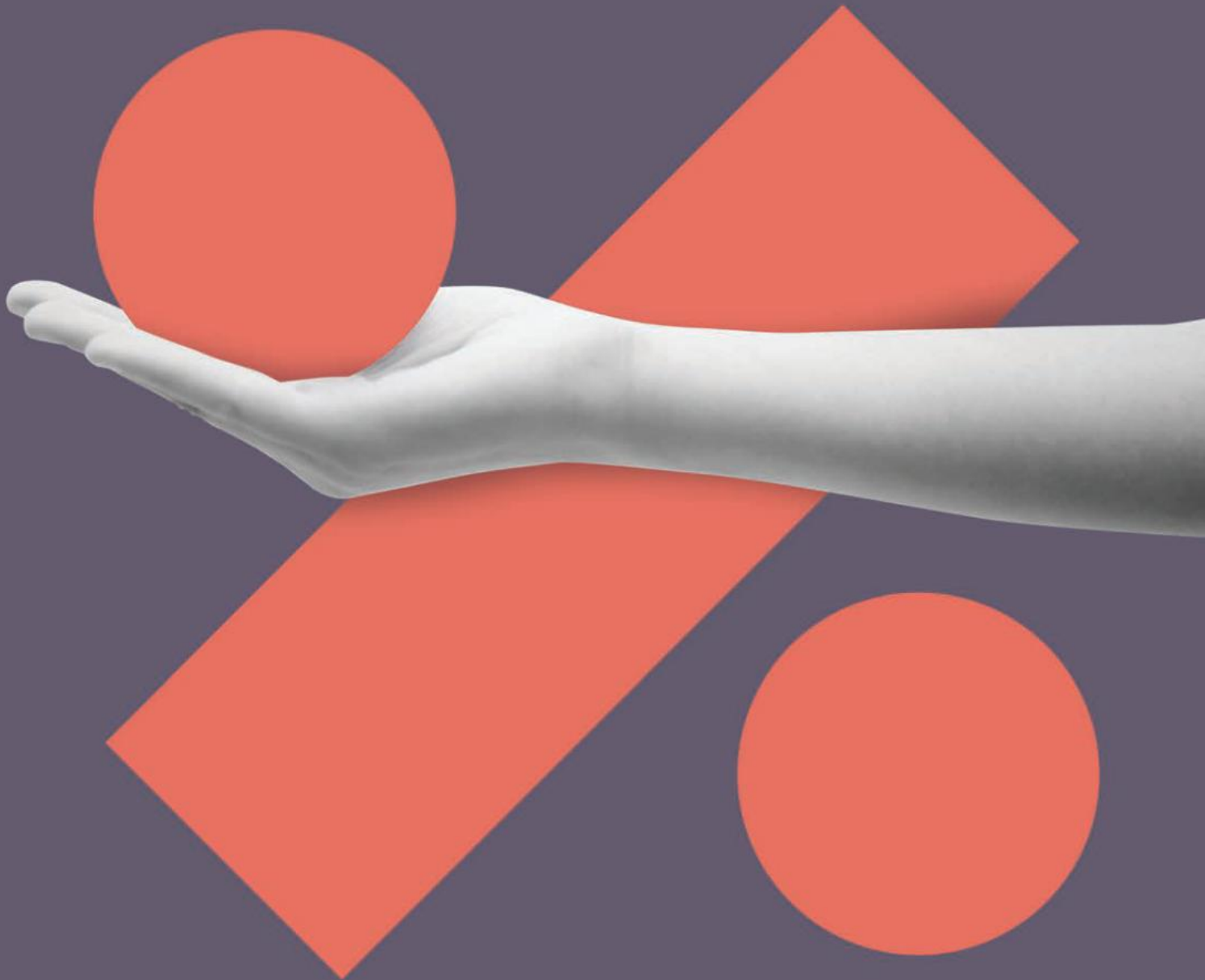


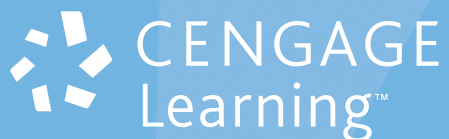


ACCOUNTING

AN INTRODUCTORY FRAMEWORK

UNITS 3 & 4





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4TH EDITION

T STANLEY, C RYAN



ACCOUNTING

AN INTRODUCTORY FRAMEWORK

UNITS 3 & 4

Accounting: An Introductory Framework Units 3 & 4

4th Edition

Trevor Stanley

Chris Ryan

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ISBN 9780170401890

Publisher: Sarah Craig

Project editor: Kathryn Coulehan

Editor: Edward Caruso

Proofreader: Robyn Flemming

Indexer: Max McMaster

Permissions researcher: Lyahna Spencer

Text designer: Jennai Lee Fai

Cover designer: Small Studio

Cover image: iStock.com/oscarhdez

Production controller: Renee Tome

Typeset by: Cenveo Publisher Services

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Acknowledgements

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National Library of Australia Cataloguing-in-Publication Data

A catalogue record for this book is available from the National Library of Australia.

Cengage Learning Australia

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South Melbourne, Victoria Australia 3205

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331 Rosedale Road, Albany, North Shore 0632, NZ

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Printed in China by 1010 Printing International Limited.

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PREFACE

Accounting: An Introductory Framework Units 3 & 4, fourth edition, is the second book in this series and continues the goal of providing a simple yet comprehensive introduction to the discipline of accounting. This new edition contains all the features that were so liked in the previous edition, but has been thoroughly revised to take account of changes in accounting standards and how accounting operates in the modern world.

Important concepts and procedures are carefully highlighted, and graded questions are fully integrated within the text to ensure a steady development of knowledge and understanding. A large number of fully worked illustrative examples and diagrams are included to assist learning. Many documents have been reproduced so that students will gain an understanding of how accounting information is collected, presented and used in business.

The use of technology in accounting is a key feature of this edition. Accounting packages and spreadsheets are crucial to the study of accounting, and are highlighted and explained in all relevant chapters. Web-based examples and exercises are also included to ensure the use of this technology in researching and analysing accounting information.

A key consideration has been that students will use this book to study for an external examination based on the materials in Chapter 4, 'Complete accounting process for a trading GST business' and Chapter 5, 'Performance analysis of companies'. Chapter 4 provides an overview of the major elements of accounting previously studied to this point. It aims to bring all these elements together so that students can see the 'big picture' in terms of recording, reporting and problem-solving. Chapter 5 concentrates on the common business structure of companies. Companies (corporations) have a different equity structure to sole traders and this difference is highlighted. As well, in the real world, the most obvious example of companies comprises those listed on the Australian Securities Exchange. These public companies have a management structure that runs the company and so the owners of these companies (shareholders) do not have access to all the available information about the business that a sole trader would have. The financial reporting by these companies is therefore a little different, with the face of the financial statements showing the key information and the details being shown in the Notes. A key objective of accounting is the ability to provide information upon which the performance of businesses can be judged. Common performance analysis tools are used regardless of what type of business is being viewed. These tools, along with some specific to companies, will also be explored. Student will therefore see the 'big picture' not only in terms of how recording and reporting is accomplished in accounting, but also how performance analysis is applied to companies and in particular public companies.

Real-world applications are also illustrated to highlight the use of accounting in everyday life and in modern business. Language and Communication sections are integrated throughout to assist in the development of language education.

Accounting: An Introductory Framework Units 3 & 4, fourth edition, also offers considerable additional material for further study. Review and reflect activities are found at the end of each chapter. The accompanying NelsonNet website features additional exercises and solutions, and links to key websites mentioned in the text.

Trevor Stanley
Chris Ryan

ABOUT THIS SERIES

This new edition of *Accounting: An Introductory Framework Units 3 & 4* has been fully updated for the QCAA Accounting General Senior Syllabus implemented at *Units 1 & 2* in 2019 and *Units 3 & 4* in 2020. It comprehensively covers the syllabus and unit objectives using the problem-solving approach valued in the syllabus, with integration of the underpinning factors throughout.

Student book

- Reflects changing terminology, as well as current practices, extensive use of technology (accounting packages, spreadsheets including business graphics, and the Internet) and real-world applications.
- Features review and reflect activities at the end of each chapter and numerous questions throughout to ensure a steady development of knowledge and understanding.
- Questions and activities support the new assessment model and provide plenty of opportunity for revision and practice.
- Refreshed design allows for easy navigation through the topics.
- Numerous illustrative examples and diagrams are included to assist learning.

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• Narrative form – with working capital

Dorothy Industries Statement of Financial Position as at 30 June 2020				
	\$		\$	
Assets				
Current Assets				
Cash at Bank		2 000		
Accounts Receivable			3 000	
Less Provision for Doubtful Debts			(1000)	
Inventory			10 000	
Accrued Revenues			25	
Prepaid Expenses			(50)	15 375
Less Current Liabilities				
Accounts Payable			1 500	
GST (Credit) Payable			700	
Accrued Expenses			125	
Disputed Revenues			(50)	
Working capital				15 425
Less Non-Current Assets				
Other Financial Assets				
Shares in XYZ Ltd		1 000		2 700
US Securities		(1 000)		
Property, Plant and Equipment				
Vehicle		14 000		12 000
Less Accumulated Depreciation		(1 000)		
Furniture		11 000		12 000
Less Accumulated Depreciation		(1 000)		
Buildings		170 000		
Less Accumulated Depreciation		(1 000)		
Land		120 000		174 000
Intangibles				
Goodwill		10 000		
Patents		(1 000)		(10 000)
Less Non-Current Liabilities				
Mortgage		210 000		420 000
Loans from Finance Co (due on 1 Feb 2021)		(10 000)		(10 000)
Net assets				15 425
Owner's Equity				
Capital (1 July 2019)		170 000		
Add Net profit		20 000		
Less Dividends		(10 000)		
				190 000

Both the account and narrative forms of presentation are used in practice. The narrative form has the advantage of being more readily understood by people without an accounting background. It is more easily adapted to show comparative figures, and also has the advantage of showing the figures for working capital. Unlike the account form, the narrative form is presented in a more descriptive manner.

Working capital is obtained by subtracting current liabilities from current assets to indicate the firm's ability to meet its current liabilities and to meet its immediate debt. Working capital is an indication of the financial soundness of the business in the short term.

Working capital is the net amount of liquid funds the firm has available to meet its commitments in the next accounting period.

Real-world application

Crime and accountants – the rules get tougher

With the new ASICAR (Non-compliance with Laws and Regulations) changes help CAs in the light of the recent cases?

In brief

A Melbourne accountant was fined \$15,000 under accountancy law for failing to report to ASIC that he had been involved in a criminal activity.

The firm Work Distribution has just accounted for the fact that they can and will be penalised for client breaches of which they are aware.

ASICAR (Non-compliance with Laws and Regulations) changes help CAs in the light of the recent cases?

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CHAPTER 2 FINANCIAL STATEMENT REPORTING 127

REVIEW AND REFLECT

The chapter contained the discussion about internal controls, specifically the internal controls over cash. This is a very important asset and one that is at risk of being misappropriated or stolen. It is important to understand the risks associated with cash and to implement internal controls to mitigate these risks.

The chapter also introduced the concept of budgeting. The cash budgeting process ensures that businesses have adequate funds to meet their commitments. A cash budget shows a business's expected cash inflows and outflows over a period of time, usually 12 months.

We saw in a real-world application how organisations and the actions of their suppliers are increasingly linked – whether in supply contracts, safety or environmental factors, and legal issues. This is a new way of thinking about business and its impact on society.

Acting for Work Distribution Kristin Hansen has made it being transparent. External business advisers need to understand how they can and will be penalised for client breaches of which they are aware.

The working capital is the net amount of liquid funds the firm has available to meet its commitments in the next accounting period.

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CHAPTER 2 FINANCIAL STATEMENT REPORTING 128

1. Describe how the total transaction of a business are recorded in MYOB through sales, expenses, and transfers.

2. What is the role of the balance sheet adjustment and accounting entries?

3. What happens when there is a change in MYOB?

4. Why is it important to have a backup of accounting system?

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A hand holding a white circle against a red background with white geometric shapes.

UNIT

3

MONITORING A BUSINESS

Introduction

This unit is about monitoring the resources of a trading GST business. These resources can take a variety of forms. In Unit 2, the resources concentrated mainly on providing and obtaining credit (accounts receivable and accounts payable), and on inventories. In this unit, the resources considered are non-current (long-term) assets, and the data and technology relating to accounting. Administrative and accounting controls will be applied to these resources to assist in safeguarding assets and **discharging accountability**. Your knowledge of accounts receivable will also be extended by considering the impact of bad debts.

The appropriate documents, records and accrual accounting concepts will be discussed in relation to the purchase, depreciation and disposal of non-current assets; and bad and doubtful debts. This will assist in **providing information for decision making**, which is one of the objectives of accounting. Fully classified financial statements will be produced, including not only the previously discussed balance day adjustments for accruals and prepayments, but also those relating to depreciation, and bad and doubtful debts. Together with appropriate ratios, these financial statements will enable a comprehensive **evaluation of the performance** of the business. Spreadsheets will also be used to show how their features and functions can be used in authentic situations relating to non-current assets and financial reporting.

1

MANAGING RESOURCES

LEARNING OBJECTIVES

When you are competent in the work covered by this chapter you should be able to:

- describe non-current assets and be able to identify and classify these in the Statement of Financial Position
- distinguish between capital expenditure and expense items, and evaluate and describe the effects that such a distinction has on the recording procedures
- explain the distinction between depreciation, depletion and amortisation
- describe the cost allocation concept of depreciation
- compare and contrast the various methods of calculating depreciation on property, plant and equipment
- record the accounting entries for depreciation of property, plant and equipment, and amortisation of intangible assets
- record the accounting entries for the disposal of different types of property, plant and equipment
- explain the necessity for an asset register
- distinguish between accounting controls and administrative controls
- describe the seven principles upon which internal accounting controls are built
- describe the procedures that should be adopted to control the purchase, storage and disposal of property, plant and equipment
- explain why data is such a vital resource
- outline the technology normally found in a business system
- describe the technology linked to the Internet and the World Wide Web
- describe the technology typically found in a small trading business that has both bricks and mortar and online sales
- explain, analyse and evaluate the impact on a business of:
 - technology risk
 - electronic controls and security
 - assurance and integrity for websites
 - privacy
 - fraud and theft
 - cloud computing
 - outsourcing accounting processes
- explain the principles behind building structured worksheets and templates with sections for input/assumptions and reports
- construct spreadsheet models relating to depreciation.

Managing resources

Non-current assets

- Capital expenditure or expense
- Accounting for the purchase of property, plant and equipment

Depreciation and amortisation

- Depreciation
- Amortisation
- Cost allocation concept of depreciation accounting
- Factors determining the depreciation charge
- Methods of calculating the depreciation charge
- Accounting for depreciation

Disposal of a property, plant and equipment asset

Asset register

Amortisation of intangible assets

- Accounting for amortisation

Internal accounting controls and administrative controls

Managing non-current assets

- Internal control over property, plant and equipment
- Internal control over the purchase of property, plant and equipment
- Internal control over the storage of property, plant and equipment
- Internal control over the disposal of property, plant and equipment
- Internal control over other non-current assets

Managing business data and technology

- Data and information
- Business technology
- Technology risks
- Electronic controls and security issues
- Assurance and integrity for websites
- Privacy issues
- Cloud computing for business
- Fraud
- Outsourcing accounting processes
- The future

Spreadsheets

- Designing and building worksheets/templates
- Uses of spreadsheets

Review and reflect

Non-current assets

Non-current assets are any assets other than current assets.

Non-current assets are assets that are purchased by the business and are not intended for resale, but are to be used within the operation of the business to earn revenue, and will normally be kept and used for longer than one accounting period (generally a year).

When non-current assets are classified in the Statement of Financial Position, they are grouped under the following headings:

Property, plant and equipment	Intangible assets	Other financial assets (investments)	Other
Land	Franchises	Government securities	Long-term accounts receivable
Buildings	Patents	Shares in companies	
Furniture	Trademarks	Debentures	
Machinery	Copyrights		
	Brand names		
	Goodwill		

Capital expenditure or expense

The distinction between a capital expenditure and an expense is based on **time** and the **nature** of the expenditure.

Expenditure resulting in the acquisition and installation of an asset whose life will extend over more than one accounting period is referred to as **capital expenditure**. Such expenditure is capitalised (treated as an asset) and appears in the Statement of Financial Position.

Expenditure for property or services that will be consumed during the current accounting period is referred to as an **expense**. These expenditures therefore appear in the Statement of Profit or Loss.

One consideration that may change the basic treatment of expenditure is the **materiality** of the items. Only material expenditures are capitalised. Materiality refers to the importance of an item to the particular entity. For example, the purchase of postage stamps is not important enough to be a capital expenditure and is regarded as an expense, even though some of the stamps may not be used until the next accounting period. Materiality will be discussed further in Chapter 2.

The ability to distinguish between capital expenditure and an expense is particularly important when accounting for property, plant and equipment.

The following are regarded as **capital expenditure**:

- Expenditure made to bring an asset into a location and condition ready for use. For example, if a machine is purchased, all freight, installation costs and any other such expenses paid are placed in the relevant asset account. Any legal costs associated with the purchase of assets, such as land, are capitalised.
- Improvement or addition to existing assets. For example, installation of new bodies on delivery vans, extensions to existing buildings, car parks, and storage facilities are also capitalised by placing them in the relevant asset account.
- Major expenditure to extend the life of the asset. For example, the cost of fitting a new or reconditioned motor to a vehicle to extend its useful life to the business would be capitalised.

The following are regarded as an **expense**:

- Expenditures to maintain an asset in an efficient working condition. For example, items such as repairing a damaged motor, repainting a building, replacing tyres on a truck, repairing broken windows, replacing broken parts on machinery or blown light bulbs, and cleaning floors are placed into relevant expense accounts.
- Expenditures that are associated with assets but that will be consumed during the accounting period. For example, motor vehicle registration, and fuels and oils. Insurance is another expense. Many businesses pay a yearly insurance premium for insurance on their cars, machinery and buildings in case of fire or damage. As has previously been discussed, the yearly payment will be debited to an asset account called Prepaid Insurance and then the appropriate expense for the month (or whatever period is deemed appropriate) brought to account. Be aware that this insurance expense relates to non-current assets, but it will not be considered in this chapter.

If an expense is incorrectly capitalised, the result is an overstatement of the period's profit (because expenses are understated) and an overstatement of the asset. Future profits will be reduced because the incorrect higher original cost of the asset will be charged in future accounting periods. These costs are known as 'depreciation' and are discussed later in this chapter.

If a capital expenditure is incorrectly recorded as an expense, the result is an understatement of the period's profit (because expenses are overstated), and an understatement of the asset. Future profit will be incorrect because the asset is not recorded at its full amount, and therefore the expenditure to be written off that asset in future periods (such as depreciation) is not as great as it should be.

1.1

- What do you understand by the term 'non-current assets'?
- How can non-current assets be classified?
- Make a list of non-current assets under each of the classifications you have stated in part b.

1.2

- Explain what is meant by the term 'capital expenditure'.
- Explain what is meant by the term 'expense' in relation to non-current assets.
- The ability to distinguish between capital expenditure and an expense is very important in accounting. Explain why.
- Make a list of non-current items considered to be capital expenditure and a list of related items considered to be expenses.

Accounting for the purchase of property, plant and equipment

Property, plant and equipment may be purchased for either credit or cash.

Credit purchase

The purchase of property, plant and equipment is a capital expenditure and is recorded in the general journal. For example:

Mar 1 Purchased new plant and machinery from Glover Machinery Co Ltd for \$22 000, including GST.

This would be recorded as follows:

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
Mar 1	Plant and Machinery GST Credits Received Glover Machinery Co Ltd (Purchase of asset on credit)		20 000 2 000	22 000

Cash purchase

Mar 1 Paid for new furniture \$4400, which includes GST.

This would be recorded as follows:

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
Mar 1	Furniture GST Credits Received Cash at Bank (Purchase of asset on credit)		4 000 400	4 400

All costs involved in purchasing property, plant and equipment (customs duty, freight and installation costs, and so on) must be capitalised. However, any GST involved is *not* capitalised.

March 31 Paid freight \$550, insurance during transit \$660, and installation expenses \$1650 on machinery purchased. 10% GST was included in all these items.

This would be recorded as follows:

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
Mar 31	Plant and Machinery GST Credits Received Cash at Bank (Paid freight on machinery)		500 50	550
31	Plant and Machinery GST Credits Received Cash at Bank (Paid insurance on machinery)		600 60	660
31	Plant and Machinery GST Credits Received Cash at Bank (Paid installation on machinery)		1 500 150	1 650

The Plant and Machinery account would appear as follows:

Dr				Ledger				Cr
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$	
				Plant and Machinery				No 3308
Mar 1	Glover Machinery Co Ltd		20 000					
31	Cash		500					
31	Cash		600					
31	Cash		1 500					

Repairs to property, plant and equipment to maintain the asset in an efficient working order (cleaning, painting, servicing and so on), or expenses associated with the asset, but consumed during the current financial year (registration of vehicles), are expenses. They are debited to the appropriate expense account. For example:

Dec 5 Paid for repairs to machinery \$451.

This is recorded as:

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
Dec 5	Repairs to Machinery		410	
	GST Credits Received		41	
	Cash at Bank			451
	(Paid for repairs to machinery)			

This would appear in the ledger as follows:

Dr				Ledger				Cr
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$	
				Repairs to Machinery				No 2415
Dec 5	Cash		410					

1.3

Show the journal entries necessary to record the following. All amounts include GST.

- Bought new machinery for cash \$16 500.
- Bought a reconditioned machine for cash \$8800 and paid installation costs \$330 and repairs \$550 before it was placed in service.
- Purchased a motor vehicle from S Wallace & Co for \$11 000.

- d Purchased a new motor truck from G Simpson Co Ltd for \$27 500. A new body was put on this truck by MV Body Works at a cost of \$2750, and registration of \$495 (including \$25 GST)¹ was paid.
- e Paid for repairs to factory machinery \$1243.
- f H Adams repainted buildings at an agreed price of \$4620.
- g Paid cleaning and maintenance \$583.

Depreciation and amortisation

The worth or service potential to the business of many of its non-current assets diminishes over their useful life. This is evident in the case of machinery, motor vehicles and furniture. There are a number of reasons why the worth of these assets diminishes.

Depreciation

Depreciation is the allocation of the depreciable amount of an asset over its useful life. The term is usually used in relation to physical assets.

Depreciable amount is the cost of the depreciable asset less the net amount expected to be recovered on disposal of the asset at the end of its useful life.

Wear and tear Many assets, particularly those of a mechanical and electrical nature, diminish in worth as the result of wear and tear. Repairs and maintenance can overcome this to some extent, but eventually the asset will expend its useful life.

Obsolescence In a highly technical world, new inventions may make existing equipment obsolete before the end of its useful life. This is referred to as 'technical obsolescence'. Similarly, equipment may become obsolete because it is no longer suitable for use by the business, thereby diminishing the worth of the asset to the business. This is referred to as 'commercial obsolescence'. Both technical and commercial obsolescence may occur whether or not the assets are used.

Amortisation

Amortisation refers to the gradual writing off of the cost of certain assets due to the passing of time or depletion. It usually refers to the writing off of intangible assets and natural resources.

Passing of time Certain assets, such as a patent taken out for 20 years, reduce in value each year. The worth of the patent diminishes by one-twentieth each year until, at the end of 20 years, it has no value.

Depletion The quantity of natural resources available from mines, quarries and forests diminishes as material is removed from them. This diminution is known as 'depletion'.

Cost allocation concept of depreciation accounting

Accountants generally accept that depreciation accounting refers to the process used to allocate the cost of the property, plant and equipment asset over the life of the asset by making **periodic charges** as an expense.

It is most important to remember that depreciation is a cost allocation process that reflects the pattern in which the future service in the asset is consumed by the entity. The charging of depreciation each year

¹ GST is not 10 per cent because a large proportion of the total amount is exempt from GST.

diminishes the **book value** of the asset. After depreciation or amortisation has been written off each year, the amount shown in the Statement of Financial Position does **not** represent the realisable value or amount the asset could be sold for. It represents the **written down cost** or **carrying amount** of the asset.

It is also important to remember that the process of charging depreciation does **not** set aside cash for the replacement of the asset at the end of its useful life.

However, depreciation or amortisation does retain funds in the business equal to the amount written off the assets. This retention of funds occurs in the net asset structure of the business, but does not accumulate cash for the replacement of assets. The reduction in the value of assets due to depreciation is offset by a corresponding increase in other assets (or a decrease in liabilities). Consider the following example:

Statement of Financial Position as at 30 June 2020			
	\$		\$
Assets		Owner's Equity	
Furniture and Equipment	3 000	Capital	4 000
Other assets	<u>1 000</u>		
	<u>\$4 000</u>		<u>\$4 000</u>

At the close of the accounting period ending 30 June 2021, total revenue was \$800. Expenses (excluding depreciation) amounted to \$200, and depreciation for the year was \$600. The Statement of Profit or Loss will appear as follows:

Statement of Profit or Loss for year ended 30 June 2021			
	\$		\$
Revenue			800
Less Expenses	200		
Depreciation	<u>600</u>		<u>800</u>
Net profit			<u><u>—</u></u>

The Statement of Financial Position will appear as follows:

Statement of Financial Position as at 30 June 2021			
	\$		\$
Assets		Owner's Equity	
Furniture and Equipment (3000 – 600)	2 400	Capital	4 000
Other assets (1000 + 800 – 200)	<u>1 600</u>		
	<u>\$4 000</u>		<u>\$4 000</u>

As the profit is zero, capital remains at \$4000. Because of the accounting equation $OE = A - L$, the total assets must also equal \$4000. As Furniture and Equipment has been reduced by the \$600 depreciation, the other assets must increase by \$600 (due to other revenue and expense transactions) to maintain the capital.

The charging of depreciation is only a book entry. It does not involve cash. The process of allocating costs over the life of the asset does not result in a pool of cash being available to replace the asset. Only a specific decision by management to set aside cash in a special account would ensure that cash for replacing the asset is available.

1.4

List the reasons why the worth of non-current assets diminishes over time, and explain what effect each has on non-current assets.

1.5

Explain the terms 'depreciation', 'amortisation' and 'depletion'.

1.6

What do you understand by the 'cost allocation concept' of depreciation accounting?

Factors determining the depreciation charge

The following factors determine the depreciation charge under the cost allocation process:

- the asset's cost price (not including GST)
- the asset's anticipated useful life
- the asset's anticipated residual value
- the method of calculating the depreciation charge.

Cost price of the asset The cost price of the asset has been discussed under the section dealing with capital expenditure. Care must be taken to include in the original cost all costs necessary to bring the asset into a location and condition ready for use.

Useful life of the asset The useful life of the asset depends on the type of asset being considered, and is usually expressed in units of use or years. There are three categories:

- 1 Assets where the exact life is fixed and known. A lease on buildings is taken out for a fixed period; say four years. Copyrights apply for the life of the author plus 50 or 70 years, and standard patents expire after 20 years.
- 2 Assets where the useful life is variable and will depend on wear and tear during use, obsolescence and physical deterioration. These include items such as machinery, furniture, electrical equipment and motor vehicles.
- 3 Assets where the useful life may outlast the life of the business. Land is the best example of this and is more likely to increase than fall in value. It is therefore not subject to depreciation.

Anticipated residual value Residual value is the anticipated worth to the business of the asset at the end of its useful life. This is obtained by estimating the trade-in, sale or scrap value of the asset at the end of its estimated life. The residual value normally applies to assets whose useful life is variable and depends on wear and tear during use, obsolescence and physical deterioration. The anticipated residual value depends to a large degree on the estimate and opinion of the valuer. The effective life of the asset to the business has to be estimated. It is very difficult to predict the estimated residual value because future events are unpredictable and the residual value may also be affected by technical advances. An arbitrary decision based on known facts is therefore usually made and it is possible for different accountants to arrive at different figures.

Methods of calculating the depreciation charge

Under the cost allocation concept of depreciation accounting, a number of methods may be used to calculate the depreciation charge. The method chosen must be based on careful evaluation of all the above factors so that the charge for depreciation for each period is as close as possible to the sum representing the using up or loss of service potential of the particular asset. As mentioned previously, any charge for depreciation affects not only this period, but also future accounting periods.

Once the method has been chosen, consistency should be employed to ensure comparability from period to period. If the method is changed, all relevant details concerning the change must be disclosed.

Straight line method

With the straight line method, each accounting period is allocated a uniform portion of the cost of the non-current asset less any residual value.

The *information required* to use this method includes:

- original cost of the asset (including necessary costs, but excluding GST)
- estimated life of the asset
- estimated residual value of the asset.

Method of calculation

$$\text{Depreciation for each accounting period} = \frac{\text{Original cost} - \text{Estimated residual value}}{\text{Estimated life}}$$

OR

$$\left(\frac{\text{Depreciable amount}}{\text{Estimated life}} \right)$$

Example

Office furniture is purchased for \$13 860 (including GST). Freight of \$220 (including GST) is also paid. The estimated life of the furniture is five years and the estimated residual value is \$800. Calculate the annual depreciation.

$$\text{Depreciation} = \frac{12\,800 - 800}{5} = \$2\,400 \text{ per annum}$$

(Cost \$12 800 = purchase price \$13 860 – GST \$1260 + freight \$220 – GST \$20)

The depreciation charge, represented graphically, is shown in Figure 1.1.

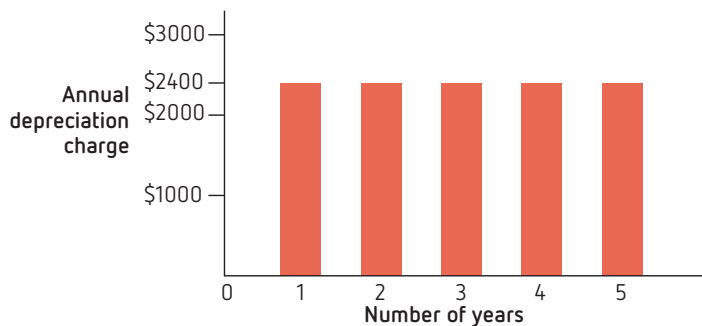


Figure 1.1 Annual depreciation charges under the straight line method

The advantages of the straight line method are:

- it is simple to use
- it is more appropriate where the benefits from the asset are roughly equal in each period, such as furniture and buildings.

The disadvantages of the straight line method are:

- it does not take into account the degree of usage, age or efficiency of the asset
- it does not allow for the likelihood of greater cost of repairs in the later life of the asset due to wear in earlier accounting periods.

1.7

Calculate the amount of depreciation using the straight line method of depreciation in each of the following:

- Bromic & Co bought furniture on credit for \$5500 (including GST). Delivery expenses amounting to \$165 (including GST) were paid. The estimated life of this furniture is eight years, and the estimated residual value is \$350.
- Wang Trading bought furniture from Kings for \$4950 (including GST). Cartage of \$143 (including GST) during transit was paid to bring the furniture to the office. The estimated life of the furniture is five years, at which time the estimated residual value is \$430.

Diminishing balance method

With the diminishing balance method, a uniform rate of depreciation is applied in each period to the cost of the asset reduced by any accumulated depreciation (i.e. the diminished balance or carrying amount).

The **information required** to use this method includes:

- original cost of the asset (including necessary costs and excluding GST)
- accumulated depreciation
- rate of depreciation to be applied.

Method of calculation

Depreciation for the period = Rate of depreciation $\times$ Diminished balance

(Diminished balance = Original cost – Accumulated depreciation)

A major difference with this method is that the residual value is not subtracted from the original cost before calculations are made. Note that the residual value is used in the formula to calculate the percentage used. It is *not* deducted from the original cost to calculate the first year's depreciation.

Example

A motor vehicle is bought on 1 July for \$33 000 (including GST) and has an estimated residual value of \$12 000. The rate of depreciation is 20 per cent of the diminishing balance. Calculate the amount of depreciation for four years, after which time it is company policy that the vehicle be sold.

Calculation of depreciation:

Year	Basis for calculation	Amount of depreciation	Diminished balance or carrying amount
1	20% of original cost \$30 000	\$6 000	\$30 000 – \$6 000 = \$24 000
2	20% of diminished balance \$24 000	\$4 800	\$24 000 – \$4 800 = \$19 200
3	20% of diminished balance \$19 200	\$3 840	\$19 200 – \$3 840 = \$15 360
4	20% of diminished balance \$15 360	\$3 072	\$15 360 – \$3 360 = \$12 000
	(Adjustment necessary to bring residual value to \$12 000)	288	
		<u>\$18 000</u>	

Final year depreciation could be found by subtracting the residual value from the reduced balance at the end of the previous year.

If the following formula is used to determine the rate of depreciation, there is no need for an adjustment in the final year to obtain the desired residual value:

$$\text{Formula: } r = 1 - \sqrt[n]{\frac{s}{c}}$$

Note: This is the n th root **not** $n \times \sqrt{\quad}$.

where: r = rate of depreciation

n = estimated life of the asset (years)

s = estimated scrap or residual value

c = original cost

For most businesses it is normal practice to express the rate as a rounded percentage. Therefore, an adjustment to the depreciation charge in the final year is required to arrive at the exact desired residual value.

The depreciation charge, represented graphically, is shown in Figure 1.2.

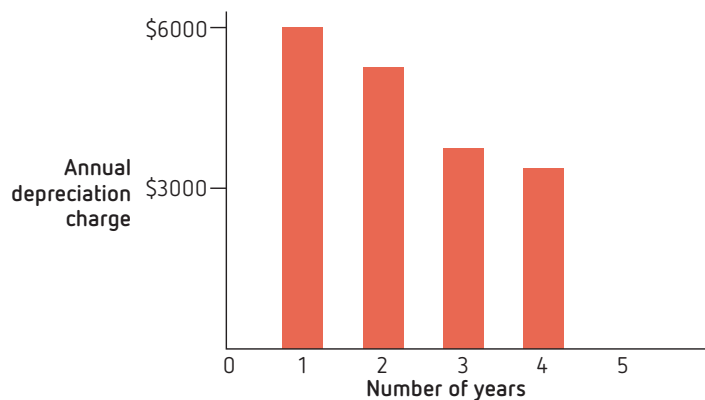


Figure 1.2 Annual depreciation charges under the diminishing balance method

Advantages of the diminishing balance method are:

- it is suitable for use where the service rendered by the asset is greatest in the early years of its life (e.g. in the case of motor vehicles and machinery). The greatest charges occur in the periods where the greatest benefits are obtained
- the depreciation charge is lower as the asset becomes older and when there is a likelihood of higher maintenance costs.

Disadvantages of the diminishing balance method are:

- the depreciation charge in the final year may need to be adjusted unless the formula is used
- the depreciation charge arrived at using this method results in a greater amount of depreciation being written off during the early life of the asset. Methods of depreciation with this characteristic are sometimes called **accelerated depreciation methods**.

1.8

- What factors must be taken into account when determining the depreciation charge?
- Briefly explain how each of these factors affects the depreciation charge.

1.9

Waterson Industries purchased a truck on 1 July 2020 for \$13 200. The estimated life of the truck is five years, with a residual value of \$2800. Calculate the amount of depreciation to be written off each year until the truck is disposed of. Use the diminishing balance method of depreciation at a rate of 25 per cent. All amounts are GST inclusive where applicable.

1.10

Jung Engineering purchased new machinery from Willards Machinery Company on 1 July 2020 for \$25 300. Freight, insurance during transit, and installation costs of \$2200 were paid. The estimated life of the machinery is four years and the residual value is \$10 000. The depreciation rate is 20 per cent. The method of depreciation chosen is the diminishing balance method. Where applicable, GST is included in all amounts. Calculate the depreciation to be written off over the life of the asset.

Other depreciation methods

There are other less common methods of depreciating non-current assets. A business may choose one of these depending on the asset and its use. These methods are:

- units of use method
- sum of digits method
- appraisal method
- valuation concept of depreciation accounting.

Detailed discussion of these may be found in more advanced accounting texts.

Real-world application



The difference between accounting and tax depreciation

In accounting, depreciation is calculated on the useful life of an asset. The accountant makes a judgement about the estimated life and applies the appropriate method of depreciation (straight line, diminishing balance etc.) in order to calculate the amount of depreciation.

However, for the calculation of income tax, things are a little different. For calculating depreciation each financial year, the allowable life of most assets is set out by the Australian Taxation Office in a Taxation Ruling. The ruling for the 2018–19 year is TR 2018/4 and is available by following the weblink.

Extracts from the PDF version appear as follows:

ASSET	LIFE (YEARS)	REVIEWED	DATE OF APPLICATION
Office furniture, freestanding:			
Bookcases:			
Metal	20	*	1 Jul 2005
Timber	15	*	1 Jul 2005
Cabinets (including credenzas, cupboards, filing, mapping, mobile, stationery and storage type):			
Metal	20	*	1 Jul 2005
Timber/laminated	15	*	1 Jul 2005
Chairs	10	*	1 Jul 2005
Desks	20	*	1 Jul 2005
Mobile storage units (compactus type)	25	*	1 Jul 2005
Reception assets (including lobby chairs, desks, lounges, sofas and tables)	10	*	1 Jul 2005
Screens	20	*	1 Jul 2005
Tables:			
Boardroom	20	*	1 Jul 2005
General	10	*	1 Jul 2005
Workstations (including desks and partitions)	20	*	1 Jul 2005

ATO Taxation Ruling 2018/4, page 269 © Australian Taxation Office for the Commonwealth of Australia.



ATO Taxation
Ruling 2018/4

Computers and computer equipment:			
Computers and computer equipment (not specified elsewhere below)	4	*	1 Jul 2016
Computer monitors	4	*	1 Jul 2016
Desktop computers (including personal computers)	4	*	1 Jul 2016
Mainframe computers	5	*	1 Jul 2016
Mobile/portable computers (including laptops, tablets)	2	*	1 Jul 2016
Network equipment (including hubs, modems, routers, switches, etc)	5	*	1 Jul 2016
Raised floors	25	*	1 Jul 2017
Servers	4	*	1 Jul 2016

ATO Taxation Ruling 2018/4, page 264 © Australian Taxation Office for the Commonwealth of Australia.

For income tax, two methods are available:

- Prime cost, which is similar to the straight line method in accounting. For example, in the table above, the life of a desktop computer for depreciation is four years or 100/4 or 25 per cent. So, if prime cost is used, 25 per cent of the asset cost (no residual value is taken into consideration) can be written off each year.
- Diminishing value, which is similar to the diminishing balance method in accounting. The rate is always 2 times the prime cost rate. In this instance, the life is four years, or 200/4 or 50 per cent of the diminished value can be written off each year.

An example can be seen by following the weblink.

Because different rates can be used for accounting and tax, different amounts of depreciation may be written off and therefore there is a difference between net profit and taxable income.

Sources: <<https://www.ato.gov.au/law/view/document?docid=TXR/TR20184/NAT/ATO/00001>>; <[https://www.ato.gov.au/business/depreciation-and-capital-expenses-and-allowances/general-depreciation-rules---capital-allowances/prime-cost-\(straight-line\)-and-diminishing-value-methods/](https://www.ato.gov.au/business/depreciation-and-capital-expenses-and-allowances/general-depreciation-rules---capital-allowances/prime-cost-(straight-line)-and-diminishing-value-methods/)>.



Income tax
depreciation
methods

1.11

Go to the website and examine the annual reports for JB Hi-Fi and Flight Centre: Significant accounting policies, Depreciation of non-current assets. Complete the following:

- Make a list of depreciation methods used.
- Were there any sales/purchases of plant and equipment?



JB Hi-Fi annual
reports

Flight Centre
annual reports

Accounting for depreciation

Once the amount of depreciation has been determined using the most suitable method, an entry must be made in the accounting records. The entry is only recorded at the end of the accounting period as a balance day adjustment or when an asset is sold. The entry will be:

	Dr	Cr
Depreciation on ...	XXX	
Accumulated Depreciation on ...		XXX
(Depreciation allowed for the year)		

The effect of this entry is to create:

- a Depreciation Expense account
- an Accumulated Depreciation account, which has the effect of showing the **carrying amount** of the asset in the Statement of Financial Position. It is a negative asset account. The asset cannot be credited directly because the depreciation is only an estimate. Under the historical cost principle, the accumulated depreciation represents the amount the asset has been written down.

Example

Furniture costing \$4620 (including GST) was purchased on 1 July 2020. The estimated life of the furniture was five years and it has an estimated residual value of \$200.

- Calculate the amount of depreciation for the year ending 30 June 2021 using the straight line method.
- Record the depreciation at that date.

Solution

$$\begin{aligned}
 \text{Depreciation calculation} &= \frac{\text{Cost price} - \text{Residual value}}{\text{Number of years}} \\
 &= \frac{4\,200 - 200}{5} \\
 &= \$800 \text{ per annum}
 \end{aligned}$$

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
2021 June 30	Depreciation on Furniture Accumulated Depreciation on Furniture (Depreciation for the year)		800	800

The expense account will appear as follows:

Dr				Ledger				Cr
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$	
2021				2021				
					Depreciation on Furniture			No 2405
June 30	Accumulated Depreciation on Furniture		800	June 30	Profit or Loss Summary		800	
			<u>\$800</u>					<u>\$800</u>

The Depreciation on Furniture account is closed to the Profit or Loss Summary account at the end of the accounting period, along with other expense accounts, as shown in *Units 1 & 2*.

The Accumulated Depreciation account is a negative asset account and is thus carried forward to the next accounting period by balancing it off.

Dr				Ledger				Cr
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$	
2021				2021				
Accumulated Depreciation on Furniture				No 3301A				
June 30	Balance c/d		<u>800</u>	June 30	Depreciation on Furniture		<u>800</u>	
			<u>\$800</u>				<u>\$800</u>	
				July 1	Balance b/d		800	

The estimated life of the machine is five years with a residual value of \$2000. The straight line method of depreciation is to be used.

- a Show the journal entries necessary to record the above information up to 30 June 2020.
- b Show the ledger accounts necessary to record the above journal entries, including the Profit or Loss Summary account.
- c Show how the Non-Current Asset account would appear in the Statement of Financial Position as at 30 June 2020.

Disposal of a property, plant and equipment asset

Each property, plant and equipment asset account is a control account and may contain information on many assets of a particular type, only one of which is being disposed of at the time. When an asset is sold or otherwise disposed of, it is desirable to record such a sale through a special account called a Disposal account and not through the asset account itself. The Disposal account gathers together all the information concerning the asset being disposed of. It is therefore easier to find out whether a gain or loss has been made on the disposal. Remember that if an asset is disposed of (physically leaves the business), all the records in the general and subsidiary ledgers must be adjusted accordingly.

Recording the disposal of a property, plant and equipment asset generally necessitates the following steps:

- 1 Depreciate the asset for that part of the current accounting period for which the asset has been used.
- 2 Transfer the cost of the asset sold from the asset account to the Disposal account.
- 3 Transfer any depreciation that has accumulated on the asset sold from the Accumulated Depreciation account to the Disposal account.
- 4 Record the disposal price of the asset (if any) in the Disposal account.
- 5 Determine whether a gain or loss has been made on the disposal of the asset. This gain or loss would be shown in a Gain or Loss on Disposal account.

Example

On 1 September 2020, Smythe Associates had motor vehicles purchased for \$26 400 (including GST). At this date, one car that had been purchased on 1 June 2017 at a cost of \$6600 (including GST) was sold for \$3300 (including GST). On 1 July 2020, the Accumulated Depreciation on Motor Vehicles account had a credit balance of \$12 000. The firm's policy is to depreciate motor vehicles at 20 per cent per annum straight line. Assume that there is no residual value and that 30 June is the end of the financial year.

Step 1 Record depreciation for that part of the year (two months) the motor vehicle sold was in use.

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
2020 Sept 1	Depreciation on Motor Vehicles Accumulated Depreciation on Motor Vehicles (Depreciation 20% p.a. on \$6000 for two months)		200	200

Step 2 Transfer the cost price of the one motor vehicle sold to the Disposal of Motor Vehicle account.

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
2020 Sept 1	Disposal of Motor Vehicle Motor Vehicles (Transfer of motor vehicle sold to the Disposal account)		6 000	6 000

Step 3 Transfer the amount of the accumulated depreciation on the one motor vehicle sold to the Disposal of Motor Vehicle account.

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
2020 Sept 1	Accumulated Depreciation on Motor Vehicles Disposal of Motor Vehicle (Accumulated depreciation transferred)		3 900	3 900

Calculation of accumulated depreciation:

$$1 \text{ June } 2017 - 30 \text{ June } 2017 \quad \frac{1}{12} \times \frac{20}{100} \times 6\,000 = 100$$

$$1 \text{ July } 2017 - 30 \text{ June } 2018 \quad \frac{20}{100} \times 6\,000 = 1\,200$$

$$1 \text{ July } 2018 - 30 \text{ June } 2019 \quad \frac{20}{100} \times 6\,000 = 1\,200$$

$$1 \text{ July } 2019 - 30 \text{ June } 2020 \quad \frac{20}{100} \times 6\,000 = 1\,200$$

$$1 \text{ July } 2020 - 1 \text{ Sept } 2020 \quad \frac{2}{12} \times \frac{20}{100} \times 6\,000 = 200$$

$$\text{Accumulated depreciation} = \underline{\underline{\$3\,900}}$$

Step 4 Record the disposal of the motor vehicle for cash \$3300.

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
2020 Sept 1	Cash at Bank GST Collected Disposal of Motor Vehicle (Disposed of motor vehicle for cash)		3 300	300 3 000

The ledger accounts from the four steps appear as follows:

Dr				Ledger				Cr	
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
2020				2020					
				Depreciation on Motor Vehicles				No 2406	
Sept 1	Accumulated Depreciation on Motor Vehicles		200						
				Motor Vehicles				No 3303	
July 1	Balance b/d		24 000	Sept 1	Disposal of Motor Vehicle		6 000		
				Accumulated Depreciation on Motor Vehicles				No 3303A	
Sept 1	Disposal of Motor Vehicle		3 900	July 1	Balance b/d		12 000		
				Sept 1	Depreciation on Motor Vehicles		200		
				Disposal of Motor Vehicle				No 3303.1	
Sept 1	Motor Vehicles		6 000	Sept 1	Accumulated Depreciation on Motor Vehicles		3 900		
					Cash		3 000		
				GST Collected				No 4102.2	
				Sept 1	Cash		300		

Step 5 Determine the gain or loss on disposal and bring this gain or loss into the records.

To determine whether a gain or loss has been made on the disposal of the asset, reference has to be made to the Disposal account.

- If the debit side is greater than the credit side (cost is greater than the accumulated depreciation and the disposal price), a loss on disposal has occurred.
- If the credit side is greater than the debit side (cost is less than accumulated depreciation and sale price), a gain on disposal has occurred.

In this example, a gain has been made on the disposal and would be recorded by the following general journal entry:

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
2020 Sept 1	Disposal of Motor Vehicle Gain on Disposal of Non-Current Assets (Gain on sale of motor vehicle)		900	900

1.14

On 31 December 2021, Zhang Enterprises had motor vehicles of \$45 000 in the accounts. On this date, one vehicle that was purchased on 1 July 2019 for \$13 200 (including GST) was sold for \$5500 cash (including GST). On 1 July 2021, the Accumulated Depreciation on Motor Vehicles account had a credit balance of \$18 000. The motor vehicles are subject to a depreciation charge of 25 per cent using the diminishing balance method.

- a Show journal entries to record the disposal.
- b Prepare the relevant ledger accounts to record the above information.

1.15

On 31 March 2021, Erickson Manufacturing had machinery purchased for \$33 000. On this date, one machine that was purchased on 1 January 2018 for \$7700 was sold to K Small. The sale price was \$1100. On 1 July 2020, the Accumulated Depreciation on Machinery account had a credit balance of \$20 000. Depreciation is 20 per cent per annum using the straight line method. Assume there is no expected residual value and that all amounts are inclusive of GST where applicable.

- a Show journal entries to record the disposal.
- b Prepare the relevant ledger accounts to record the above information.

1.16

On 1 July 2017, Selman Industries bought a machine for \$8800 from P Smith & Co Ltd. Freight and installation expenses amounted to \$550. The machine was expected to last five years and have a residual value of \$500.

On 30 June 2020, the machine was traded in to Machines Co Ltd for \$3520 on a new machine valued at \$6050. The estimated residual value after five years is \$450. Installation charges of \$495 were paid. Depreciation is to be calculated using the straight line method. All amounts include GST where applicable.

- a Show the journal entries necessary to record the above information up to the end of the accounting period 30 June 2020.
- b Show the ledger accounts to record the above journal entries, including the Profit or Loss Summary account.
- c Show how the asset account would appear in the Statement of Financial Position as at 30 June 2018, 2019 and 2020.

1.17

Malak & Co purchased a new machine from Machinery Suppliers on 1 January 2018 for \$17 600. Freight and installation costs of \$1650 were paid. The estimated life of the machine was five years and the residual value at that time was estimated to be \$4900. Depreciation of 25 per cent per annum is to be charged according to the diminishing balance method.

On 31 December 2021, the machine was traded in on a new model for \$5500. The new machine was purchased from Machinery Suppliers for \$22 000 and installation charges of \$2200 were paid by cheque. The estimated life of this machine is four years, with a residual value of \$5200. GST is included in all amounts where applicable. Depreciation of 30 per cent per annum is to be charged according to the diminishing balance method.

- a Record this information in the necessary journals up to 30 June 2022.
- b Show the ledger accounts necessary to record the above journal entries, including the Profit or Loss Summary account.
- c Show how the asset account would appear in the Statement of Financial Position as at 30 June 2018, 2019, 2020, 2021 and 2022.

1.18

On 1 September 2018, Graham Traders purchased furniture from AB Furniture Suppliers for \$3850, including delivery charges of \$33. The furniture was expected to last for five years, with an estimated residual value of \$500.

On 30 June 2022, furniture originally purchased for \$2200 was traded in with AB Furniture Suppliers for \$495. New furniture was purchased from the company for \$3300. The estimated life of this furniture was five years, with a residual value of \$400. All amounts include GST where applicable.

The straight line method of depreciation is to be used.

- a Show the journal entries necessary to record the above information to the end of the accounting period 30 June 2022.
- b Show the ledger accounts to record the above journal entries, including the Profit or Loss Summary account.
- c Show how the asset account would appear in the Statement of Financial Position at the end of each accounting period.

1.19

On 1 July 2018, Mathers Industries purchased a machine (serial number F 476) from Northside Machinery Supply for \$9460. This machine was installed at a cost of \$440, which was paid. The estimated life of the machine was five years and the estimated residual value was \$700. The straight line method of depreciation was chosen. Northside Machinery Supply was paid on 31 August 2018.

On 1 October 2018, a second machine was purchased (serial number D 690) from Northside Machinery Supply for \$9900. This machine was installed at a cost of \$550 by the supplying firm. The estimated life and depreciation to be charged was the same as for the first machine purchased, and the estimated residual value was \$800. Northside Machinery Supply was paid on 30 November 2018.

On 1 March 2022, machine number F 476 was sold for cash \$1045 and a new machine, serial number J 538, was purchased from Watsons Machinery Co Ltd for \$11 000. The purchase price included installation of \$770. The estimated residual value of this machine was \$500 and the method of depreciation chosen was the diminishing balance method. The rate of depreciation was calculated at 30 per cent. GST is included in all applicable amounts.

- a Show the ledger accounts to record the above information, including the Profit or Loss Summary account for accounting periods ending 30 June.
- b Show how the asset account will appear in the Statement of Financial Position as at 30 June 2019, 2020, 2021 and 2022.

1.20

On 1 July 2019, Orson Manufacturing Co bought a machine costing \$11 000 (including GST \$1000) from Arkson Machinery Co Ltd. Freight and installation expenses paid amounted to \$880 (including GST \$80). The machine was expected to last five years and to have a residual value of \$300.

On 31 March 2022, the machine was traded to International Machinery Co Ltd for \$3300 (including GST \$300) on a new machine costing \$18 700 (including GST \$1700). Estimated residual value after five years is \$2500.

You are required to show journal entries to record the above information up to the end of the accounting period 30 June 2022.

Asset register

The asset register is an important part of the internal control over property, plant and equipment assets. These assets will have an identification number so they can be tracked and not lost. The asset register must cater for different categories of assets that have different data needs. These categories are generally for non-current assets, including financial assets; property, plant and equipment assets; and intangible assets. Within each category, there will be different types of assets; for example, within property, plant and equipment, there might be motor vehicles, computers, furniture, buildings etc.

The register has the same function as a subsidiary ledger. Each individual asset is recorded at cost (excluding GST) in the register. The total of all register records for each type of asset would agree with the total in the control account for that asset in the general ledger. For example, the cost of all individual motor vehicles as shown on the individual records in the asset register for motor vehicles would agree with the total in the Motor Vehicles account (control account) in the general ledger. Similarly, the total of accumulated depreciation recorded on the individual records for motor vehicles would agree with the Accumulated Depreciation on Motor Vehicles control account in the general ledger.

The following example shows the relationship between the asset register and the control accounts.

Asset Register – Property, Plant and Equipment (Motor Vehicles)

Type Motor vehicle no 1			
Date	Particulars	Original cost	Accumulated depreciation
		\$ 7 500	\$ 1 800

Type Motor vehicle no 2			
Date	Particulars	Original cost	Accumulated depreciation
		\$ 8 000	\$ 2 000

Type Motor vehicle no 3			
Date	Particulars	Original cost	Accumulated depreciation
		\$ 8 500	\$ 1 000

General Ledger Motor Vehicles

Balance
→ \$24 000

General Ledger Accumulated Depreciation on Motor Vehicles

Balance
← \$4 800

Note: The total of the balance in the Motor Vehicles control account is equal to the sum of the balances for motor vehicles on the individual asset register records. The Accumulated Depreciation on Motor Vehicles control account has a balance equal to the sum of the balances of the accumulated depreciation columns of the individual asset register records.

Illustrative example

From the following information, prepare an asset register record. Also prepare the journal entries necessary to record the transactions, post to the ledger and show how the asset account appears in the Statement of Financial Position on 30 June 2019 and 2020 for a business called Majestics. All amounts include GST where applicable.

2018	
July 1	A Convair delivery van was purchased from R Selwood & Co Ltd for \$37 840. A van body was installed by G Richards Fabricators at a cost of \$6160. Registration of \$1480 (inclusive of \$80 GST) was paid, registration no ZZZ 344. (The estimated life of the van is four years, its estimated residual value is \$5600 and the depreciation method to be used is straight line.)
Aug 31	Paid R Selwood & Co Ltd and G Richards Fabricators in full.
Oct 15	Paid R Selwood & Co Ltd for servicing of delivery van, \$264.
Dec 10	Repaired gearbox, no charge (under warranty), R Selwood & Co Ltd.
2019	
Oct 1	Paid for servicing and repair of brakes, R Selwood & Co Ltd, \$792.
Nov 20	Paid for repairs to motor, burnt valves and servicing, \$1848, R Selwood & Co Ltd.
2020	
Feb 3	Paid for servicing, replacing clutch and reconditioning gearbox, R Selwood & Co Ltd, \$3080.
Oct 11	Paid for servicing and replacing wheel bearings on front wheels, R Selwood & Co Ltd, \$880.
Dec 31	Sold the delivery van to G Rogers for \$17 600 cash.
All repairs and servicing are paid on the day they are done.	

ASSET REGISTER RECORD

Asset no: MV-ZZZ344		Account no: 3302			
Type Convair Delivery Van	Manufacturer Convair	Estimated residual value \$5600			
Location Head Office	Supplier R Selwood & Co Ltd	Depreciation rate 25%			
Date of purchase 1 July 2018	Estimated life 4 years	Taxable rate of depreciation			
Depreciation method straight line					
Date	Particulars	Original cost	Annual accounting depreciation	Accumulated depreciation	Tax depreciation
2018		\$	\$	\$	\$
July 1	R Selwood & Co Ltd	34 400			
	G Richards Fabricators	5 600			
2019					
June 30	Depreciation		8 600	8 600	
2020					
June 30	Depreciation		8 600	17 200	
Dec 31	Depreciation		4 300	21 500	

Amount of \$40 000 to be transferred from the Vehicle account to Disposal account

Amount to be transferred from the Accumulated Depreciation account to Disposal account

Repairs and maintenance			
Date	Repairer	Cost	Remarks
2018		\$	
Oct 15	R Selwood & Co Ltd	240	Servicing
Dec 10	R Selwood & Co Ltd		Gearbox (no charge)
2019			
Oct 1	R Selwood & Co Ltd	720	Servicing & repair brakes
Nov 20	R Selwood & Co Ltd	1 680	Servicing & burnt out valves
2020			
Feb 3	R Selwood & Co Ltd	2 800	Servicing, replace clutch, recondition gearbox
Oct 11	R Selwood & Co Ltd	800	Servicing, replace front wheel bearings
Details of disposal			
Date	Name	Amount	Particulars
2020		\$	
Dec 31	G Rogers	16 000	Cash sale



Amount to be entered in the Disposal account

Figure 1.3 Asset register

Notes

- 1 The rate of depreciation allowed as a tax deduction on property, plant and equipment assets is set by the ATO. This does not mean that a business cannot depreciate the assets at a higher or lower rate. If excessive use requires higher depreciation than that allowed for tax purposes, this should be accounted for. Where tax depreciation differs from accounting depreciation, this should be shown on the asset register record for reference purposes only.
- 2 The recording of repairs and maintenance is important. When deciding on future purchases of similar equipment, this may influence decisions on whether or not to replace the asset at a particular stage or with the same make.

The keeping of an asset register (see Figure 1.3) greatly simplifies the calculations for disposing of an asset. The cost of the asset and the accumulated depreciation are recorded up to the end of the last accounting period. All that is then required is the current accounting period calculation for the depreciation, which is entered in the asset register together with the disposal details. Once this is done the original cost of the asset, the total accumulated depreciation on the asset, and the disposal price are obtained for entry into the appropriate ledger accounts when the asset is disposed of.

Majestics General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
2018 July 1	Delivery Vehicle		34 400	
	GST Credits Received		3 440	
	R Selwood & Co Ltd			37 840
	(Purchase of new Convair delivery van)			

July	1	Delivery Vehicle	5 600	
		GST Credits Received G Richards Fabricators (Fitted new body to delivery van)	560	6 160
	1	Registration on Delivery Vehicle	1 400	
		GST Credits Received Cash at Bank (Paid registration)	80	1 480
Aug	31	R Selwood & Co Ltd G Richards Fabricators Cash at Bank (Paid accounts payable)	37 840 6 160	44 000
Oct	15	Repairs to Delivery Vehicle	240	
		GST Credits Received Cash at Bank (Paid for service)	24	264
2019				
June	30	Depreciation on Delivery Vehicle Accumulated Depreciation on Delivery Vehicle (Depreciation charged for year – (34 400 + 5600 – 5600)/4)	8 600	8 600
	30	Profit or Loss Summary Registration of Delivery Vehicle Depreciation on Delivery Vehicle Repairs to Delivery Vehicle (Closed off expenses to Profit or Loss Summary)	10 240	1 400 8 600 240
Oct	1	Repairs to Delivery Vehicle	720	
		GST Credits Received Cash at Bank (Paid for repairs)	72	792
Nov	20	Repairs to Delivery Vehicle	1 680	
		GST Credits Received Cash at Bank (Paid for repairs)	168	1 848
2020				
Feb	3	Repairs to Delivery Vehicle	2 800	
		GST Credits Received Cash at Bank (Paid for repairs)	280	3 080
June	30	Depreciation on Delivery Vehicle Accumulated Depreciation on Delivery Vehicle (Depreciation charged for year)	8 600	8 600
	30	Profit or Loss Summary Depreciation on Delivery Vehicle Repairs to Delivery Vehicle (Closed off expenses to Profit or Loss Summary)	13 800	8 600 5 200
Oct	11	Repairs to Delivery Vehicle	800	
		GST Credits Received Cash at Bank (Paid for repairs)	80	880

Dec 31	Depreciation on Delivery Vehicle	4 300	
	Accumulated Depreciation on Delivery Vehicle (Depreciation charged for half year)		4 300
31	Disposal of Delivery Vehicle	40 000	
	Delivery Vehicle (Transfer of delivery van on sale)		40 000
31	Accumulated Depreciation on Delivery Vehicle	21 500	
	Disposal of Delivery Vehicle (Transfer on sale of delivery van)		21 500
31	Cash at Bank	17 600	
	GST Collected		1 600
	Disposal of Delivery Vehicle (Disposed of vehicle for cash)		16 000
31	Loss on Disposal of Non-Current Assets	2 500	
	Disposal of Delivery Vehicle (Loss on disposal of delivery van) (40 000 – 21 500 – 16 000)		2 500
2021 June 30	Profit or Loss Summary	7 600	
	Depreciation on Delivery Vehicle		4 300
	Loss on Disposal of Non-Current Assets		2 500
	Repairs to Delivery Vehicle		800
	(Closed off expenses to Profit or Loss Summary)		

Dr				Ledger				Cr	
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
Repairs to Delivery Vehicle								No 2303	
2018				2019					
Oct 15	Cash		240	June 30	Profit or Loss Summary		240		
			<u>\$240</u>				<u>\$240</u>		
2019				2020					
Oct 1	Cash		720	June 30	Profit or Loss Summary		5 200		
Nov 20	Cash		1 680						
2020				2021					
Feb 3	Cash		2 800	June 30	Profit or Loss Summary		800		
			<u>\$5 200</u>				<u>\$800</u>		
Oct 11	Cash		800						
			<u>\$800</u>				<u>\$800</u>		

Depreciation on Delivery Vehicle		No 2304
2019	2019	
June 30 Accumulated Depreciation	June 30 Profit or Loss Summary	8 600
		<u>8 600</u>
2020	2020	
June 30 Accumulated Depreciation	June 30 Profit or Loss Summary	8 600
		<u>8 600</u>
2020	2021	
Dec 31 Accumulated Depreciation	June 30 Profit or Loss Summary	4 300
		<u>4 300</u>
Registration of Delivery Vehicle		No 2307
2018	2019	
July 1 Cash	June 30 Profit or Loss Summary	1 400
		<u>1 400</u>
Loss on Disposal of Non-Current Assets		No 2422
2020	2021	
Dec 31 Disposal of Delivery Vehicle	June 30 Profit or Loss Summary	2 500
		<u>2 500</u>
Delivery Vehicle		No 3302
2018	2020	
July 1 R Selwood & Co Ltd	Dec 31 Disposal of Delivery Vehicle	40 000
1 G Richards Fabricators		
		<u>5 600</u>
		<u>40 000</u>
Accumulated Depreciation on Delivery Vehicle		No 3302A
2020	2019	
Dec 31 Disposal of Delivery Vehicle	June 30 Depreciation	8 600
	2020	
	June 30 Depreciation	8 600
	Dec 31 Depreciation	4 300
		<u>4 300</u>
		<u>21 500</u>
Disposal of Delivery Vehicle		No 3302.1
2020	2020	
Dec 31 Delivery Vehicle	Dec 31 Accumulated Depreciation	21 500
	31 Cash	16 000
	31 Loss on Disposal of Non-Current Assets	2 500
		<u>2 500</u>
		<u>40 000</u>
GST Collected		No 4102.2
	2020	
	Dec 31 Cash at Bank	1 600

GST Credits Received				No 4102.2A
2018				
July	1	R Selwood & Co Ltd	3 440	
	1	G Richards Fabricators	560	
	1	Cash at Bank	80	
Oct	15	Cash at Bank	24	
2019				
Oct	1	Cash at Bank	72	
Nov	20	Cash at Bank	168	
2020				
Feb	3	Cash at Bank	280	
Oct	11	Cash at Bank	80	
R Selwood & Co Ltd				No 4102.3
2018			2018	
Aug	31	Cash	<u>37 840</u>	July 1 Delivery Vehicle and GST <u>37 840</u>
			<u>\$37 840</u>	<u>\$37 840</u>
G Richards Fabricators				No 4102.4
2018			2018	
Aug	31	Cash	<u>6 160</u>	July 1 Delivery Vehicle and GST <u>6 160</u>
			<u>\$6 160</u>	<u>\$6 160</u>
Profit or Loss Summary (extract)				No 5103
2019				
June	30	Registration	1 400	
	30	Depreciation on Delivery Vehicle	8 600	
	30	Repairs to Delivery Vehicle	240	
2020				
June	30	Depreciation on Delivery Vehicle	8 600	
	30	Repairs to Delivery Vehicle	5 200	
2021				
June	30	Depreciation on Delivery Vehicle	4 300	
	30	Loss on Disposal of Non-Current Assets	2 500	
	30	Repairs to Delivery Vehicle	800	

Statement of Financial Position (extract) as at 30 June				
	2020		2019	
	\$	\$	\$	\$
Non-Current Assets				
Property, Plant and Equipment				
Delivery Vehicle (at cost)	40 000		40 000	
Less Accumulated Depreciation	<u>17 200</u>	22 800	<u>8 600</u>	31 400

The asset is shown at its original cost. This results from the application of the historical cost principle. As the useful life of the asset has diminished, the accumulated depreciation must be deducted.

1.21

'The Accumulated Depreciation account represents funds that have been set aside for the replacement of the non-current asset.' Comment on this statement.

1.22

Explain the significance of keeping an asset register for property, plant and equipment with regard to the control account–subsidiary ledger principle.

1.23

On 1 January 2019, Taahu Electronics purchased an Essex delivery van from Essex Trading Co Ltd for \$38 500. Registration of \$1050 (including \$50 GST) was paid. In addition, an air-conditioner that cost \$3300 was fitted before delivery by Essex Trading Co. It was estimated that the van would be kept for five years and at the end of that time would have a trade-in value of \$6000. The straight line method of depreciation was chosen for use with this vehicle, and GST applies where appropriate.

Additional information

2019

Feb	1	Paid Essex Trading Co in full.
Mar	1	Van serviced by Essex Trading Co Ltd, \$902.
July	15	Replaced battery and alternator by Essex Trading Co Ltd, no charge.
Nov	14	Van serviced by Essex Trading Co Ltd, \$2420.

2020

May	6	Tyres replaced by Archer Tyre Service, \$660.
Aug	10	New clutch fitted and air-conditioner serviced by NC Repair Services, \$594.
Sept	30	\$11 000 was received for sale of the van. (GST applies.)

On the basis of this information:

- show the asset register record recording the above information
- show the ledger accounts necessary to record the above information to the end of the accounting period 30 June 2021
- show how the asset account will appear in the Statement of Financial Position as at 30 June 2019, 2020 and 2021.

1.24

On 1 July 2018, Murdock Marine purchased two delivery vehicles from Riverside Trading Co Ltd. Vehicle A cost \$27 500 and vehicle B cost \$28 600. Registration amounting to \$1045 (including \$45 GST) on each vehicle was paid. The estimated life of the vehicles was four years, and the estimated residual values were \$6600 for vehicle A and \$7000 for vehicle B. The straight line method of depreciation was chosen for the vehicles. Riverside Trading Co Ltd was paid on 30 August.

On 1 January 2022, Murdock traded in vehicle A for \$9900 on a delivery vehicle costing \$33 000 from Riverside Trading Co Ltd. Registration of \$735 (including \$35 GST) was paid. The estimated life of the new vehicle was five years, with a residual value of \$10 000. Relevant amounts include GST.

On the basis of this information:

- a show the ledger accounts necessary to the end of the accounting period 30 June 2022
- b show how the asset account will appear in the Statement of Financial Position as at 30 June 2019, 2020, 2021 and 2022
- c show the asset register record for vehicle A.

Amortisation of intangible assets

Intangible assets such as patents, franchises and copyrights should be amortised over the period of their useful life during which benefits will be received. However, goodwill is not amortised in this way.²

A **patent** confers on the holder the sole right to make, use or sell some invention. The life of the patent will depend on its type. Standard patents exist up to 20 years. Innovation patents exist up to eight years. Where the cost of a patent has been capitalised, it should be amortised over the life of the patent.

A **franchise** or **licence** is a right or privilege granted to a person or corporation to market and use specified goods or services. A fee is paid to the owner in order to use a particular name, production technique, or marketing expertise, and sometimes the necessary training, equipment and inventories. Where the fee has been capitalised, this should be amortised over the term of the franchise or licence. Typical franchises include Coffee Club, Boost Juice, Jim's Mowing and Swimart.

A **copyright** is the exclusive right given by law to make copies or to give performances of original works. This right continues for 50 or 70 years after the death of the author. Any value recorded for copyrights should be amortised. Generally, this is done over a relatively short period of time because of the uncertain nature of copyright.

The exclusive right to use **trademarks** and **brand names** (e.g. McDonald's, Nike, Coca-Cola) may be obtained by registering them at an agency of the Australian Government. They generally have an indefinite life so are not amortised.³ If purchased, the purchase price is the cost. If developed, the cost is expensed.

Major **research and development** costs of new products and processes that have been capitalised could be amortised. However, the modern approach is to write these costs off as an expense as they occur, rather than to capitalise them.

Accounting for amortisation

The straight line method is generally used to calculate the amount of amortisation. Once the amortisation amount has been determined, an entry must be made in the accounting records. This is usually a balance day adjustment. The entry made will be:

	Dr	Cr
Amortisation of ...	XXX	
Accumulated Amortisation of ... (Amortisation allowed for the year)		XXX

The effect of this entry is to create an:

- amortisation expense account
- an Accumulated Amortisation account that has the effect of showing the carrying amount of the asset in the Statement of Financial Position. The asset cannot be credited directly because the amortisation is only an estimate.

² Determining the amount of amortisation and impairment of goodwill is beyond the scope of this book.

³ Impairment of trademarks and brand marks is beyond the scope of this book.

Example

A patent was purchased on 1 July 2018 for \$20 000. It has been decided to amortise the cost of the patent over eight years.

- a Calculate the amount of amortisation for the year ending 30 June 2019 using the straight line method.
- b Record the amortisation at that date.

Solution

Amortisation calculation

$$\begin{aligned}\text{Amortisation} &= \frac{\$20\,000}{8} \\ &= \$2\,500 \text{ per annum}\end{aligned}$$

Recording

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
2019 June 30	Amortisation of Patent Accumulated Amortisation of Patent (Amortisation for the year)		2 500	2 500

The expense account will appear as follows:

Dr				Ledger				Cr	
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
2019				2019					
Amortisation of Patent				No 2426					
June 30	Accumulated Amortisation of Patent		2 500	June 30	Profit or Loss Summary		2 500		
			<u>\$2 500</u>						<u>\$2 500</u>

The Amortisation of Patent account is closed to the Profit or Loss Summary account at the end of the accounting period.

The Accumulated Amortisation account is a negative asset and is thus carried forward to the next accounting period by balancing it off.

Dr				Ledger				Cr	
Date	Particulars		Ref	Amount \$	Date	Particulars		Ref	Amount \$
2019					2019				
Accumulated Amortisation of Patent					No 3401A				
June 30	Balance c/d			2 500	June 30	Amortisation of Patent			2 500
				<u>\$2 500</u>					<u>\$2 500</u>
					July 1	Balance b/d			2 500

The Statement of Financial Position on 30 June 2019 includes the patent and the accumulated amortisation of the patent.

Statement of Financial Position (extract) as at 30 June 2019		
	\$	\$
Non-Current Assets		
Intangible Assets		
Patent	25 000	
Less Accumulated Amortisation	<u>2 500</u>	22 500

The amortisation will accumulate until the cost of the asset is reduced to zero.

1.25

- What determines the amount of amortisation to be written off an intangible asset?
- Make a list of assets that would be considered intangible assets.
- Give the journal entry necessary to write amortisation of \$100 000 off a licence. Explain why each account has been debited or credited.

1.26

On 1 July, G Harcourt purchased a franchise valued at \$230 000. Harcourt wishes to amortise this over 10 years. Give the journal entry to record the amortisation at 30 June and show how the above information would appear in the Statement of Financial Position.

Interesting accounting fact

Did you know?

Accounting slogans can be smart. What do you think of these catchy T-shirt slogans?

Number crunching with cents

Makes perfect cents

Trendy analysis

Figuring it out

Numbers for your future

Can you think of some more?

Source: <shoutslogans.com/accountant-slogans> and <the-alternative-accountant.com/funny-slogans.html>

Real-world application



The importance of good accounting

Watch the YouTube clip by Jay Goltz by following the weblink.

Main points discussed:

- Businesses fail because they do not take enough notice of accounting. You must have a fundamental understanding of accounting.
- You need a good accountant to help you run a business.

Source: Jay Goltz, for *The New York Times*



Jay Goltz video

Internal accounting controls and administrative controls

As we discussed in Chapter 8 of *Units 1 & 2*, the accountant has many methods and measures to ensure that the general aims of internal control are achieved. A summary of what was covered is outlined below.

Internal control of a business enterprise involves those internal methods and measures that ensure efficient management of the enterprise and achievement of planned objectives.

The general aims of internal control are to:

- safeguard the assets of the business
- check the accuracy and reliability of the business's accounting data
- promote operational efficiency
- encourage adherence to prescribed managerial policies.

Accounting controls are the methods and procedures designed to safeguard the assets of the business and to check the accuracy and reliability of its accounting data.

Administrative controls are the methods and procedures designed to promote operational efficiency and to encourage adherence to prescribed managerial policies.

Internal controls built into an accounting system aim to:

- prevent errors from being made in the first instance
- detect errors if they are made
- prevent theft and fraud
- increase efficiency through budgeting procedures.

Internal accounting controls are built around the following seven principles:

1 Reliable, competent personnel

An accounting system is only as good as the individuals who implement and maintain it. Therefore, it is vital for an organisation to employ qualified personnel and to ensure that they are given duties and responsibilities commensurate with their abilities.

2 Verification

Verification is the act of checking the accuracy of accounting records by some independent means. One important way to verify accounting records is to compare the physical asset with the accounting record relating to it. This is often described as comparing 'what is there with what should be there'.

3 Authorisation

Authorisation means that a person in a position of responsibility or authority will validate a course of action. Such things as purchasing assets, granting credit and paying bills all require authorisation.

4 Responsibility

The plan of the organisation should fix responsibility for the functions to be performed and confer the authority necessary to carry them out. Responsibility for tasks should not be shared, as this may create problems if queries arise.

5 Separation of duties/rotation of duties

Separation of duties means the separation of authorisation, recording and custodianship (physical handling of the asset). People who authorise a transaction should not be involved in recording or handling the asset. Also, the person who does the recording of particular assets should not be responsible for the physical handling of the asset. It is vital that separation of duties be adhered to; fraud is only possible if the person who obtains the physical asset is also able to change the records to cover the fraud. Where separation of duties is implemented, two or more people would have to collude in order to commit a fraud. In addition to separating the duties of personnel, employees should also rotate duties as much as possible and be forced to take annual leave.

6 Adequate and accurate documents and records

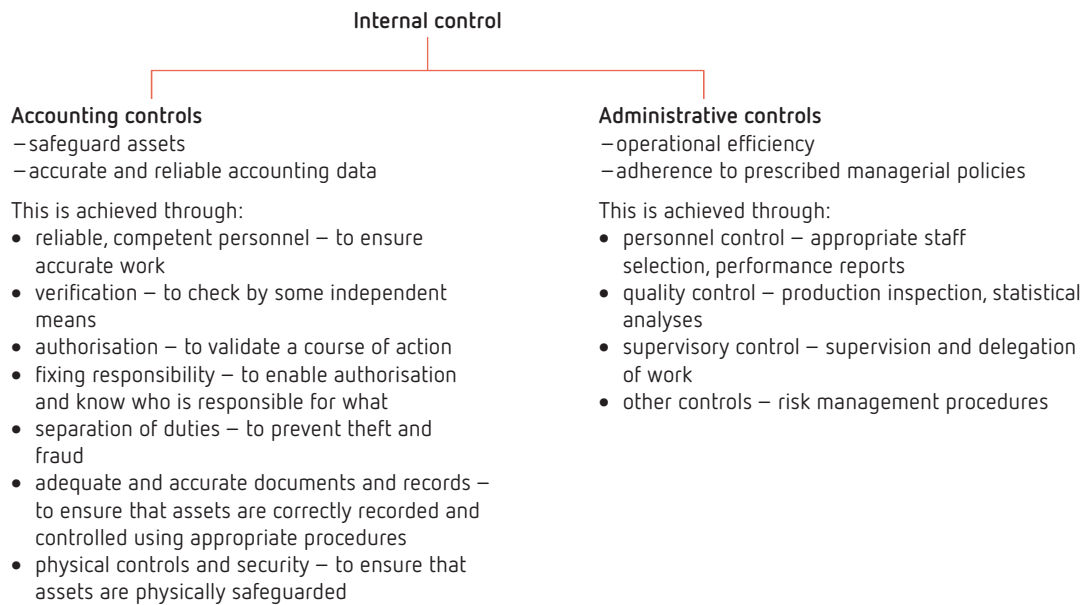
Documents are necessary to capture the information that is to enter the accounting system. Inadequate documentation can cause control problems. Documents ensure that assets are correctly recorded and controlled.

7 Physical controls and security

This principle relates to the controls that physically safeguard the assets, particularly cash, inventories and long-term assets. It includes such things as control over access through keys and employee identification cards, cash registers, safes, secure areas for storage of assets, video surveillance, after-hours security, fire protection and adequate insurance.

These are the general features of a good system of internal control. The extent of internal controls that are possible and desirable to use will depend on the size of the organisation and other factors such as the nature of the activity and the associated product, size of the business, location and dispersion, management and ownership.

Accounting controls are the most important management controls in an organisation. There are, however, other controls that management must implement. The following is a summary of all these controls.



Managing non-current assets

Non-current assets generally consist of property, plant and equipment; other financial assets (investments); and intangibles. These assets are specifically acquired because they will help the business grow and make profits. Appropriate controls must therefore be implemented over long-term assets.

Internal control over property, plant and equipment

Property, plant and equipment assets require controls over their purchase, storage and disposal that are just as stringent as those exercised over any of the business's other assets.

The most important control over property, plant and equipment is the **asset register**. When a business has more than one item of property, plant and equipment, it is desirable that a register be kept to record details of each asset. A register enables:

- proper control over such assets through the use of the control account–subsidiary ledger technique. The control account is the asset account in the general ledger, and the subsidiary ledger consists of the individual asset register records
- accurate accounting for property, plant and equipment.

The register will consist of separate records for each individual asset. The exact details kept on each record will depend on each business's policy.

An example of a record used in an asset register was shown on page 25.

Internal control over the purchase of property, plant and equipment

Control must be exercised in the following areas:

Authorisation As the purchase of an item of property, plant and equipment is a major decision, higher level management must authorise such purchases. All purchase orders must show this authorisation.

Selection As the purchase of property, plant and equipment may commit the business to large payments and ownership over several accounting periods, it is important that all facts are known before purchase.

When purchasing machinery, for example, all technical details regarding performance, operation, reliability, anticipated repair costs, initial cost and cost of delivery should be examined by a suitably qualified and responsible member of the business.

Proof of ownership The purchase of property, plant and equipment is usually accompanied by proof of ownership, such as title deeds to property. These are valuable and should be kept in a safe or a bank safe deposit box.

Payment of cash Once the purchase of the asset is authorised, it becomes a normal cash payment. Before payment is made, a check must be made that the asset has been received and the purchase order matches the tax invoice.

When the asset has been purchased, details of the asset must be recorded in the asset register.

Internal control over the storage of property, plant and equipment

Property, plant and equipment help to produce revenue and therefore are normally in fairly constant use. Whether the assets are movable or remain in one location for their entire life, control over their storage must be exercised in the following areas:

Location All assets should be identified by some means, usually by an asset number. The asset register identifies the assets owned and their designated location. Regular checks should be made to ensure that the assets are situated in their correct place.

Maintenance It is essential that assets be kept in good working order.

Protection The assets must be protected against theft or damage. The asset register indicates the assets that should be on hand, and regular checks should be made to ensure that this is the case. Adequate insurance cover should also be maintained against any unforeseen circumstances.

All details of location and maintenance are also recorded in the asset register. The register also ensures proper protection of the asset.

Internal control over the disposal of property, plant and equipment

Control must be exercised in the following areas:

Authorisation As with purchase, the disposal of property, plant and equipment needs proper authorisation by higher level management. This is to prevent an unauthorised employee selling valuable assets. It also prevents disposal without due consideration of all relevant facts.

Physical disposal This could take place by outright sale, tender, trade-in or scrapping. Whatever method of disposal is adopted, the best possible price should be obtained. A properly authorised employee must be in charge of the physical disposal of the asset.

Receipt of cash The procedure for receipt of cash from disposal and the controls necessary are as per a normal receipt of cash.

Disposal of the asset is then recorded in the asset register.

Internal control over other non-current assets

Control must be exercised in the following areas:

Investments and other financial assets Proper authorisation for the purchase of investments must occur. Suitably qualified and responsible staff must be involved in the selection of any investment so that maximum returns are obtained for the business. Proof of ownership of the investment must be obtained and kept in a secure place. Suitable records must be kept and any returns accounted for. Authorisation

must be obtained for any disposal, and the correct control procedures for receipt of cash on sale of the asset must be accounted for.

Patents and copyrights These assets can be very valuable to the business. Controls should be put in place to ensure that they are registered correctly and to ensure that any breaches are dealt with in the appropriate manner. This would require the services of suitably qualified staff or external experts in the field.

1.27

- a Describe the concept 'internal control'.
- b Describe and explain the general aims of internal control.
- c Distinguish between an accounting control and an administrative control.
- d Describe the aims of internal controls built into an accounting system.
- e Name and explain the seven general principles around which internal accounting controls are built.

1.28

The asset register is a most important control measure over property, plant and equipment. What type of information should it contain, and how does this help achieve control over these assets?

1.29

In what areas should control over purchases of property, plant and equipment be exercised? Briefly describe how this control would be achieved.

1.30

- a Control over storage of property, plant and equipment is necessary in a number of areas. Identify and briefly discuss each of these areas.
- b What controls should be followed in disposing of property, plant and equipment? Discuss the controls under the headings 'authorisation', 'physical disposal' and 'receipt of cash'.

1.31

Marterson Trading has a very large sales staff that consists of 30 people who travel throughout the state selling to various customers. Orders are usually written manually on an order form and then, when the salesperson returns to the office, the details are manually entered into the accounting system. Two months ago, Marterson purchased 35 laptop computers so that the 30 salespeople could take the computers with them, enter the customers' orders electronically and, upon returning to the office, automatically upload the data into the accounting system. The extra five laptops were bought in case other people needed a laptop to perform their duties and to provide spares to the salespeople in case any broke down.

The sales manager just went to obtain a laptop and found that there are none on the shelf where they should be stored. He doesn't know who has them.

Prepare a letter to the sales manager outlining your recommendations to improve the control over these non-current assets.

Managing business data and technology

Data and information

Data can be defined as factual material of any kind (unstructured facts). Data could include football results, electricity meter readings, tax invoices and receipts. However, these are of little use in their raw state. Data must be collected and processed in some way in order to give it meaning. It then becomes useful and is called **information**. For example, across all the sales dockets for a month, every product sold would be the data. However, if that data was collated and the top 10 products for the month were calculated, the business owner would know much more about the business than simply having the raw data. It is this manipulation of data and the output from the system in the form of information that allows business owners to understand their business and to plan for the future. Typical output would include source documents; financial statements; sales information; and customer, supplier and payroll details.

Business technology

In Chapter 5 of *Units 1 & 2*, the various accounting technologies used in a computer system were discussed. Regardless of the type of business, some basic technologies are generally employed. For a trading business, they could be:

- **Computer hardware** This is illustrated in Figure 1.4.

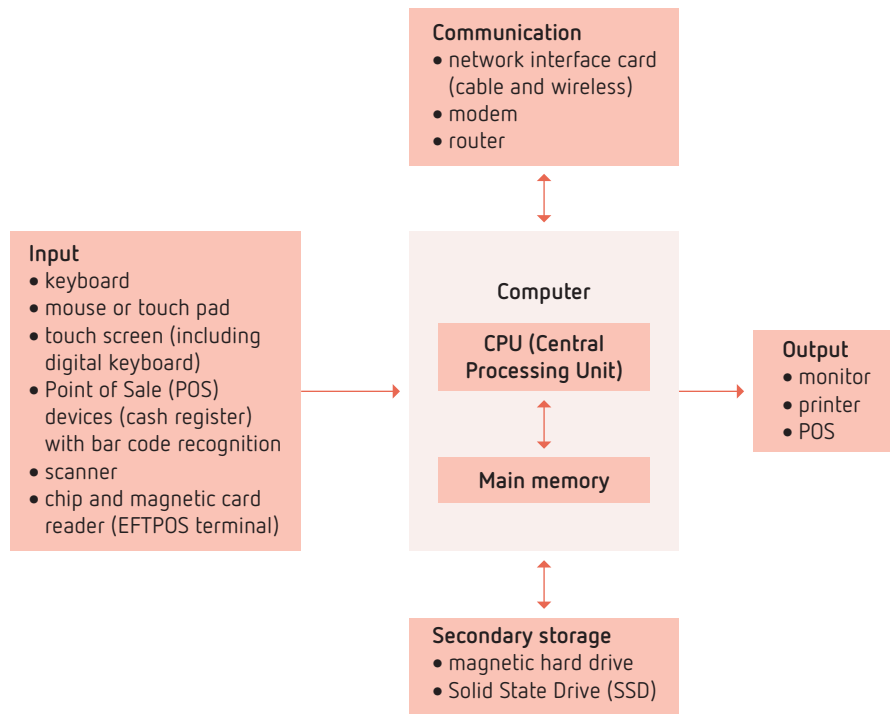


Figure 1.4 Computer hardware used in a typical trading business computer system

This computer hardware includes:

- input devices to enable people to access the system and input data
- the computer to process the data
- communication devices to communicate within the organisation and with the outside world
- output devices to see the result of any processing
- storage devices to store the data and information for later use.

The key to most business systems is the communications that allow employees, customers, suppliers and other authorised users to log into the system. To access the system, they could be using hardware such

as business computers, personal computers, or portable devices such as laptops, smartphones and tablets (Apple iPad, Samsung Galaxy and Microsoft [MS] Surface Pro); and this connection could be through Wi-Fi or cable directly into the system or through the Internet. Another important hardware device is the telephone system, which plays a vital role in voice communication. All this hardware is sometimes known as **information and communications technology (ICT)**.

- **Software** This is the set of computer programs (the instructions for the various processing operations) that makes the hardware function. **System software** comes with the hardware, and **development software** can be used if the business wants to build applications. However, most small to medium-sized businesses would buy ready-made application software. This purchased **application software** includes accounting (MYOB, Reckon/Quickbooks, Xero), word processing (MS Word), spreadsheeting (MS Excel), email (MS Outlook, Google Gmail) and Internet access (MS Internet Explorer and Edge, Apple Safari, Google Chrome and Mozilla Firefox). As well, mobile applications or 'apps' for mobile devices such as phones and tablets are dramatically increasing in use. One very important piece of application software that could be purchased or specifically developed to suit the needs of the business is the **website**. This website can be a simple site at the **information level** that shows basic product descriptions, advertisements and contact details; through to the **transaction level** by selling directly to customers using shopping carts with electronic payments. This transaction level is commonly referred to as an e-commerce or e-business capability.

Other application software includes:

- **Customer Relationship Management (CRM)** to help build and maintain customers; for example, Coles Flybuys and Woolworths Rewards customers could be sent special deals based on the products they buy and the amount of their overall shopping
- **Supply Chain Management (SCM)** to help maintain the on-time supply of goods and services by monitoring the movements in applicable product, information and finance; for example, monitoring the supply chain to ensure manufacturers and wholesalers meet their obligations to supply product at the right price and on time
- **Business Intelligence (BI)** to statistically mine through all the data to discover 'gems' of information that will improve the business. For example, predicting the level of inventories required at certain stores at certain times so that enough inventories are carried to meet the customers' needs, but not too high a level of inventories are kept to avoid cash being tied up in underselling inventories.
- **People** These generally include operators, technicians and end users who are employees, customers, suppliers and other authorised users. Of course, employees have to be trained to operate the system. However, the current trend is to have one interface that all users interact with, so if a customer logs into the website, they will be using the same software as if they were an employee. The software must be simple to use and if errors are made, the software must pick them up before the transaction is processed.

1.32

- Explain the difference between data and information.
- Name the five basic hardware components of a computer system.
- What technologies are typically used in a trading business and what purpose do they serve?

1.33

- Discuss the various types of application software that may be useful in a trading business.
- Use a search engine to investigate a trading business's application of the following:
 - Customer Relationship Management (CRM)
 - Supply Chain Management (SCM)
 - Business Intelligence (BI).

Document and give specific examples of how these types of software can improve a business.

Technology linked to the Internet and the World Wide Web

The use of a computer, combined with the ability to communicate anywhere in the world, has allowed businesses to operate as electronic, virtual businesses and not just in bricks and mortar, physical premises. The technologies relating to networks and the Internet have provided the medium for conducting business electronically.

It is often thought that the Internet and the World Wide Web are the same thing. Although they are related, they are two separate concepts.

The Internet is not owned by any one organisation and there is no controlling body. It can be used to transfer all types of data – email, files, video, voice and web pages. The **Internet** is the networking infrastructure that allows data to be transferred around the world. It is the hardware and software that allows independent, networked computers to talk to one another.

The hardware that comprises network communication is made up of different levels:

- On each computer, a **network interface card/controller (NIC)** allows the computer to communicate with other nodes such as printers and external computers. The message is transmitted via twisted pair copper wires, coaxial cables or fibre optics. In wireless situations, a **wireless network interface card/controller (WNIC)** is used.
- A **local area network (LAN)** is a collection of computers in close proximity, such as in an office or warehouse.
- A **wide area network (WAN)** covers a large geographical area, such as across a whole country or the globe.
- **Routers** are special devices that connect the LANs and WANs and direct communication traffic.

The Internet is based on internetworking; that is, connecting the WANs to the LANs to each individual computer. A **backbone** criss-crosses the world and **Internet Service Providers (ISPs)**⁴ allow access to this backbone. Consumers access their ISP via a modem, while larger organisations have networks that access their ISP via permanent, high-speed, high-capacity connections.

How does the Internet differ from the World Wide Web? The Internet forms the base for the communications, setting up the infrastructure for how the communication will take place. You generally do not see this because it occurs automatically and seamlessly.

Applications sit on top of this base. The **World Wide Web (WWW or 3W)** is one such application, and it is the most popular. To gain access to the World Wide Web, all that is required is a computer or portable device (smartphone or tablet), an Internet browser (software such as Internet Explorer, Edge, Safari, Google Chrome) and a link to an ISP via a modem, Wi-Fi, or other connection.

The World Wide Web is built around four main items:

- A website, web address, domain name or universal resource locator (URL), which is the address of the site you wish to locate. For example, the URL <www.icann.org> is the address for the Internet Corporation for Assigned Names and Numbers. This web address is another way of accessing the numeric Internet Protocol (IP) address 192.0.34.65. However, the domain name is much easier to remember than a list of numbers.

If you accessed <https://www.woolworths.com.au>, the *https://* part of the name is Hypertext Transfer Protocol Secure, which is used on the World Wide Web. The less secure default version is *http://*. *woolworths* is the name of the business, and the last five characters in the domain name have a certain structure, as shown in Table 1.1.

⁴ ISPs are the most common access for most users. ISPs are generally connected to Internet access providers such as Optus and Telstra.

Table 1.1 Domain names

Last two characters	Definition	Previous three characters	Definition
.us	United States	.com	Commercial
No characters	United States	.org	Organisations
.au	Australia	.net	Network service provider
.nz	New Zealand	.edu	Educational institution
.uk	United Kingdom	.gov	Government
.ca	Canada	.biz	Business
.fr	France		
.de	Germany		
.cn	China		
.jp	Japan		

- Web pages, which are the pages you see on the browser.
- Links, which link each web page together. These are generally in blue and allow the user to click to a new web page.
- A web server, which stores the pages and displays them when required.

Many organisations have extended this Internet and web technology to meet their own needs. An **intranet** uses the Internet technology and browsers to allow authorised users access to the data of individual businesses and organisations. It is for internal use. An **extranet** is the linking of customers, suppliers and other businesses' intranets into a collaborative network. These businesses can therefore access any relevant information that is required from each other's site. Obviously, security is of prime importance in both intranets and extranets, in order that only authorised users have access. On the other hand, the Internet is open to anybody and therefore is designed for worldwide access.

Search engines are the fastest way to find information on the web. Typical search engines include:

Google Australia	<google.com.au>
Bing	<bing.com>
Yahoo	<au.yahoo.com>
Ask	<www.ask.com>
WebCrawler	<webcrawler.com>
Web Wombat	<webwombat.com.au>

1.34

- Explain the hardware that typically comprises network communications.
- Differentiate between the Internet and the World Wide Web.

1.35

- Explain the four main components of this web address: <http://www.iana.org/>.
- Name the organisation whose website is listed in part a.
- Find details of the top-level domains (TLDs) at this web address.
- Go to the page <https://www.iso.org/obp/>. To find a list of country codes as per the ISO 3166 code list, click on Country Codes, and Search. Are they the same as those listed in Table 1.1?

1.36

Various sites can be used to obtain information about the basic tools of the Internet. Visit the following sites and enter appropriate search words for items you want to find more information about (ISP, TCP/IP, extranet, ISO and so on):

a <<https://www.webopedia.com/>>

b <<https://www.pcworld.com/>>.

Bricks and mortar vs online technology

In a bricks and mortar shop, sales can be made by phone or email, through a salesperson, or by a customer actually coming to the shop and buying goods. You have previously learnt about the records that are kept and the controls that are implemented. An online business provides another sales channel – that of selling over the Internet. Because the entire process of selling a product and paying for it can be done without any human intervention, changes occur in the way accounting records are produced. All the data will be entered electronically by the user (the originating source) and not by people within the organisation. The software must be able to pick up input errors (e.g. digits left out of phone numbers) and appropriate opportunities must be provided to ensure that users are able to change anything that is incorrect.

Once the sale transaction has been completed, it may or may not have entered our business's accounting system. If it hasn't been recorded in our system, then appropriate measures will have to be implemented to transfer the data electronically. It doesn't matter if the sale occurs over the counter via a cash register, or over the Internet, the accounting debit and credit entries will be the same. How the entries get into the accounting system may be different, but the result will be the same.

A typical sales transaction for an online shop proceeds as follows:

- 1 The customer accesses the online shop website and a secure session is set up through <https://>. Alternatively, the online shop can be accessed with a mobile app on a smartphone or tablet, and the process will be similar. The customer would have previously registered a login name and password, or could create a new account. A confirmed email address is generally used to communicate with the customer.
- 2 The merchant's website loads the shopping cart software and sets up the connection with the inventory system in order to display the goods available and the prices, including any specials.
- 3 The customer chooses the goods, places them in the cart and proceeds to the checkout. Payment will generally be made by credit card, so the customer will enter the credit card details.
- 4 The merchant's computer will check the credit card details with the appropriate financial institution that authorises the customer's payment. The payment could also be done through PayPal or by direct debit.
- 5 An email with an appropriate document number (tax invoice, receipt) will be sent to the customer to confirm their purchase. If goods are to be physically delivered, then this email will also have a hyperlink to the courier to track the progress of delivery.

Upon payment authorisation, the inventory levels for each item sold will be reduced, the sales transaction will be recorded in the accounting system, and the customer's payment will be electronically received from the financial institution. As you can see, there is no human intervention in the transaction until the goods are dispatched, because the whole ordering and payment process is fully automated. Even in the actual picking of the goods in the warehouse to fill the order, robots can be used to make the process more efficient. Amazon is a firm that uses these huge automated warehouses.

An example of an online shop is Woolworths, as shown in Figure 1.5. After accessing this site, users can click on the products they want and add them to their shopping cart.

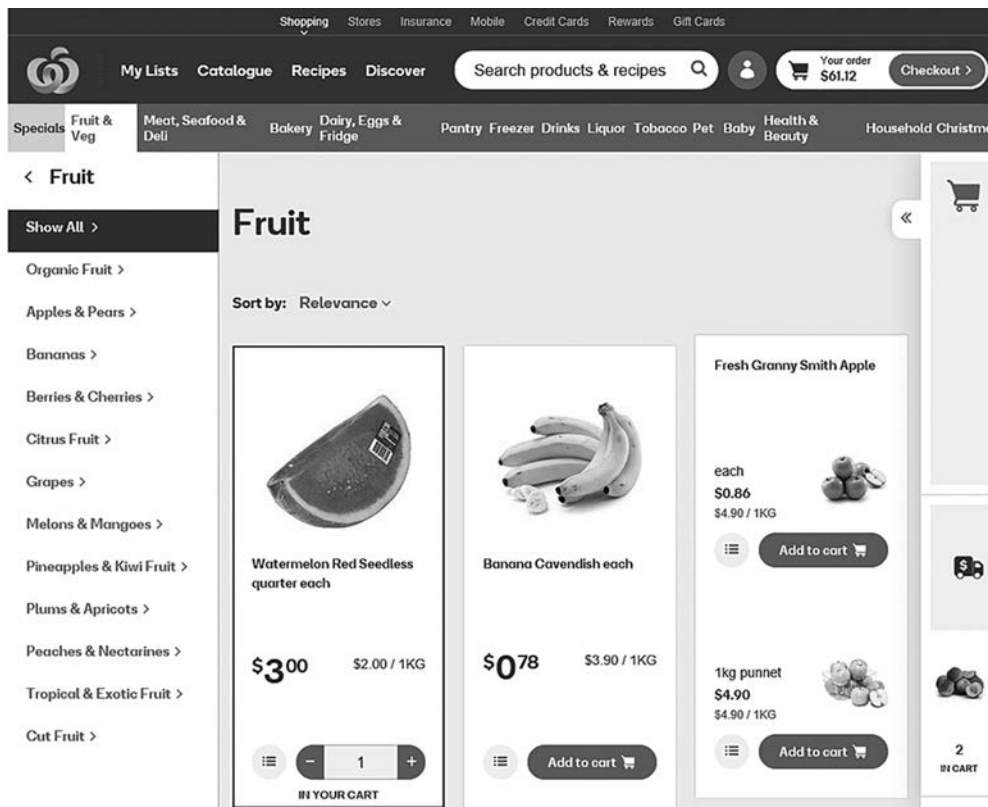


Figure 1.5 Woolworths Shopping web page, used for selling goods online

The shopping cart is filled with the goods required (the order at the moment is \$61.12 in Figure 1.5), and the customer then clicks on Checkout to place the order. After payment, the goods will then be delivered in the timeframe requested by the customer.

In terms of normal accounting, the basic elements of recording are still required. Instead of a checkout operator recording the items that are sold, the online customer presents the items at the checkout and the computer uses the items in the shopping cart to prepare the order. If the customer chooses to pay by card, payment is similar to a normal card being swiped through a machine. The only real difference is that, instead of the customer picking the goods and walking out of the shop with them packed in bags, the goods have to be picked from the shelves by an employee at a depot/store and then delivered.

Another type of shopfront is Commsec, as shown in Figure 1.6. Commonwealth Securities is a broking site where registered users can buy and sell shares at low brokerage costs. Access to the site is free. Market depth for the leading stocks is readily available. At any time, you can see how many shares are in the market and at what prices other people are willing to buy or sell them. Orders are placed via the site, and a designated bank account is used for the electronic movement of money to pay for the shares if buying, or to receive the money if selling. It is vital that these types of transaction are performed in a secure environment so that customers cannot later claim they did not authorise the transaction. Imagine that a customer sells some shares at \$5.20 at 11 a.m. and the shares rise to \$10.30 at 1 p.m. The customer should not be able to claim that the sale at 11 a.m. was not authorised, and then try to sell them at 1 p.m. at the higher price. This is called non-repudiation of transactions and will be discussed on page 53.



Source: CommSec, www.commsec.com.au

Place Order - Shares

*Required Field

Account: ☐ BUY ☐ SELL

*Code: BHP BILLITON LIMITED FPO

*Quantity: or Value (\$):

*Price Limit (\$): or ☐ At Market

*Expiry: or ☐ Good for Day

Order Estimate

Order Value (\$):	0.000
Brokerage & Cost (\$):	0.000 (Incl GST)
Total (\$):	0.000

Clear Proceed

Figure 1.6 CommSec web page used for buying and selling shares

Some other sites and mobile apps that have shopfronts are listed in Table 1.2.

Table 1.2 Some sites with shopfronts

Store	Web address
Amazon.com	<amazon.com.au>
Booking.com	<booking.com>
Coles	<shop.coles.com.au>
Chemist Warehouse	<chemistwarehouse.com.au>
eBay	<ebay.com.au>
Kogan	<kogan.com/au>
JB Hi-Fi	<jbhifi.com.au>
Menulog	<menulog.com.au>
Qantas	<qantas.com.au>
Virgin Australia	<virginaustralia.com>
Webjet	<webjet.com.au>
Wotif	<wotif.com.au>

Despite the increasing use of online shopping, there are some issues that have to be resolved:

- **Delivery** The goods have to be delivered and this generally takes time. Who will deliver the goods? Who is responsible if the delivery is late, and what happens if breakages occur? For example, if ordered eggs are broken, the watermelon is squashed, the 'fresh' produce is not fresh, or a bottle of wine is cracked. A delivery policy on the site will outline what will occur.
- **Returns** How do customers return goods? Under what circumstances will a return be accepted (e.g. if the clothes do not fit)? Who pays for the freight back to the shop? There is generally a returns policy on the site outlining this information.

- **Privacy** How will customer data be protected? Customers are entitled to privacy, with none of their information being passed on to a third party. A privacy policy on the site will say how customer data is protected.
- **Security** Can customers trust that the site is secure? Is appropriate technology used to ensure that transactions are securely authorised and processed? (See later discussion.)

1.37

Go to the Woolworths shopping site. To get a feel for the site, start shopping and pretend to buy some goods by placing them in the shopping trolley (Add to cart). Proceed to the checkout, but cancel the transaction when you are asked for user account details or payment details.

- Do you like shopping like this?
- Who do you think this type of shopping is aimed at?
- What problems do you think could occur with shopping over the Internet or with using an app?

1.38

Locate an Australian website or associated app for each of the following items to be purchased:

- airline tickets
 - televisions and electronics
 - clothing
 - groceries.
- How did you locate the site?
 - Record the website address.
 - Pretend to buy whatever is being sold. Continue right up until the time the site asks you for user account details or to pay for the goods, then cancel the transaction.
 - What did you like about the site? What didn't you like about the site? Would you return to the site?
 - What were the similarities between the sites? What were the differences?

1.39

- Describe a typical transaction for an online store.
- What are some of the problems with selling goods through an online store?

1.40

- Watch the two videos by following the weblinks. (You may have to click on Open or Save to see it or try a different web browser.)
- What is your opinion on the use of robots in automated warehouses? Why are firms using this technology? What issues are associated with this?
- Research what technology is being used for the actual delivery of goods.



Kiva Robots
Financial
Times – robotic
technology

1.41

In online stores and shopfronts, what is different about the accounting controls that are in evidence? How is the accounting similar to that used by bricks and mortar businesses?

1.42

Find other websites that deal in stocks and shares. How much free information can you get on such websites? Do you have to register? Why are these sites popular with people who want to buy and sell shares?

Typical technology used in a small trading business

To give a practical sense to what has just been outlined, let us assume that you own a bookshop called Absolute Books. It has a bricks and mortar shop where customers can walk in, browse through the books, see the prices and buy the ones they want either with cash or through electronic payment. It also has an online website where users anywhere in the world can browse through the catalogues, see the prices of the books (including freight to the customer's address) and purchase their books online with electronic payment.

Some of the technology used in this bookshop business includes:

- a **LAN computer system** to input, process, store, communicate and output data and information
- various devices such as printers and a modem which are connected to this system through **cable and Wi-Fi**
- two **desktop computers** for general use, such as ordering product, emails and enquiries
- three **POS cash registers** with **barcode scanners** to scan each product sold. The price will automatically come from the system and the quantity on hand will be reduced by the quantity sold
- three **EFTPOS terminals** for electronic payment by customers
- a **website** and **associated app** that lists all products, sells them via a shopping cart and receives payment online. This allows the business to sell both nationally and internationally, 24 hours a day, seven days a week. Lower sales and marketing costs are attainable, as advertisements can be placed on the website and direct marketing to customers can occur via email or notification. Also, online product information, ordering and technical support save labour costs because fewer people are involved in these online activities. A considerable reduction occurs in the cost of transactions as online banking transactions cost only a few cents per transaction. Billing directly to customer credit cards also saves costs. Finally, if the product being sold is available in electronic form, such as eBooks and music, then delivery is very fast
- a **separate stock room/warehouse** where items purchased for sale are entered into the system, stored and then moved into the retail area for sale, or readied for shipment when sold online
- the use of a **tablet** that accesses the system via Wi-Fi, so a salesperson can visit, for example, schools, businesses or nursing homes and immediately have access to stock quantities on hand for each product and immediately record any sales
- an **accounting package** that handles ordering, receiving, sales, cash receipts and payments, payroll and reports
- **customer relationship management software** so every detail of dealings with a customer is recorded, so they can be sent targeted emails and text messages about specials and events
- **cloud storage** of all data so it can be accessed from any device using appropriate authorisation
- a **paperless office**, so all incoming documents and communications must be in digital form or scanned for storage and later retrieval
- an **anti-theft tag** inserted into each product and **electronic surveillance detectors** at the entrance to the shop to prevent theft
- the use of **surveillance cameras** throughout the shop and stock room to monitor customer and employee movements to prevent theft
- a **telephone system** with the ability to transfer calls from one extension to the other.

From the above you can see how important technology is in the running of a business. However, the data is also vitally important.

The data in the computer system is one of the most important assets of a business.
It is vital that it is protected at all times.

This asset will never be shown in the Statement of Financial Position as it is very difficult to value in monetary terms. However, data is extremely valuable and must be protected. The next section looks at the risks attached to this technology and the ways in which businesses can protect themselves.

Interesting accounting fact

Did you know?

Australia's CSIRO (Commonwealth Scientific and Industrial Research Organisation) invented Wi-Fi

Wireless LAN technology (which is known as Wi-Fi) was invented by five CSIRO scientists and was based on their pioneering work in radioastronomy. Wi-Fi is used all over the world and is commonly found in offices, airports, public buildings, shopping centres and coffee shops. Royalties on the wireless LAN invention have earned more than \$430 million.

Source: CSIRO



CSIRO Wi-Fi

1.43

- a Visit a small trading business in your local vicinity. It could sell, for example, groceries, shoes, clothing, spectacles or pet supplies. Document the different technologies used in this business. You can do this by observing how the business operates and/or talking with the business owner. Make sure you are very specific about the technologies used.
- b How important is their data?
- c What measures are used to protect their data?

Technology risks

Business risk is the risk associated with operating a business. On one level, there is the risk the owner takes to invest in the business – will it be profitable and succeed? What is the risk of opening up a new location or introducing a new product line? What is the risk of burglary or a fire? These are risks that all businesses take as part of their normal operations.

Another set of risks emerges with a greater reliance on information and communication technology. Data can be lost, tampered with or stolen. Bugs in the software may cause disruption and errors. People may gain access to information that should be confidential. Viruses may attack the computer system. Sabotage can occur from within the business or from an external party. Risk is therefore recognising the types of threats that could occur and the probability that they will occur. Controls must therefore be implemented to minimise this risk.

Various types of risks are associated with using technology:

- **Failure of technology** This could occur for a number of reasons. A disaster might occur, such as a fire, flood, earthquake or bombing. The hardware might fail simply because electrical components wear out. Software might have an unknown bug. Because of poor testing, software is sold to unsuspecting customers and it is not until problems occur that a fix, patch or upgrade is released to overcome the problem. The aim is to have a **reliable system** that operates and is available 24 hours a day, 7 days a week and so steps must be taken to try to ensure that technology does not fail.
- **Unauthorised access** In the electronic world, the password is still the most common way of proving the identity of the user. If passwords are written down so they can be easily found, or are not changed frequently or are easy to guess, then the risk of somebody obtaining that password is greatly increased. Two-factor authorisation, by additionally using a number to be input and provided by a secure token or SMS text, provides extra security.
- **Unauthorised use of credit cards** Because the credit card is the easiest and most convenient way to pay for goods, the fraudulent use of cards is one of the greatest risks. Greater use of chip technology in cards and the use of an extra Card Security Code (CSC) or Card Verification Value (CVV), typically on the back of the card, means that security has improved. However, fraudulent

use of credit cards still occurs. **Scavenging** – by looking through rubbish bins to find old docketts, discarded printouts and so on – is one method of obtaining sensitive information. **Hackers** can break into merchant sites where credit card information is stored. Another ploy is to set up **false websites** selling goods for special days such as Valentine's Day or Father's Day. Customers supply the credit card information, but the goods are not delivered on the day and the perpetrators are never seen again.

- **Data theft** Because a great deal of data is kept electronically, thieves do not physically have to come to the premises to steal this valuable information. They can do so from the comfort of their home, which may even be in a different country. **Data diddling/alteration** is unauthorised changing of the data, and **data leakage** is unauthorised copying of the data files.
- **Communication risks** While the data is travelling over the communication channel, data can be tapped or intercepted. If a wiretap is used anywhere along the communication lines, this is called eavesdropping.
- **Denial-of-service attacks** These occur through the deliberate overloading of an Internet site with requests for information. The web server is flooded and, as a result, cannot attend to legitimate requests from users.
- **Malicious acts** Disgruntled employees can physically destroy computer equipment and data. Examples include putting an axe through computer equipment, crashing servers or deleting data. Outsiders might also attack the computer system. **Crackers** are hackers who enter computer systems with malicious intent.
- **Malicious programs and code** These programs are commonly called **malware**, which is short for 'malicious software'. This software aims to obtain access to or to damage a computer system without the owner's knowledge and comes in a number of forms. **Spyware** monitors what the user is doing without their knowledge. As the user enters, for example, their accounts and passwords on the keyboard, this data is sent to someone else. This is also known as **key logging**. A **virus**, such as the Petya or Wannacry ransomware extortion virus, which locks the user's computer system until they pay money, is an executable code that replicates itself and spreads to other systems, generally without the knowledge of the user. It requires a host to spread and can attach itself to other files and programs. It can transfer by infected USB drives, as a macro in an email attachment, or be downloaded from a disreputable Internet site or clicking on links in an email. A **Trojan horse** is a legitimate program that has functions the user wants, but can also perform functions that are hidden from the user. On the outside it appears harmless, but on the inside it is malicious. It does not replicate or copy itself, but may cause considerable damage at a later date. A **worm** is a complete program that replicates itself without the use of a host, generally by copying itself to other computers on the network. A **trapdoor** is like the backdoor to a computer system. It circumvents the normal security systems and allows easy access. **Adware** monitors web-surfing data and uses the data to send pop-up banners to the screen.
- **Falsified identity** Pretending to be a legitimate and authorised user by finding out the user ID and password is known as **masquerading** or **impersonation**. Once the user is into the system, they have all the rights and privileges of the legitimate person. **Phishing** is the use of fraudulent emails that look as if they have come from legitimate organisations requesting personal information such as bank account and password details. These emails can be quite convincing and so great care should be taken when personal and financial information is asked for in any email. **Spoofing** occurs when the perpetrator uses the identity of another person by changing the address from the original source; for example, by changing the name in an email header to a false name. They could pretend to be the Help desk in computer support and ask for user ID and passwords. **Email spoofing** is often used in **spam mail**, where unsolicited mail is sent and the sender doesn't want to reveal where the original message came from. On the World Wide Web, a technique called **typosquatting** or **URL hijacking** can be used. A website that looks like the real thing can be set up with just a slight adjustment to the web address. Consumers enter this bogus site thinking they are on the legitimate site. This happened on one occasion when a mirror site for the Sydney Opera House was created. Users thought they were booking legitimate tickets, but they lost their money because the site was a fraud. **Identity theft** is taking on someone's identity through illegally obtained personal details; for example, using someone's stolen driver's licence details to obtain a credit card to fraudulently purchase goods in their name.

Dozens of countries hit by huge cyberextortion attack

NEW YORK (AP) – Dozens of countries were hit with a huge cyberextortion attack [on] Friday that locked up computers and held users' files for ransom at a multitude of hospitals, companies and government agencies.

It was believed to be the biggest attack of its kind ever recorded.

...

The attack infected computers with what is known as 'ransomware' – software that locks up the user's data and flashes a message demanding payment to release it.

...

Security experts said the attack appeared to be caused by a self-replicating piece of software that enters companies and organizations when employees click on email attachments, then spreads quickly internally from computer to computer when employees share documents and other files.

Its ransom demands start at \$300 and increase after two hours to \$400, \$500 and then \$600, said Kurt Baumgartner, a security researcher at Kaspersky Lab. Affected users can restore their files from backups, if they have them, or pay the ransom; otherwise they risk losing their data entirely.

...

Source: 'Dozens of countries hit by huge cyberextortion attack', Anick Jesdanun, Jill Lawless and Aritz Parra, AP News, 13 May 2017.



Ransomware

- **Crimeware** This is any malicious software used to specifically carry out illegal acts online and thus commit a crime.
- **Validity and integrity of electronic transactions** Because actual transactions are going to occur electronically, consumers and traders alike must be completely confident that the transaction is valid and has not been tampered with. As there is no paper trail, this electronic transaction must be tamper-proof and it must not be possible to dispute the transaction at a later point in time.
- **Privacy issues** Consumers want to ensure that their personal information is kept private and confidential. They want to be assured that this personal information will not be passed on to a third party.
- **Social engineering and human frailty** The weakest link in terms of risk relates to the human factor. Humans are prone to making errors and tend to take short cuts. Although controls might be in place, people do not always follow procedures. **Social engineering** occurs when an employee is tricked into revealing information about how to get into a system. Humans generally try to be helpful, so if a person posing as a fellow employee asks for help, he or she will most likely receive it. People are **susceptible to losing equipment**. They can leave laptops and digital devices, which might have sensitive and confidential information, on trains, planes or taxis. Confidential data stored on a USB stick might get lost.

1.44

Explain each of the following terms concerning risks relating to electronic business:

a failure of technology	j denial-of-service attacks	s masquerading
b unauthorised access	k malicious acts	t spoofing
c unauthorised use of credit cards	l crackers	u phishing
d scavenging	m malware	v typosquatting
e hacking	n spyware	w identity theft
f false websites	o virus	x crimeware
g data theft	p Trojan horse	y validity of electronic transactions
h data leakage	q worm	z social engineering.
i eavesdropping	r trapdoor	



Webopedia

PCWorld

Norton

McAfee

1.45

For a greater explanation of the terms in Question 1.44, visit the following sites by following the weblinks and enter the terms.

- a Webopedia
- b PCWorld
- c Norton
- d McAfee

1.46

Given all of the risks associated with technology, how do you think these risks can be overcome? How confident are you that transactions over the World Wide Web are safe? Why?

Symantec
Security Centre**1.47**

Visit the Symantec Security Centre at the following weblink. What is the latest virus that has been discovered?

Electronic controls and security issues

Having discussed the most common risks that businesses must face regarding the use of technology, what electronic controls and security can be put in place to prevent or minimise these from occurring? The following measures should be implemented:

- **Authentication – password protection** This is the single most important control mechanism for any computer system. Passwords should be alphanumeric and at least eight characters in length. The system normally forces users to change their password at least once every 60 days. The password should not be revealed to anybody, and no procedure should be set up in the computer system that requires users to reveal their passwords. Password cracking software can be used by hackers to infiltrate a system, so passwords should not consist of people's names, birthdays and words that can easily be guessed. They should also not be written down. ID cards, smart cards and biometrics are a number of measures being developed in order to prove the identity of a user. ID cards generally have a photograph of the user and a magnetic strip that can be swiped through a reader. Smart cards, with an inbuilt microchip, will allow for massive storage of data about the cardholder. These cards can be used in combination with a password or some other biometric identification. **Biometrics** relies on identification through the unique physical features of a person. These include face geometry, iris and retina prints of the eye, voice patterns and fingerprints. (A check is made of blood flow and pressure to distinguish between real fingers and a fingerprint on a glove or wax model.)
- **Physical controls** The main components of computer systems – such as servers, central storage devices and communications – should be in adequately locked rooms with appropriate authorised access. The location of desktop computers should be registered and periodically checked to see if they are in those locations. Laptops and other mobile devices should be carefully monitored and appropriate access security measures implemented in case these mobile devices are lost.

- **Uninterruptible power supply (UPS)** If the power fails for any reason, the UPS acts as a large battery, allowing time for the computer system to be shut down correctly without the loss of any data or information. It also prevents power spikes and dips from damaging electrical circuitry.
- **Appropriate backup procedures and maintenance** Data should be backed up at least daily and these backups stored offsite in case a fire or similar disaster strikes the premises. Regular maintenance should occur to keep computer equipment at peak condition, and a supply of crucial backup parts should be kept to minimise any downtime if a problem arises.
- **Virus protection** It is essential that a computer system has adequate virus protection. The most common form of virus protection is a package alerting users that a virus has been received, allowing the virus to then be disabled or quarantined. McAfee Antivirus and Norton Antivirus are two such pieces of software. It is vital that the virus definitions and signatures are kept up to date because the software works on the principle of the known characteristics of each virus. If a new virus has attacked and the virus definition has not been updated, the virus will not be detected.
- **Software-based security** This encompasses a number of items. **Firewalls** are the most common type of protection. In a building, a firewall is made of brick and is designed to stop the fire from penetrating other parts of the building. In computing, the firewall acts in the same way – it is a set of programs that monitors and controls the flow of communications. It protects the resources of an internal network from being penetrated by outside users on an external network (the Internet). All traffic must pass through the firewall. It is therefore the single point of entry and exit for all traffic, with appropriate controls being placed on this flow. **Intrusion detection software** monitors a computer system for any out-of-the-ordinary activity. If there is increased activity, such as numerous attempts to log on by a user, this will be detected and appropriate action taken. Often, firms will buy a **suite of security software** that comprises firewalls, virus protection and resources to probe the system for any security faults.
- **Disaster recovery plan** Whenever a disaster such as a fire or earthquake strikes, the computer system could be completely or partially destroyed. A disaster recovery plan should have been prepared for this emergency. The plan should set out how the business will reinstate its computer system in the fastest possible time. As a regular precaution, backups should have been done at least daily and the backups stored offsite. In a disaster, not only are backups required, but new hardware must also be found and software installed. A **hot site** can be set up with appropriate hardware and software ready to operate at any time. In the event of a disaster, backup data files would be loaded and the system would be ready to function.
- **Online business security** As explained previously, the basic component of an online business is the communications that take place between the customer and the business. Because sensitive and confidential data – such as credit card details, the amount of the transaction, the identity of the customer – must travel over communication lines, this data is susceptible to security breaches. From an accounting perspective, every business transaction that occurs over the World Wide Web must fulfil four properties, known by the acronym PAIN:
 - **Private** – where the content of the communication is secret and confidential to the sender and receiver
 - **Authenticity** – where both parties know that the other party is real and not some mirror site imitating a legitimate retailer or bank
 - **Integrity** – where the communication content cannot be modified without detection (intentionally or accidentally) during transmission
 - **Non-repudiation** – where the original sender of the communication cannot later claim that they did not send the message.



McAfee Antivirus

Norton Antivirus

If every electronic transaction has these properties, traders and customers can be confident that the transaction is legitimate, valid and enforceable. The customer will know that the trader should not be able to take an order and fail to deliver. The trader will know who the customer is and, having delivered the goods, be confident that the consumer cannot legitimately claim not to have received the goods. These properties are the cornerstone of normal business. However, in an online business environment, they become vital elements in any transaction.

A major security step is **encryption**. Encryption means changing the message to be sent with a secret code.

Encrypting a message

Message:

i love you

Secret code/private key: move letter back two characters in the alphabet:

A is Y, B is Z, C is A and so on.

The encrypted message is therefore:

g jmtc wms

If both the sender and the receiver know the code, the message can be decoded.

The encryption technique uses a formula or algorithm, known as a key, to change the original message. If both the sender and the receiver know the key, they are confident that they can send encrypted messages to one another without anyone else being able to read them. Whenever a customer wishes to conduct a transaction over the Internet using a browser, this encryption happens behind the scenes. Having entered the web address in the normal way, the site will move to a secure location using the **Secure Sockets Layer (SSL)** protocol or the later version known as **Transport Layer Security (TLS)**. These protocols allow users to have secure connections to Internet sites or mobile apps and to conduct dealings in a secure and private environment.

Another form of online business security is the use of a **Virtual Private Network (VPN)**. This sets up a secure communication connection using the Internet. With appropriate authorisations, this is a form of extranet that allows collaboration between business partners. A business can securely access the partner's information system and electronically trade directly with one another. On an individual level, a VPN service can be used by anyone who wants to conduct encrypted communications over the Internet.

- **Reliable and responsible personnel** Because people are often the weakest link in any security, all staff should be competent through effective hiring and training. Employees must be made aware of not only the controls that are required, but why they are required. In this way, they will be less likely to circumvent the controls. If there is a breach in security, an action plan should be ready to be implemented as part of the disaster recovery plan.

As you can see, there are a great many risks involved in using technology in business. Each of these risks must be assessed, and appropriate controls and security implemented to minimise the risks as much as possible.

In terms of accounting controls, you should be aware that some of the traditional controls previously discussed are taken over by the computer to exploit the benefits of information and communication technologies. The main aim is to ensure that the transaction is valid and enforceable. In terms of recording, the details of the transaction are electronic and no printed copy of documents is required. The data required to purchase an item and pay for it is entered once by the customer and then processed electronically by the business. Fewer people are involved and therefore fewer of the traditional controls are required.

Often the controls are built into the software to try to reduce errors; for example, if required fields are left blank, the user will be prompted to enter the data; or if invalid credit card numbers or inventory items are entered, then the user will be asked to enter the data again. The security built into the SSL protocol is seamless. People do not even know that it is happening. The overall approach is still to provide customers with the level of service they require. Control is still vital, but has a different emphasis.

Finally, it must be remembered that despite all these controls, problems do occur. No system is ever completely safe. Somebody will always try to breach whatever control system is implemented. Such security breaches are often reported in the media. This is why accountants and IT professionals must stay alert and try to minimise the associated risks.

1.48

Explain each of the following terms in relation to controls and security:

- a authentication-password protection
- b ID cards, smart cards and biometrics
- c physical controls
- d UPS
- e backup procedures and maintenance
- f virus protection
- g firewalls
- h intrusion detection
- i disaster recovery plan
- j PAIN
- k private keys
- l SSL and TLS protocols
- m reliable and responsible personnel.

1.49

- a Why are the accounting controls different in an electronic business?
- b How can PAIN ensure the validity of electronic business transactions?
- c Does PAIN apply to normal business transactions?

1.50

Visit the RSA Security site by following the weblink.

- a What is the latest news in relation to security?
- b What products are offered by this firm to ensure security of the clients and customers?



RSA Security

1.51

In Australia, CERT Australia (Computer Emergency Response Team) and AusCERT (Australian Cyber Emergency Response Team) are the organisations that respond to emergencies. In the United States, the US-CERT (US Computer Emergency Readiness Team) is the main body. What are the latest security alerts from these organisations?



CERT Australia

AusCERT

US-CERT

1.52

Read the following article.

Hacker warns of weak link

Olivier Knox

Recently released from prison, unemployed, and barred from many jobs by a ban on his using computers, America's most notorious hacker yesterday told lawmakers that people, not machines, are the weak link.

Describing how he easily duped employees at top firms such as Motorola and Nokia into divulging key information, Kevin Mitnick, 36, told senators that he was 'so successful in that line of attack that I rarely had to go to a technical attack'.

Relaxed and confident, Mitnick described to a Senate Governmental Affairs Committee hearing on the safety of US federal computers how over a hacking career spanning decades he managed to break into all of the systems he targeted save one – run by a fellow hacker in Britain.

Because people can be fooled into giving up passwords or other access, firms 'can spend millions of dollars (to beef up computer security) and that can be money wasted,' said Mitnick, who on January 21 was released after nearly five years in jail.

Instead, he stressed, the Government should focus on training its employees and workers in the private sector, for example, by making them watch a videotape showing a hacker conning someone to gain access to a computer system.

But even so, determined individuals or foreign nations with ample resources will find a way in, he cautioned, saying computer security was like putting a lock on one's door: 'If somebody really wants to get in, they'll go in through a window.'

Source: 'Hacker warns of weak link', Olivier Knox, *The Courier Mail*, 4 March 2000, p. 18. The use of this work has been licensed by Copyright Agency except as permitted by the Copyright Act, you must not re-use this work without the permission of the copyright owner or Copyright Agency.

This article was written in 2000. Answer the following questions:

- a Who is the article about?
- b What is the main message of the article?
- c Is this message still relevant today?
- d What does Kevin Mitnick think should be done to train employees?
- e If you believe the contents of the article, what do you think should be the main thrust of security and controls?
- f Find out what Kevin Mitnick is now employed to do.

Assurance and integrity for websites

Although businesses are aware of the risks of conducting online business and implement various measures to overcome these risks, how can they convince their customers that they are a legitimate and authentic site? How does a customer know that a site has integrity and is safe to deal with? Have you visited a site and thought that it does not look authentic? Has your security protection warned you about proceeding to a specific site in an email you have clicked on? In fact, many people will not conduct a transaction with a site that does not have some form of assurance symbol shown.

Various forms of assurance are available and sites displaying the symbol of these providers are ensuring that the site will act with integrity. Some assurance providers are listed in Table 1.3.

Follow the link to visit the websites of these providers.

Table 1.3 Assurance providers

Provider	Symbol
DigiCert	
Thawte	
GeoTrust	
RapidSSL	



Assurance
providers

The most obvious thing about these symbols is that they will appear on the website, especially on any screen where payments are being made. Less obvious is that the `https://` address bar may appear in green, and the security status bar will show a lock symbol and the name of the certificate authority that issued the SSL. You can click on this lock symbol to obtain details of the certificate.

The banks also try to ensure more security by having an extra level of protection attached to the card being used in an online shop. 'Visa' and 'MasterCard SecureCode' are symbols that are used to exemplify this assurance.

1.53

What is the purpose of symbols such as GeoTrust and DigiCert appearing on websites?

1.54

Visit each of the sites in Table 1.3 and summarise the objectives of each of the providers. From their website or other legitimate sources, identify the main clients that use their symbols.

1.55

For each of the stores listed in Table 1.2, click on the lock symbol and name the provider who issued the SSL/TLS encryption certificate.

1.56

Visit the following RapidSSLOnline and Servertastic websites (or sites similar to these that can be found on Google) by following the weblinks.

What are they selling? What are the specific names of the assurance symbols they are selling?



RapidSSLOnline
Servertastic

Privacy issues



Privacy Act

Privacy is a major issue with technology. A lot of personal information about customers, employees and suppliers is stored in electronic form on computers, and so it is important that all this information is kept private. As well, one of the key elements of electronic transactions is that the details of the transaction are kept private and confidential. This is especially the case with credit card details.



Woolworths

Concerns about privacy can be diminished in two ways. First, the *Privacy Act 1988* as amended in 2001 makes businesses with a turnover greater than \$3 million meet certain privacy requirements (see Privacy Act weblink). Websites will often have a privacy statement outlining why they are collecting information and how they will use it (see the bottom of the Woolworths weblink). As well, through the passing of the *Privacy Amendment (Notifiable Data Breaches) Act 2017*, Australians will be alerted by the above businesses if there has been an 'eligible data breach' and this breach is 'likely to result in serious harm' to an individual.

Second, cookies are a common device used by websites. Cookies are small data files that are stored on the user's hard drive. When the user revisits the website, the site will look for the cookie and act on the contents. These cookies are often used to customise a site to meet the needs of the user. However, the information stored in them should never be sensitive information such as user IDs and passwords, or credit card details.

12 ATO workers lose job for privacy breach

Colin Brinsden

Thirty tax office workers have been investigated and 12 have been sacked over the unauthorised access of taxation records this financial year.

'Stupid people trying to look at their friends,' Australian Taxation Office commissioner Chris Jordan told a Senate hearing in Canberra on Tuesday.

'To lose your job for having a look at someone's records that you weren't supposed to is pretty severe.'

The committee was told about the investigations against the backdrop of an alleged \$165 million payroll tax fraud case that has snared the children of ATO deputy commissioner Michael Cranston.

Some workers were reprimanded or fined.

There were 23 cases of unauthorised access to tax files in 2015/16.

Source: Australian Associated Press, by Colin Brinsden, 30 May 2017. Used with permission of AAP.

Uber hacking a worry

Scott Pape

If you have an Uber account, you really need to read this.

You may have heard that this week Uber fessed up that it had been hacked in October last year – with the names and contact details of 57 million of its user and driver accounts being stolen. But instead of making the breach public, it paid the hackers \$100 000 to destroy the copied data.

Trustworthy fellows, those hackers. I'm sure they did what they said. Uber is continuing to dig its hole – it has decided not to contact customers whose data has been breached, and instead has said it is 'monitoring the affected accounts and has flagged them for additional fraud protection'.

Poor form!

For the record, if this hack happened next year [2018], Uber would be toast. That's because laws to be introduced in February will force organisations to contact victims and report data theft to the Australian Privacy Commissioner.

So what can you do if you have an Uber account?

Three things.

First, you should assume your details have been breached. Second, you should change all your passwords. If you're normal, you have one password that you use for everything. Stop doing that, and start looking into encrypted password vaults like LastPass.

Third, you should check your credit file, which you can get for free if you write to the credit agencies.

Actually, for \$79.95 you can get your file plus an alert system that pings you if any changes are made to your credit file for 12 months, via MyCreditFile.com.au.

Can you trust MyCreditFile.com.au?

Well, it's a product of credit reporting agency Equifax (formerly Veda Advantage), which earlier in the year suffered one of the biggest data breaches in history.

Tread your own path!

Source: Scott Pape, *Hobart Mercury*, 25 November 2017. © 2017 News Limited. The use of this work has been licensed by Copyright Agency except as permitted by the Copyright Act, you must not re-use this work without the permission of the copyright owner or Copyright Agency.

1.57

Visit the Woolworths and Coles shopping sites and look at their privacy statements. If you were trading with these organisations, would you be satisfied with the level of privacy offered?



Woolworths
Group privacy
policy

Coles privacy
policy

1.58

- a Under the *Privacy Amendment (Notifiable Data Breaches) Act 2017*, research the meaning of 'eligible data breach'. Why do you think 'eligible' is in the legislation?
- b Find three recent data breaches that have affected Australians.

1.59

Investigate and document the following privacy breaches:

- a Dropbox 2012
- b Yahoo 2013
- c Kmart 2015
- d Red Cross Blood Service 2016
- e Equifax 2017
- f Facebook 2018 (April; October).

Cloud computing for business

Many of you will have used cloud computing in your everyday life. If you have saved photos, videos and music from your phone or computer to Google Drive, Microsoft OneDrive, Amazon Cloud Drive or Apple iCloud, you are using cloud computing. This essentially means that the files are not stored on the device itself and so if that device is lost, stolen, damaged or breaks down, you will still be able to access the files 'in the cloud'. This is very convenient and adds a sense of safety to users that all is not lost if something goes wrong. The user can access the Internet to obtain this data at any time using any device.

The same can be said about storing business data and information 'in the cloud'. Instead of saving the data to the hard drive of the computer or network server, the data is stored in the cloud and can therefore be accessed anywhere in the world from any device using an appropriate user name and password. This is very convenient. Some businesses store their data on-site and backup this data to the cloud. Some store their data in the cloud and backup on-site. Others store everything in the cloud.

Some businesses not only store their data in the cloud, but the application software operates in the cloud as well. The software is not actually stored on the business's computer system. The business may pay a monthly fee to access this software using the Internet. This is known as **Software as a Service (SaaS)**. Business personnel know that the software they are using has automatically been updated and the version being used is the same no matter where they are in the world. This service is very scalable in the sense that if the business grows, allowing more users to access the system is very easy. An example of this is Microsoft Office Online.

Cloud computing essentially means using the Internet to store and access data and applications that are stored off-site; generally, in a **data centre** located somewhere in the world. It has become very popular and some of the benefits include:

- **Cost** Businesses do not have to invest in a computer system that requires huge storage capabilities to store software and data, pay for maintenance of hardware and software updates, and pay IT personnel to perform these tasks. Everything is stored off-site and so the initial set-up for Internet access to the cloud is much cheaper. Also, the business only pays when it accesses the applications.
- **Scalability** If the business grows or diminishes throughout the world, access can be easily changed. This adds great flexibility. Cost is on a user pays basis so if the number of users change, the costs of use will change accordingly.
- **Reliability** The huge data centres that are used in cloud computing generally have the latest and fastest hardware to store the software and the data. Users therefore do not need to worry about backing up data (and software) as the data is mirrored on multiple sites.

However, there are a number of potential problems that arise with cloud computing:

- **Loss of control** Because the software and data are not stored at a site you own, there is a loss of control over that data. The data could be stored anywhere in the world. In fact, most businesses would not know where the data is stored. So long as everything works every time they want to use that software and data, businesses are happy. However, despite all the latest equipment and best intentions, crashes do occur. Amazon Cloud crashed in 2011 and 2017, so it does happen. As part of the service contract, the systems in place to restore the data and get the client business up and running as soon as possible is very important.
- **Security and privacy** There are many issues here:
 - How secure is the data where it is stored? Is the stored data encrypted? Who does the encrypting – you or them? How vulnerable is the site to being hacked?
 - How secure is the data in transit over the Internet? Are there adequate encryption controls?

- How secure are the authentication controls that allow access? Is two-factor authentication in place?
- What security measures are in place to separate user businesses and prevent competing businesses at the site from accessing sensitive data?
- If a security or privacy issue does arise, what systems are in place to deal with it and what legal system will be applicable? (See below.)
- **Different legal jurisdictions** The business may be operating in Australia, but the data may be stored offshore in, say, the United States or Singapore. If something goes wrong, whose legal jurisdiction is in force and what legal rights does the client business have?
- **Reliance on ISP for bandwidth** Bandwidth refers to how fast data can be transferred in a set period of time. In cloud computing, everything must go through the Internet and so costs are dependent upon that access. Bandwidth is very important for speedy access and so the ISP must be able to provide this bandwidth at all times at a reasonable cost. Bandwidth is vital if trying to restore data quickly. As well, if a business decides that all data is stored in the cloud, but wants a backup of critical data and information on site, bandwidth will determine how quickly this backup can be done.
- **What happens if you want to leave** If all of the data is stored in the cloud and, for some reason, you want to move to a different provider or store on-site, what rights do you have? It is very important to read the service contract and to agree as to what will happen in these circumstances. Disputes arise, so having a suitable arrangement in place is vital.

The key thing about cloud computing is that despite its many advantages, it does have some issues surrounding its use. Being aware of these issues, taking steps to overcome them and minimising the risk is very important.

1.60

Investigate and document the location of the major global data centres for cloud computing operated by:

- a IBM
- b Amazon Web Services (AWS)
- c Google
- d Microsoft Azure.

1.61

‘In terms of accounting, cloud computing has gone from a maybe to a must have.’ With reference to small business, what accounting software is available in the cloud, and what are the benefits and potential problems?

Fraud

In Queensland, ‘Fraud is behaviour that’s deceptive, dishonest, corrupt or unethical. For a fraud to exist there needs to be an offender, a victim and an absence of control or safeguards.’⁵

The most important element in fraud is that the person acts **dishonestly** in any of these situations:

- obtaining property belonging to someone else
- applying someone else’s property to one’s own use

⁵ See <police.qld.gov.au/programs/cscp/fraud/default.htm>, <police.qld.gov.au/programs/cscp/fraud/Documents/EmployeeFraudBrochure.pdf>, and Section 408C of the *Criminal Code Act 1899* (Qld).

- causing a detriment to another person or entity
- gaining a benefit or advantage for any person
- inducing or causing any person to deliver property to another person.

It is interesting that two of the most valuable assets of a business not shown on the Statement of Financial Position are data and employees. Because employees are such a valuable asset, businesses try to keep them happy with appropriate pay, training and job satisfaction. However, employees are the very people who can commit fraud, so this is a two-edged sword – trust them to do their job, but understand that if there is too much trust, then they may commit a fraud. This type of fraud is commonly referred to as **occupational** or **employee fraud**.

A number of theories have been put forward as to why people commit fraud. One of these is the Cressey Triangle, more commonly known as the **Fraud Triangle**, as shown in Figure 1.7.

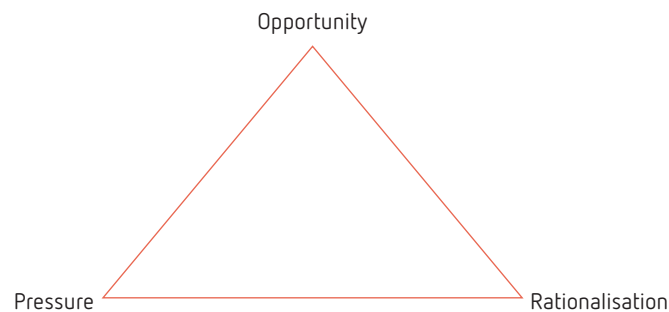


Figure 1.7 Fraud Triangle

The Fraud Triangle states that a person can become dishonest if three things converge:

- **Pressure** This could come from a number of sources including inadequate money and salary, living beyond one's means, owing huge debts on property and investments, greed, envy of others, dissatisfaction with job, gambling debts, drug and alcohol problems, and pressure from family.
- **Opportunity** This allows the perpetrator to act dishonestly if they think they have the skills to commit the fraud, conceal it and convert it to personal gain. This is generally done in secret for fear of being caught.
- **Rationalisation** This might include 'I'm only borrowing the money and will pay it back later', 'I work hard and the firm owes me', 'the business makes too much money so I should get a share of it', 'it was for a good cause as I badly need it for my family', 'it won't be missed', 'this could be fun to see if I can get away with it' and 'everyone else is doing it'.

Types of fraud

There are three main types of occupational fraud. The first relates to **asset misappropriation** and the major forms this takes are shown in Table 1.4.

Table 1.4 Asset misappropriation⁶

'O, what a tangled web we weave when first we practise to deceive!' Sir Walter Scott

Asset	Category	Area	How it occurs
Cash	Skimming	• Sales	• Unrecorded • Understated • Providing discounted or free goods or services to friends and associates

⁶ Adapted from 'Fraud', PricewaterhouseCoopers, 2008, p. 4; 'Employee Fraud', CPA Australia, 2011, p. 5; and 'Report to the Nations on Occupational Fraud and Abuse', Association of Certified Fraud Examiners, 2016, p. 11.

Asset	Category	Area	How it occurs
Cash (cont.)	Skimming (cont.)	Receivables	Write off bad debts that are not legitimate bad debts
		Refunds and other	- Multiple refunds - Unauthorised or fictitious refunds
	Fraudulent payments	Point of sale payments	- False voids - False refunds
		Cheque tampering	- Forged endorsement/authorisation - Altered payee
		Expense reimbursement schemes	- Overstated expenses - Fictitious expenses - Multiple reimbursements
		Payroll schemes	- Ghost employee with payments being made to fraudster's bank account - Commission schemes - Workers compensation - Falsified wages/faking time sheets - Manipulation of financial data to receive performance-based bonuses
		Billing schemes	- Creating bogus suppliers with payment being made to the fraudster's bank account - Fictitious invoices - Private purchases through business accounts/business credit cards - Associates of the staff providing services to the business at inflated prices
	Theft	Cash on hand	- Petty cash access - Falsified documentation and/or reconciliations
		From the deposit	- Failed bank reconciliation - Safe deposit box access
		Other	- Inadequate physical security controls - Personal use of stationery and other consumables
Inventory and all other assets	Theft	Unconcealed theft	Large unexplained stocktake variances to accounting records
		Purchasing and receiving	- Inappropriate segregation of duties - Creating bogus purchase orders of a bona fide supplier and substituting the supplier's bank account details with fraudster's bank account details - Falsified delivery dockets - Skimming deliveries
		False sales and shipping	- Inappropriate segregation of duties - Fictitious customers
		Asset requisitions and transfers	- Falsified transfer documents - Unauthorised write-off schemes
	Misuse	- Inventory - Plant and equipment - Intellectual property and other assets	- Utilisation for personal benefit or gain - Inadequate supervision or controls - Low staff morale and disgruntled employees increases the risk of unethical behaviour

As well as asset misappropriation, **financial statement fraud** can occur. This involves employees deliberately overstating or understating the net worth and net profit of the business. It can result from inappropriate timing differences, fictitious or overstated revenues, concealed or overstated liabilities and expenses, improper asset valuations and improper disclosures. **Corruption** can also occur through employees obtaining kickbacks or bribes from suppliers or contractors.

Some of the factors that contribute to fraud are shown in Table 1.5.

Table 1.5 Factors contributing to the facilitation of the fraud⁷

Weak internal controls	61%
Reckless dishonesty regardless of controls	21%
Collusion circumventing good controls	11%
Other	5%

As you can see from Table 1.5, weak internal controls are the main factor that enables fraud to occur (61 per cent) and gives the fraudster an opportunity to commit a fraud. It is very important that businesses review their internal controls to see that they are effective. Small businesses find it particularly difficult to have adequate internal controls as there are not enough employees to segregate duties.

However, the table also reveals another interesting statistic. The basic premise of internal control is that the controls be set up in such a way that it takes two people to collude to commit a fraud. The assumption is that a person does not know how another person will react if asked to collude to commit a fraud. It is this fear of asking someone else and that person possibly telling authorities that they were approached is hopefully a line people will not cross. This is why segregation of duties is so important. However, if people do collude, then the controls become ineffective, as occurred in 11 per cent of the cases. 'Fraud is almost twice as likely to be perpetrated in groups as in solitude. This is partly because fraudsters need to collude to circumvent controls. So collusion is especially threatening for a company. Larger groups (say, five or more people) tend to do more harm financially than single fraudsters or small groups.'⁸

Finally, we have already seen how important technology is to the running of a business. Table 1.6 shows how technology has been used to perpetrate a fraud.

Table 1.6 How technology was used to perpetrate the fraud⁹

Created false or misleading information in accounting records	24%
Provided false or misleading information via email or other messaging platform	20%
Abused permissible access to organisation's computer system	13%
Obtained access to organisation's computer systems without permission	3%
Other	8%

Note: Although this table highlights that technology can be used to commit a fraud, there is still a large percentage of frauds where technology is not used. Some of these non-technology fraud risks were discussed previously.

⁷ KPMG, 'Global profiles of the fraudster: Technology and weak controls fuel the fraud', 2016, p. 11.

⁸ KPMG, 'Global profiles of the fraudster: Technology and weak controls fuel the fraud', 2016, p. 6.

⁹ KPMG, 'Global profiles of the fraudster: Technology and weak controls fuel the fraud', 2016, p. 20.

Real-world application



Case studies of fraud

Purchasing fraud

A finance director of an Australian parts supply organisation resigned suddenly, citing personal reasons. His actions were then reviewed to determine whether he had acted against the interests of the organisation.

A review of the organisation's supplier master files using an automated fraud detection program revealed the 'bank account' field had been altered for several of the organisation's suppliers. Bank account numbers had been replaced with a common bank account number, and several transactions processed into this account. The account number was traced to the former finance director.

Sales and inventory fraud

The sales director of an electronic product manufacturer resigned from his position when confronted with irregularities in sales figures.

An investigation discovered that a significant proportion of sales invoiced to particular suppliers had been falsely created, allowing the misappropriation of inventory from the warehouse.

The fraudulent sales invoices were later credited by the sales director as 'non-inventory return credits'. The inventory itself had been collected by an associate of the sales director, and the sale proceeds shared between them.

Unauthorised removal of corporate information

A senior manager of an electrical components organisation entered into a contract with an overseas manufacturer to produce identical components for his employers. He subsequently created his own business, resigned from his position and set up in competition. As a result of concerns about the loss of customers, an investigation was initiated.

The investigation established that the senior manager had managed to access a database he was not authorised to enter, and had obtained electronic copies of the complete customer list, product price list and technical information prior to his resignation. This had enabled him to target the organisation's customers and offer cheaper prices. His actions were in breach of the anti-competitive clause in his contract.

Sales commission fraud

A publishing organisation was concerned about the high outstanding debtor balances in the accounts of a remote subsidiary. Enquiries made to some of the debtors identified a number of suspect sales transactions which were denied by the debtors.

Investigations revealed that a particular sales manager with access to sales records had created fraudulent sales using existing debtor accounts, in order to generate fraudulent commissions. Although the total amount of the fraudulent commissions was small, the corresponding revenue overstatement amounted to \$800 000.

Evidence included statements from the debtors and audit logs showing the creation of the sales on the system by the sales manager. Further enquiries revealed the suspect had also processed a number of fraudulent accounts payable cheques.

Leaked confidential information

A group of employees in an organisation were suspected of leaking confidential information by electronic mail. It was alleged that this information was used by certain people to obtain financial advantage.

The computer network was logged to identify the movement of email attachments. Leaked documents were tracked exiting the organisation's network. Access was obtained to laptop computer systems used by employees and the computers were forensically imaged. Deleted electronic mail messages containing the document in question were recovered. A time line was constructed which identified the movement of the document through a chain of emails to outside parties.

Analysis of data and time information associated with the email messages and the attached document clearly identified the time period over which the leak had occurred. Analysis of hidden data within the document resulted in the identification of the original computer from which the document was first emailed, as well as the subsequent editing of the document by people in the electronic email chain.

The people responsible for editing and releasing the document were identified. Evidence collected was used in a successful civil action.

Overpaid overtime

External analysts were contracted by a government agency to analyse staff salaries and overtime payments over a three-year period.

The analysts identified nine employees who were paid overtime rates in excess of \$1000 per hour, the highest being \$4989 per hour. These results allowed the agency to investigate the payments and recover the over-payments.

Fraudulent collusion between suppliers and employees

Analysis of payments carried out for a large insurance organisation identified duplicate claim payments and suspicious payments to suppliers sharing an address with an employee.

The payments were proved to be fraudulent and were reported to the police. This led to criminal charges being laid.

Duplicate payment of supplier invoices and cleaning of supplier master files

External analysts contracted by an organisation identified \$600 000 of duplicate invoice payments over a two-year period. An automated detection program established that these had occurred because a number of suppliers had been entered on the supplier master file more than once, allowing for the easy processing of duplicate invoices.

Bill and hold

A manufacturer felt pressure to achieve year-end sales forecasts and the sales force were asked to come up with strategies to meet targets.

One option taken was to 'bill and hold', where customers entered into a sale agreement for goods to be purchased but the product was sent to the manufacturer's own warehouse. Since responsibility for the goods was not passed to the customers there was no effective delivery.

The second option was to offer deep discounts to customers to purchase goods with a 'side letter' of guaranteed return, effectively creating a consignment, not sale. These transactions were identified through a review of the manufacturer's stocktake and unusual sales returns just after year end.

The manufacturer was forced to re-state its financial statements, the share price fell dramatically and the manufacturer and its senior officers faced regulatory action.

Misappropriation by financial controller

The financial controller of a large organisation was alleged to have misappropriated \$5.5 million from the organisation through cheque fraud. An investigation was conducted to determine the extent to which amounts might have been misappropriated and to trace those funds to identify possible sources of recovery.

In addition, as a result of an attempt to disguise the misappropriation, various accounts had been misstated and liabilities had not been recognised. A full reconciliation of all accounts was conducted to determine the organisation's true financial position.

The misappropriated amounts were fully recovered from the perpetrator's assets, from a fidelity bond insurance claim, and a claim against the auditors for professional negligence. Accounts were reconciled identifying misstatement of assets and liabilities totalling \$8 million and various controls were implemented to reduce the risk of future misstatement.

Source: 'Fraud', PricewaterhouseCoopers, 2008

1.62

The most up-to-date information about fraud can be obtained from the Queensland police website. Follow the weblink and list and explain three current items on the site.



Queensland
Police

Interesting accounting fact

Did you know?

Forensic accounting is a speciality of accounting

Forensic accounting is the speciality of accounting that gathers financial evidence for legal proceedings. Forensic accountants are sometimes known as investigative auditors as they are called upon to look at a set of data and to investigate financial matters relating to fraud, insurance claims, valuing assets in family law disputes and the like. Ultimately, forensic accountants will testify in a court of law as expert witnesses. They will use their knowledge of accounting to gather the appropriate financial evidence to the standard required for a legal case to proceed.

Real-world application



Cynthia Cooper

WorldCom, a US telecommunications company, collapsed in 2002 due to misstated financial statements over five quarters amounting to \$USD3.8 billion. This misstatement later grew to \$USD11 billion.

Extraordinary circumstances

Cynthia Cooper

The longer WorldCom Chief Audit Executive Cynthia Cooper stares at the entries in front of her, the more sinister they seem. But the CFO is badgering her to delay her team's audit of the company's books and directing others to block Cooper's efforts. Still, something in the pit of her stomach tells her to keep digging. Cooper takes readers behind the scenes on a riveting, real-time journey as she and her team work at night and behind closed doors to expose the largest fraud in corporate history (up to 2002). Whom can they trust? Could she lose her job? Should she fear for her physical safety?

Source: *Extraordinary Circumstances* by Cynthia Cooper, © 2009, John Wiley and Sons.



Cynthia Cooper



WorldCom
whistle-blower

WorldCom whistle-blower Cynthia Cooper

Julie Homer and David M Katz

... For executives, Cooper's experiences challenging then-CEO Bernie Ebbers and then-CFO Scott Sullivan, brought to life in her new book, *Extraordinary Circumstances* (John Wiley & Sons, February), offer lessons that are as fresh today as when the scandal first broke.

When did you first suspect that something might be wrong at WorldCom?

It was a process. My feelings changed from curiosity to discomfort to suspicion based on some of the accounting entries my team and I had identified, and also on the odd reactions I was getting from some of the finance executives.

For example, the CFO (Scott Sullivan) asked me to delay our capital-expenditure audit. When I received an E-mail from the controller telling me that I was wasting my time auditing capital expenditures, it made me uncomfortable. When I showed [our evidence] to the external audit partner, he wasn't initially concerned. In fact, the audit committee actually gave Scott the weekend to write a white paper supporting his position.

Nobody wants to believe that the CFO is perpetrating a multi-billion-dollar fraud, especially somebody as respected as Scott Sullivan. But as my suspicions grew, my team and I began working at night and behind closed doors because we didn't want to be detected. We were running so many queries of the accounting system that we were starting to crash it.

When did it come together for you?

Eventually we went door-to-door in the accounting department, working our way up the chain of command. When we finally confronted the controller, David Meyers, he confessed. His wife later told *The Wall Street Journal* that he had decided that if I came to him and confronted him directly he would tell me the truth. He also said he felt better that day than he had in years.

Was there anything about the culture of WorldCom that contributed to the scandal?

I think Bernie's personal propensity for taking risks contributed to both the rise and fall of the company. He loaded it with some \$40 billion in debt to fund one acquisition after another. He followed the same strategy with his own investments, taking out loans and using his WorldCom stock as collateral. His personal decisions then affected his business decisions, because he ultimately saw his net worth disappear, and he was left owing WorldCom some \$400 million for loans approved by the board.

...

What would you want to leave people with regarding the recent corporate scandals?

I encourage people not to give in to the thinking that fraud won't happen in their companies. History has a way of repeating itself, and based on human nature there will always be fraud. When there's increased pressure due to another boom-and-bust in the market, there may well be another rash of frauds. I think we have to do our best not to forget what we've been through and hold tight to the positive changes in corporate governance that so many people have worked to achieve.

Source: 'WorldCom Whistle-blower Cynthia Cooper', Julie Homer and David M Katz, *CFO*, 1 February 2008, <http://ww2.cfo.com/human-capital-careers/2008/02/worldcom-whistle-blower-cynthia-cooper/>. Used with permission.



Time Persons
of the Year

Cynthia Cooper, Sherron Watkins and Coleen Rowley were named 2002 *Time Magazine's* Persons of the Year. This award has been given to only six other women – Wallis Simpson (1936), Soong Mei-ling [Madame Chiang Kai-Shek] (1937), Elizabeth II (1952), Corazon Aquino (1986), Melinda Gates (2005) and Angela Merkel (2015) – since *Time* began naming its Person of the Year in 1927.

1.63

Follow the weblink detailing the top 10 corporate accounting scandals.

Investigate further the following frauds:

- a Enron
- b Bernard Madoff's Ponzi Scheme
- c Lehman Brothers.



Top 10 corporate
accounting
scandals

1.64

Investigate and document the alleged Australian frauds committed by the following people:

- a Rodney Adler (FAI Insurance)
- b Alan Bond (Bell Resources and Bond Corporation)
- c Joel Morehu-Barlow (Fake Tahitian prince and Queensland Health Department)
- d Rene Rivkin (insider trading)
- e Christopher Skase (Qintex group and Seven Network)
- f Ray Williams (HIH Insurance).

Outsourcing accounting processes

Outsourcing occurs when a firm pays an outside organisation to perform a business process on a continuing basis. This is sometimes referred to as 'contracting out' the business process.

Outsourcing can be done in many areas. One of the most popular in accounting is for payroll. In large organisations, payroll (and the wider area of Human Resource Management) can be very complex with various industrial awards, enterprise bargaining agreements and contracts of employment determining how much is paid to employees. As well, there are various compliance obligations relating to hours worked and overtime, Pay As You Go (PAYG) tax instalments, superannuation, workers compensation, fringe benefits tax, payroll tax, annual leave, sick leave, parental leave, HECS/HELP repayment of student loans, employee deductions, safety, training, anti-discrimination, pay slips, payment to each employee, and keeping appropriate records. These obligations must be met every pay period, which can be weekly, fortnightly or monthly.

Some businesses decide to outsource this whole payroll process instead of doing it themselves with their own employees. Why would they do that? The most important reason is cost. If it costs less to outsource the process than actually do it yourself, then businesses decide to outsource. As well, the obligation to be compliant moves from the business to the outsourced firm (the **service provider**) as it is now their responsibility. Because the service provider specialises in payroll for many businesses, it should be more efficient, up-to-date and have the necessary skills – and this is what the business is paying for. However, of crucial importance is the technology employed. In order for the business to make decisions, it must have current data relating to payroll costs. The technology of both parties must facilitate this transfer of data.

Other areas of outsourcing in accounting are in actually keeping the accounting records of businesses and ensuring tax compliance. Many of these functions are being outsourced offshore to places such as India and the Philippines, where labour is cheaper than in Australia. With the aid of various communication and data channels, routine accounting data can be captured and stored in an offshore site or captured on-site and then transferred offshore for processing. Related to this is the preparation of tax returns. Some public accounting firms are collecting the data from the client and transferring it offshore. The data is used by offshore labour to prepare tax returns and other reports that comply with Australian laws, and the final tax return is sent back to Australia for presentation to the client. Appropriate policies, procedures and technology must be put in place to facilitate this transfer securely and privately.

The possible **benefits** of this approach are:

- cost reduction and increased profitability as labour costs are cheaper than in Australia, especially with routine, number crunching, compliance accounting work that can be done with the aid of software
- suited to back-office functions that are not customer focused and so there is no loss of service to customers
- faster turn-around speeds using technology
- quality is maintained as the skill level of workers in accounting and IT should be approximately the same as in Australia
- staff in Australia can concentrate on core activities aimed at higher and more profitable levels of accounting; for example, client advice.

However, there are **risks** associated with offshore outsourcing. These include:

- expectations may not be met in terms of quality control, skill levels and speed of turn-around. It can be difficult to maintain quality in a foreign country and to obtain the quality of staff required
- security and privacy is a major worry. How secure is the data between sites and the storage off-site? Of great concern is the privacy of the data and how the offshore service provider is able to meet the strict requirements of Australian privacy laws
- lack of acceptance from Australian customers who do not want their financial information moving outside the organisation
- loss of in-house skills as these skills are transferred to another organisation
- signing of an agreement that covers all contingencies relating to who owns data and what happens when things go wrong
- contingency plans must be in place if the business wants to change the outsourced service provider. What will happen to the data and intellectual property in this situation?
- political issues about loss of local employment opportunities and skills.

This is a complicated issue for the discipline of accounting. However, many firms in Australia have begun outsourcing work. Time will tell if this is successful.

In summary, managing business data and technology is very complex. Figure 1.8 on page 71 provides an overview of the impact technology has on business and controls.

1.65

Use a search engine to find the reasons why Australian accounting firms are outsourcing offshore. Document the source of the site, the country involved and the reasons given.

1.66

What is your opinion on outsourcing business processes by Australian firms? Can it be successful? What are the problems?

1.67

‘Technology has a great influence on business and controls.’ Discuss with reference to small business and large business. Is every technology appropriate for small and large business?

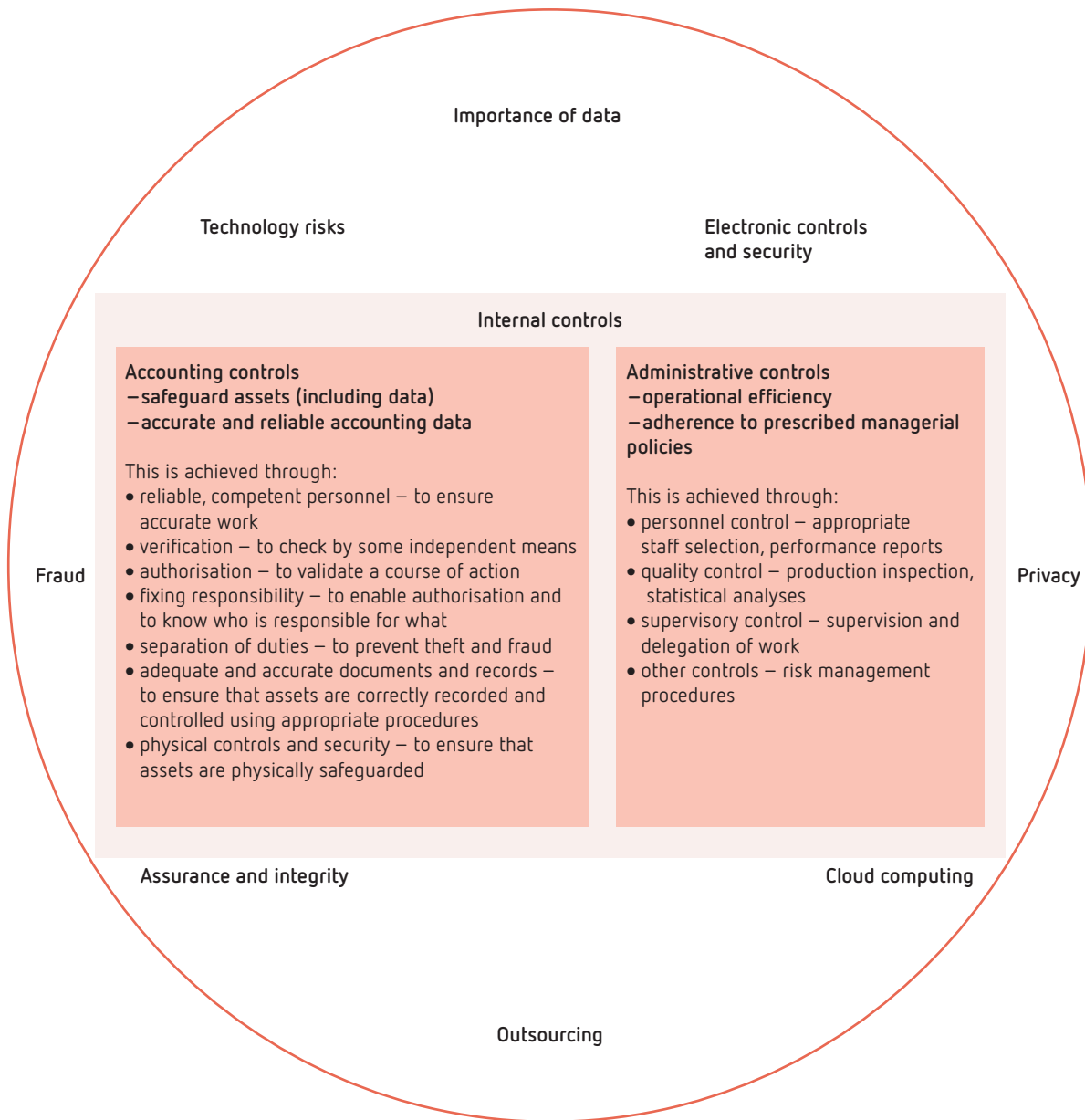


Figure 1.8 Impact of technology on business and controls

The future

One of the technologies that may influence business and accounting in the future is **blockchain**. Blockchain technology could change how transactions are conducted. In very simple terms, a ‘block’ is a block of data and the ‘chain’ is the linking of these blocks together to form a chain that cannot be broken. This means that it is very secure because the data in the block is encrypted, that a new block is added to the chain, and then the whole chain is stored in many places (decentralised or distributed locations) at the same time. Once data is stored in the block, it can never be changed. If someone were to try and change the data at one place, they would also have to change it in hundreds of other unknown places where it was stored. Also, a change in one place and nowhere else would signal something is wrong. So blockchain has a very high level of security as it is not controlled by anyone in any one place. If a genuine error were discovered, another entry would have to be made to correct that error. In this way, both the incorrect entry and the correcting entry would be visible on the blockchain.

How can this affect accounting? You have been learning about double entry accounting in terms of debits and credits. You should know that a transaction with an outside party not only results in a double entry being created in your records, but another double entry being recorded in the other party's records. They are mirror images as they reflect the different views of the one transaction. For example, if Krymer's Store bought and paid for GST-free goods from Breston Ltd at 10.12 a.m. on 8 April 2020 for \$1000, the entries recorded in each set of books would appear as follows:

Krymer's Store**Private Ledger**

Dr	Cash at Bank	Cr
	April 8	1000
	Inventories	
April 8	1000	

Breston Ltd**Private Ledger**

Dr	Sales	Cr
	April 8	1000
	Cash at Bank	
April 8	1000	

There would be a receipt from Breston Ltd or a bank statement entry to evidence this transaction. At any time, the auditor could verify this transaction by looking at these documents.

What if blockchain technology were introduced? Instead of these two sets of records being separate and private, there would now be a connection between them. After the transaction is authorised, data would be entered into a block and stored in a blockchain. This would be a decentralised, shared ledger which shows that Krymer's Store has paid the money and Breston Ltd has received the money. This could appear as follows:

Shared ledger

Dr	Krymer's Store	Cr
	April 8	1000
	Breston Ltd	
April 8	1000	

OR

Shared ledger

	Breston Ltd	Krymer's Store
April 8	\$1000	-\$1000

OR

Shared ledger

Date	Seller	Buyer	Amount	Link ID
April 8	Breston Ltd	Krymer's Store	\$1000	9Rt2miW301dF5

The view of the shared ledger immediately above envisages each transaction as being part of a large Excel spreadsheet with all details of the transaction being date stamped and recorded in the block. Whatever is stored in this shared ledger cannot be changed. If every transaction between the two parties

were in a blockchain and verified by a link identifying number, auditors would no longer need to check anything. The data is verifiable because it is in the blockchain.

Now imagine that the first entry made is not in the businesses' records, but in the blockchain. All the details would be recorded in terms of the parties involved, the item involved, the amount involved and so on. This transaction becomes a contract and the parties both agree digitally to everything in that contract (sometimes called a **smart contract**). This transaction is time stamped, bundled together with other transactions to form a block; the mechanics of the blockchain come into play in terms of encryption and decentralised storage; and the transaction is stored and verified and can never be changed. This transaction now has an entry in the blockchain and has a verifying link similar to a link to an Internet site. This link then becomes the basis of the entries in each individual business's books. Recording transactions this way is known as **triple entry accounting**, as an extra ledger stores the data. This is shown in Figure 1.9.

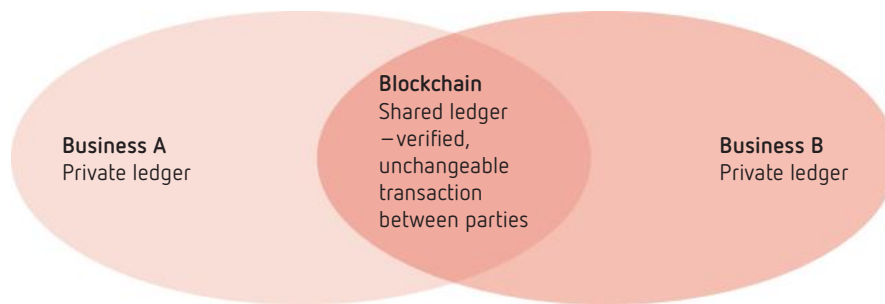


Figure 1.9 Triple entry accounting

An interesting question now arises. If the blockchain recording the transaction can verify the transaction and the transaction can never be deleted or amended, is it necessary for both parties to record the transaction in their books as usually occurs? In the future, is it possible for the entry to be made only in the blockchain?

Blockchain could also affect the auditing profession. Imagine the millions of transactions that occur every week in companies such as Woolworths and the Commonwealth Bank. One of the challenges facing the auditing profession is how to audit this vast volume of transaction data. In the past, it was impossible to check every transaction. One technique used was to choose a sample of transactions to be checked. However, with the advent of **Data Analytics** tools, all the data can be checked and all irregularities discovered. Further, if blockchain develops into a reliable, commonly used business technology and all transaction data is automatically verifiable, this may have a tremendous effect on the auditing process.

Finally, blockchain technology could be used in a great variety of applications other than financial transactions. Blockchain is currently used to identify diamonds, from the stone's source, through the processing and certifying stages, to its ultimate sale. Other possible uses include land and property title registration, intellectual property registration, shareholder registration and share trading – anything that has value and where a particular item needs verification. In all these situations, blockchain ensures that buyers know they are buying the real thing and not a fake. Having verifiable evidence is the great advantage of blockchain.

However, it should be clearly understood that blockchain is not bitcoin. **Bitcoin** is a digital currency that is based on blockchain technology. Once a bitcoin is created, it can be moved from owner to owner and the trail of those movements is verifiable and always available. It is open to all, verified and secured, and anonymous. Is this the blockchain model that would work in business? Businesses want the advantages of verification and security, but they want transactions with outside parties kept confidential and private. They want to grant permission only to certain businesses to view and update the blockchain; and not only that, they want to endorse only certain people in that business to authorise transactions on the blockchain through smart contracts. This approach is referred to as a **permissioned blockchain**. Businesses also want to use a standard currency. There is also the issue of trusting the technology – will it work in all circumstances as it is touted to do? Linked to this, businesses have to be able to gain easy and reliable

access to the blockchain transactions to prepare financial statements. Will all this happen? Businesses will continue to keep their own sets of records in the foreseeable future until these issues are resolved.

Blockchain has been in existence for over 10 years and has not yet been widely used in business. Blockchain for business is therefore early in its development. Only time will tell if this technology becomes the next big thing or maybe even the new Internet.

Another development revolves around data that may impact the organisation such as comments in social media, newspaper and TV articles, entries on websites, video and audio files; for example, security files and documents. This vast volume and variety of data is referred to as **Big Data**. It can be structured in the form of transactions or unstructured in the form of social media entries. **Data Analytics** tools are being developed to analyse this vast amount of data in order to determine trends and make better and faster decisions.

Real-world application



ASX to upgrade to Blythe Masters' blockchain Digital Asset Holdings technology

James Eyers

Brokers, traders and custodians in the \$2 trillion cash equities market have welcomed the ASX's decision to upgrade its post-trade settlement and clearing system with blockchain technology and the exchange's pledge to share cost savings with them.

The ASX said it would provide more detail in March about timing for rolling out the new technology being developed by Digital Asset Holdings, a New York start-up run by former JP Morgan investment banker Blythe Masters, of which ASX owns about 8 per cent.

The ASX said on Thursday morning it was comfortable replacing its ageing CHES system with a new one using 'distributed ledger technology' (DLT). The ASX is the first stock exchange in the world to commit to using the technology in a decision that may be followed by other exchanges.

It will allow fund managers, stockbrokers and custodians to reduce operating costs because they won't need to conduct a reconciliation process between their systems and the ASX's. Instead, they will know in real time that the share ownership information in their systems is the correct version and exactly the same as the ASX's.

The system can also reduce risk against which regulatory capital has to be held. The quantum of cost savings has not yet been quantified.

ASX chief executive Dominic Stevens said synchronised databases would 'give a tremendous benefit to the market as it takes out a lot of the reconciliation issues. It also provides a platform for the market by standardising how data is used across the whole industry, and there's a massive benefit in that'.

...

How it will work

DAH's distributed ledger technology has adapted some parts of the blockchain technology underpinning the cryptocurrency bitcoin, but it also has key differences.

It's similar because it will create an immutable, synchronised record that serves as a provable, single version of the truth that all parties can rely upon. But unlike bitcoin, the application for clearing and settlement will not require transactions to be validated by a public network of power-hungry computers using a 'consensus mechanism', which in bitcoin replaces the work of a central, trusted party.

Instead, the ASX will remain a trusted entity. The system will be a private, 'permissioned' network with known participants. Confidentiality of trading information will be maintained but the ASX and regulators will be able to see all transactions.

The system should open up ways for the wealth management industry to innovate around market data.

Leigh Travers, chief executive of ASX-listed blockchain corporate adviser DigitalX and a former Euroz stockbroker, said the new system 'will deliver more transparency around proof of ownership and capital raisings'. He also said the ASX's decision would have a broader impact on the local technology industry 'by ensuring Australia stays at the forefront of blockchain innovation'.

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ASX blockchain

1.68

- Explain the essential characteristics of blockchain technology. What problems have to be overcome for it to flourish in business?
- Investigate and document the latest articles about permissioned blockchain use in business and accounting. Summarise the developments. Is anything stopping its widespread use for large businesses? What about small businesses?

1.69

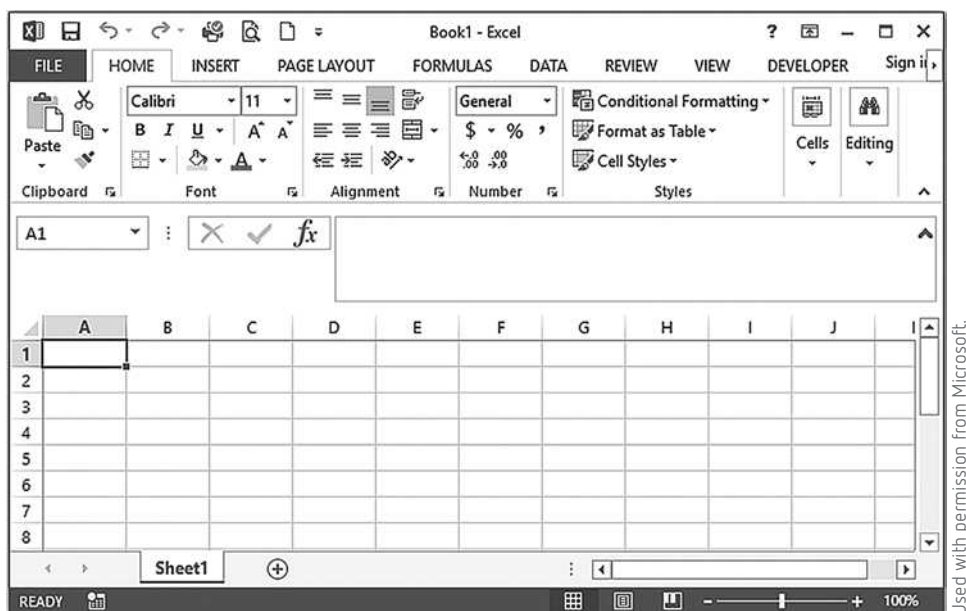
One of the blockchain ledgers being developed for business is Hyperledger Fabric from Linux Foundation. Investigate and document where this shared ledger is being used. How successful has it been?

1.70

Investigate and document the latest articles on Big Data and Data Analytics.

Spreadsheets

Spreadsheets were introduced in *Units 1 & 2*. We saw that they are very versatile and easy to use; and the one that is almost universally used is Microsoft Excel (MS Excel) as shown in Figure 1.10.



Used with permission from Microsoft.

Figure 1.10 MS Excel screen layout

Four terms are commonly used in relation to spreadsheets:

- **spreadsheet** – the actual program, such as MS Excel
- **worksheet** – the building of the model (or problem-solving calculations) that is prepared using the spreadsheet program
- **workbook** – a book that contains a number of worksheets. This is useful for building large models. When data is saved, it is saved as a workbook.
- **template** – an already prepared and built worksheet where the user simply enters data and obtains output. Once a worksheet is completed, it can become a template.

A spreadsheet is an electronic worksheet that uses the great calculating power and memory capacity of the computer. A spreadsheet is organised as a grid of columns and rows. Each entry position is a cell represented by a coordinate on the grid, such as A1. At each position, data can be entered in one of three forms:

- **labels** – used for descriptive text that identifies rows or columns. They are therefore generally alphabetic characters
- **numbers** – used for numeric data so that calculations can be performed
- **formulas** – used to define the relationship between numbers shown in various cells. For example, the formula =A1*A2 in cell A3 means ‘multiply the numbers in cells A1 and A2 and put the answer in A3’. You can see that if we changed the numbers in A1 or A2, the answer in A3 would automatically change.

We will now further explore the use of spreadsheets in the real world of Accounting.

Designing and building worksheets/templates

When designing a worksheet, the user should be able to use it as simply as possible. In addition, the worksheet must be accurate or its worth is greatly reduced. The simplest error will render a worksheet useless. For these reasons, great care and attention must be paid to worksheet/template design.

The preparation of a worksheet/template involves the following steps:

- 1 **Define the problem** Determine the exact nature of what is required (both input and output) so that the worksheet can be built to those specifications. It is very important to decide if a spreadsheet is the best software to solve the problem. Sometimes a database might be more useful.
- 2 **Plan the solution** Provide a complete solution to the problem, even on paper if necessary. Prepare the solution and try to draw how the screens will appear on the computer. Pay particular attention to where formulas are to be used. The use of formulas makes the worksheet very powerful. The layout for documentation and instructions discussed in the next section is very important.
- 3 **Build the worksheet/template** Enter the labels, numbers and formulas into the worksheet. If you wish to use the worksheet as a template, all the figures for the worksheet are changed to 0 (zero) and saved under an appropriate name. New users then simply enter their own data into the template.
- 4 **Test the worksheet/template** This is perhaps the most important step. You must ensure that the worksheet is accurate under all circumstances (see section on accuracy on page 77). You should spend as much time testing the model as building it. Use a calculator to manually check all calculations and reports based on the input data.
- 5 **Prepare the documentation** Ensure that the user of the worksheet/template knows how to use it correctly. This means using screens in the template to explain what is required. It can also mean preparing a manual to accompany the template.

Documentation and instructions

When preparing a worksheet, it is most important that appropriate documentation and instructions are given. In business, the original designer of a worksheet may not be the ultimate user. If the documentation and instructions are inadequate, it can be very difficult for the new person to understand the worksheet. As a result, errors can occur.

For this reason, the first few screens are generally devoted to telling any new user of the worksheet what the worksheet is all about. These screens can be divided into the following areas:

- **Name and purpose area** This will identify the name of the worksheet and state what the worksheet does. For example, the name of the worksheet might be Depreciation and the purpose might be 'to prepare a depreciation schedule using the straight line method of depreciation'. It is not sufficient just to say that the worksheet prepares a depreciation schedule. The screen must state that the worksheet is based on straight line depreciation. The author's name, the creation date and the date and time of adjustments will also appear here.
- **Index area** This sets out the coordinates of the main parts of the worksheet. It allows the user to see the main parts and perhaps use the GOTO command to go immediately to the required area.
- **Instructions area** This tells the user what has to be done and must be quite specific. Basically, there are three types of worksheet structures:
 - where the user can enter all the figures in an appropriate part of the worksheet set aside for this purpose (often called the **input/assumptions** area) and these figures are used to form the report in the report area. In this situation, the user will not usually be able to enter data in the report area
 - where the user enters data directly into the report area and there may be no **input/assumptions** area
 - a combination of the above, where the basic assumptions are entered in the **input/assumptions** area. Because the input data is so large, it is best to just enter the data straight into the report.
- **Input/assumptions area** (if required) If the worksheet is one where a specific area is to be set aside for the user to input data or to make assumptions on which the report will be based, then this section will be required. This area is sometimes known as an **assumption table** or a **data table**. It will consist mainly of a series of text materials with a space for the user to enter the data. The input cells will generally be unprotected/unlocked and in a different colour so that the user knows this is where data must be entered. On the basis of this data, the report area will prepare the necessary report.
- **Report area** This is the area where the required report is shown. It should be designed as if it is a report for an end user. For example, if the worksheet was required to print a Statement of Profit or Loss and Statement of Financial Position, then the appropriate classification of accounts, number of columns and so on must be taken into account so that the printout becomes what the user requires. In planning a worksheet, it is this output that should be the starting point. The normal procedure is to design the output and then work backwards to achieve it.

As mentioned previously, do not think that data cannot be entered into this report area. Sometimes it is impossible to have all of your data in an input/assumptions area, as the user might find it easier to enter the data straight into the report area. Ease of use is important.

The screens in Figure 1.11 illustrate how each of these areas would appear using an input/assumptions area. The worksheet is for the calculation of depreciation.

The formulas for the report area are shown in Figure 1.12 (page 79).

Figure 1.11 shows a very simple layout of the screens. Because the columns change for different reports, sometimes the reports cannot just go straight down the page, but must be moved across into columns on the right (see Figure 1.13 on page 79). This is very useful in large models. Alternatively, separate worksheets can be prepared for the major sections (see Figure 1.14 on page 80).

Accuracy

People are often lulled into a false sense of security when they read something that has been printed by a computer. They tend to believe that because a computer has produced the output, it must be correct. When building and testing a worksheet, you should assume that everything printed is wrong and prove that it is correct, rather than assuming that it is correct. Some aids in ensuring accuracy when building and testing a worksheet are presented below.

- **Build cross-checks or proofs** into the worksheet to have an internal proof that figures are correct. For example, if there are two ways to ascertain a figure, try to incorporate these two forms of calculation in the form of a check total or a proof calculation so that if they give different answers it is

	A	B	C	D
1	INTRODUCTION			
2	Template:	Straight Line Depreciation		
3				
4	Author:	XXX XXXXXX		
5				
6	File Name:	Deprec Straight Line		
7				
8	Creation Date:	28-Mar-20		
9				
10	Date Adjusted:	23-Jun-20	02:36 PM	
11				
12	Use the Page Up and Page Down keys to see the major parts of the template			
13				
14				
15	PURPOSE			
16				
17	The purpose of this template is to prepare a Depreciation Schedule showing Straight Line depreciation. The maximum life is 10 years			
18				
19				
20				
21				
22				
23				
24				

(a)

	A	B	C	D
25	INDEX			
26				
27	Purpose		A15 - D24	
28	Index		A25 - D34	
29	Instructions		A35 - D44	
30	Input		A45 - D69	
31	Depreciation Schedule		A70 - D99	
32				
33				
34				
35	INSTRUCTIONS			
36				
37	Enter the relevant data into the Input area			
38				
39				
40				
41				
42				
43				
44				

(b)

	A	B	C	D
45	INPUT/ASSUMPTIONS			
46				
47	Name of Asset:		Equipment	
48				
49	Cost Price:		\$30,000.00	
50				
51	Residual Value:		\$4,000.00	
52				
53	Life (in Years - Max 10):		5	
54				
55				
56				
57				
58				
59				
60				
61				
62				
63				
64				
65				
66				
67				
68				
69				

(c)

	A	B	C	D
70	REPORT			
71	Depreciation Schedule			
72				
73	Name of Asset:		Equipment	
74	Cost Price:		\$30,000.00	
75	Residual Value:		\$4,000.00	
76	Life (in Years):		5	
77				
78				
79		Year		Straight Line
80				\$
81				
82		1		5,200.00
83		2		5,200.00
84		3		5,200.00
85		4		5,200.00
86		5		5,200.00
87		6		0.00
88		7		0.00
89		8		0.00
90		9		0.00
91		10		0.00
92				\$26,000.00
93				
94		Proof		0
95				

(d)

Figure 1.11a, b (top left and right), **c, d** (bottom left and right) Documentation screens for a worksheet that calculates depreciation

obvious to the user. Generally, the proof calculation consists of the cell coordinates for the figure you are trying to prove minus the alternative calculation. If the two figures being checked are correct, the resultant answer will be zero. Proofs can also be used to ensure that only valid input is entered. Once again, if the data is valid, a zero will be the answer.

- Adjust formulas to **eliminate rounding errors**. You should always try to ensure that the form a figure takes in memory is the same as the form shown on the screen. For example, if you added together two figures, such as 25.4 and 23.3, your answer would be 48.7. If you only desired to have whole dollars in the output, it would not be appropriate to use a format command (to show the format of the figure on the screen) that states whole dollars only. If you only want to show whole dollars in the worksheet and you used a format command so that the decimals did not appear, your output would show 25 plus 23, adding up to 49, which would be misleading.

	A	B	C	D
70	REPORT			
71	Depreciation Schedule			
72				
73	Name of Asset:		=C47	
74	Cost Price:		=C49	
75	Residual Value:		=C51	
76	Life (in Years):		=C53	
77				
78				
79		Year		Straight
80				Line
81				\$
82		1		=IF(\$C\$53>=B82,(\$C\$49-\$C\$51)/\$C\$53,0)
83		2		=IF(\$C\$53>=B83,(\$C\$49-\$C\$51)/\$C\$53,0)
84		3		=IF(\$C\$53>=B84,(\$C\$49-\$C\$51)/\$C\$53,0)
85		4		=IF(\$C\$53>=B85,(\$C\$49-\$C\$51)/\$C\$53,0)
86		5		=IF(\$C\$53>=B86,(\$C\$49-\$C\$51)/\$C\$53,0)
87		6		=IF(\$C\$53>=B87,(\$C\$49-\$C\$51)/\$C\$53,0)
88		7		=IF(\$C\$53>=B88,(\$C\$49-\$C\$51)/\$C\$53,0)
89		8		=IF(\$C\$53>=B89,(\$C\$49-\$C\$51)/\$C\$53,0)
90		9		=IF(\$C\$53>=B90,(\$C\$49-\$C\$51)/\$C\$53,0)
91		10		=IF(\$C\$53>=B91,(\$C\$49-\$C\$51)/\$C\$53,0)
92				=SUM(D82:D91)
93				
94			Proof	=D92-(C49-C51)
95				
96				

Figure 1.12 Formulas for the report area of the worksheet

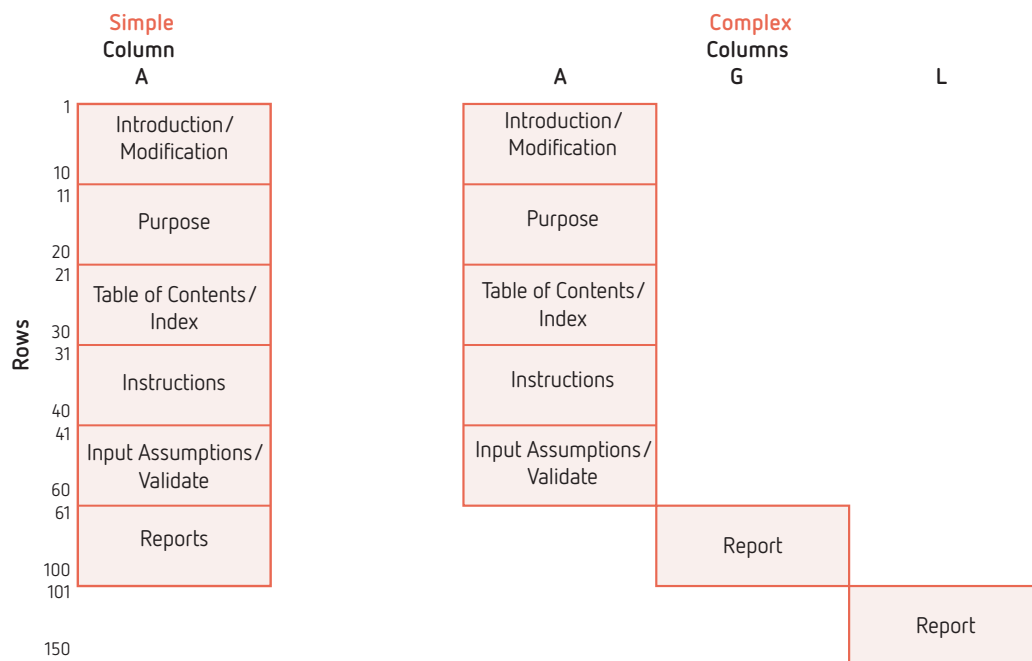


Figure 1.13 Structures for building models

	A	B	C	D
1	REPORT			
2	Depreciation Schedule			
3				
4	Name of Asset:		Equipment	
5	Cost Price:		\$30,000.00	
6	Residual Value:		\$4,000.00	
7	Life (in Years):		5	
8				
9				
10		Year		Straight
11				Line
12				\$
13		1		5,200.00
14		2		5,200.00
15		3		5,200.00
16		4		5,200.00
17		5		5,200.00
18		6		0.00
19		7		0.00
20		8		0.00
21		9		0.00
22		10		0.00
23				\$26,000.00
24				
25			Proof	\$0.00
26				

Figure 1.14 Model with main sections appearing as worksheets

This occurs because when you format, the figures are rounded on the screen. Therefore, 48.7 is rounded to 49. In memory, however, the figures of 25.4, 23.3 and 48.7 are still stored. They are different only on the screen.

If this situation arises, formulas must be adjusted by using a **round** function. If a round function is used, then in memory 25.4 becomes 25 and 23.3 becomes 23, so the answer will be 48 when the two figures are added. Rounding is particularly important in calculations involving percentages such as discounts, bonuses, commissions, and so on.

- **Lock all formulas** so that the user does not accidentally overwrite them. Most spreadsheets have the facility to lock/protect formulas. They prevent the user from accidentally typing in a number where there was a formula or label, and therefore making some part of the output incorrect. All data that the user can change should be in a different colour and unlocked. Everything else in the worksheet should be locked/protected and in the normal (black) colour.
- Use a calculator to **manually prove formulas** you have entered are correct.
- **Change all the input figures** to see if the formulas are working correctly. This is a check to see if you have accidentally entered a number (which will remain fixed) instead of a formula (where the output will change when other figures change). For example, if you wanted your worksheet to be able to change

the sales figures for each month by simply entering a percentage increase in the input/assumptions area, change the percentage increase figure and see that all the sales figures change by the correct percentage.

Ease of use

To help the user, the following should be considered:

- **Screen layout** To allow the user to move around the worksheet as efficiently as possible, the screen layout should be very clear. Most keyboards have a Page Up key and a Page Down key, so the user can press these keys to move up and down. With the main areas mentioned above, it may be good practice to start them on a new page/screen. Similarly, if your output has involved both a Statement of Profit or Loss and a Statement of Financial Position, each of these main reports would be started on a new page/screen.
- **File names** When a worksheet is saved, it must be given a meaningful name. Always think of a name that describes the worksheet accurately. This allows quick identification in the future.
- **Starting position** When you save the worksheet, always place the cursor in a meaningful position, such as the name and purpose area or the instruction area. When the worksheet is opened, the screen where the cursor is positioned will appear. This is much more meaningful than showing a screen in the middle of the worksheet.

1.71

- a Enter the following into the coordinates given:
- | | |
|----|-------------|
| A1 | 25.4 |
| A2 | 23.3 |
| A4 | =SUM(A1:A2) |
| B1 | =A1 |
| B2 | =A2 |
| B4 | =SUM(B1:B2) |
- b Format column B (at least from row 1 down to row 20) to whole dollars.
- i What is the result?
 - ii Why is it different from column A?
- c Enter the following:
- | | |
|----|-------------|
| C1 | =INT(A1) |
| C2 | =INT(A2) |
| C4 | =SUM(C1:C2) |
- d Format column C (at least from row 1 down to row 20) to whole dollars.
- i What is the result?
 - ii Why is it different from column B?
- e Enter the following into the coordinates given:
- | | |
|-----|-------------|
| A7 | 21.6 |
| A8 | 34.5 |
| A9 | 41.1 |
| A11 | =SUM(A7:A9) |
| B7 | =A7 |
| B8 | =A8 |
| B9 | =A9 |
| B11 | =SUM(B7:B9) |

f What is the result in column B? (Remember that column B was formatted to whole dollars previously.)

g Enter the following into the coordinates given:

C7 =ROUND(A7,0)

C8 =ROUND(A8,0)

C9 =ROUND(A9,0)

C11 =SUM(C7:C9)

h What is the result in column C? Why?

Therefore, what is in memory should be the same as what is on the screen at all times. Whenever you have a calculation that results in an answer that has more decimals than are required, you must use =ROUND or =INT to convert it to the required number of decimals. Also, you then format it on the screen to the required number of decimals.

i Save as **Round 1**.

1.72

a To build a Discount model, enter the following into the coordinates given and then justify the row to the right:

A1 PRICE

B1 QTY

C1 GROSS

D1 DISCOUNT

E1 NET

b Format columns D and E (from row 1 down to row 20) to five decimal places.

c Enter the following into the coordinates given:

A3 12.47

B3 3

C3 =A3*B3

D3 =C3*.025 (this is a 2.5 per cent discount)

E3 =C3-D3

A4 13.13

B4 1

C4 =A4*B4

D4 =C4*.025

E4 =C4-D4

E6 =SUM(E3:E4)

Note the resultant calculations up to five decimal places in column E and that the addition is correct.

d Format the figures in columns D and E to two decimal places. What appears incorrect?

e The formulas in D3 and D4 have to be rounded to two decimal places. This can be achieved by:

D3 =ROUND(C3*.025,2)

D4 =ROUND(C4*.025,2)

Column E should now add up.

- f Save as **Discount**.
- g Change the structure of the worksheet so that the price, quantity and discount rate is in an input/assumptions area with each input unprotected and in a different colour; the output is in a report area; and global protection is turned on.
- h Save as **Discount 1**.

1.73

Prepare the worksheet to calculate straight line depreciation as shown in Figures 1.11 and 1.12 on pages 78–79.

- a Save the worksheet under the name of **Deprec Straight Line 1**. It is important that all the numbers in B82 to B91 are numbers and not text because the formulas in column D use the numbers in column B to know if the life has been reached. An alternative formula for D82 could be:

=IF(\$C\$56>=B82,SLN(\$C\$52,\$C\$54,\$C\$56),0)

- b Enter zeros into all values in the input/assumptions area and save the worksheet as a template under the name of **Deprec Straight Line Template**.
 - c Open **Deprec Straight Line Template** and use the worksheet to make the following calculations:
- | | | | |
|----------------|------------|-------------|--------------|
| Cost price | i \$40 000 | ii \$25 200 | iii \$16 000 |
| Residual value | \$1 000 | \$6 000 | \$600 |
| Life (years) | 5 | 3 | 10 |

1.74

Prepare the following worksheet to calculate straight line and diminishing balance depreciation for an asset. (Hint: Extra calculations for diminishing balance are done in hidden column D for each year's depreciation and in column F for the diminished balance in order for the worksheet to appear as required.)

	A	B	C	E
45	INPUT/ASSUMPTIONS			
46				
47	Name of Asset:		Motor Vehicle	
48				
49	Cost Price:		\$45,000.00	
50				
51	Residual Value:		\$12,000.00	
52				
53	Life in Years (Max 10):		4	
54				
55	Diminishing Balance			
56	Depreciation Rate:		30.00 %	
57				
58	(Enter 0 if you want the			
59	computer to calculate it)			
60				
61				
62				
63				

	A	B	C	E
70	REPORT			
71	Depreciation Schedule			
72				
73	Name of Asset:		Motor Vehicle	
74	Cost Price:		\$45,000.00	
75	Residual Value:		\$12,000.00	
76	Life (in Years):		4	
77	Dimin Balance Rate:		30.0000 %	
78				
79	Year		Straight	Diminishing
80			Line	Balance
81			\$	\$
82	1		8,250.00	13,500.00
83	2		8,250.00	9,450.00
84	3		8,250.00	6,615.00
85	4		8,250.00	3,435.00
86	5		0.00	0.00
87	6		0.00	0.00
88	7		0.00	0.00
89	8		0.00	0.00
90	9		0.00	0.00
91	10		0.00	0.00
92			\$33,000.00	\$33,000.00
93				
94		Proof	0	0

	A	B	C	E
70	REPORT			
71	Depreciation Schedule			
72				
73	Name of Asset:	=C47		
74	Cost Price:	=C49		
75	Residual Value:	=C51		
76	Life (in Years):	=C53		
77	Dimin Balance Rate:	=IF(C56>0,C56,100*(1-(C51/C49)^(1/C53)))		%
78				
79	Year		Straight	Diminishing
80			Line	Balance
81			\$	\$
82	1	=IF(\$C\$53>=A82,(\$C\$49-\$C\$51)/\$C\$53,0)		=IF(\$C\$53>=A82,D82,0)
83	2	=IF(\$C\$53>=A83,(\$C\$49-\$C\$51)/\$C\$53,0)		=IF(\$C\$53>=A83,D83,0)
84	3	=IF(\$C\$53>=A84,(\$C\$49-\$C\$51)/\$C\$53,0)		=IF(\$C\$53>=A84,D84,0)
85	4	=IF(\$C\$53>=A85,(\$C\$49-\$C\$51)/\$C\$53,0)		=IF(\$C\$53>=A85,D85,0)
86	5	=IF(\$C\$53>=A86,(\$C\$49-\$C\$51)/\$C\$53,0)		=IF(\$C\$53>=A86,D86,0)
87	6	=IF(\$C\$53>=A87,(\$C\$49-\$C\$51)/\$C\$53,0)		=IF(\$C\$53>=A87,D87,0)
88	7	=IF(\$C\$53>=A88,(\$C\$49-\$C\$51)/\$C\$53,0)		=IF(\$C\$53>=A88,D88,0)
89	8	=IF(\$C\$53>=A89,(\$C\$49-\$C\$51)/\$C\$53,0)		=IF(\$C\$53>=A89,D89,0)
90	9	=IF(\$C\$53>=A90,(\$C\$49-\$C\$51)/\$C\$53,0)		=IF(\$C\$53>=A90,D90,0)
91	10	=IF(\$C\$53>=A91,(\$C\$49-\$C\$51)/\$C\$53,0)		=IF(\$C\$53>=A91,D91,0)
92		=SUM(C82:C91)		=SUM(E82:E91)
93				
94		Proof	=C92-(\$C\$49-\$C\$75)	=E92-(\$C\$49-\$C\$75)
95				

- Save the worksheet under the name of **Deprec Schedule 1**. The formula in C77 calculates the rate of depreciation if the user enters zero as per the instruction in the input area. Remember that columns D and F must be hidden. You may also like to investigate the DB function in Excel.
- Enter zeros into all values in the input/assumptions area and save the worksheet as a template under the name of **Deprec Schedule Template**.
- Open **Deprec Schedule Template** and use the worksheet to make the calculations in Question 1.73c. Let the computer calculate the rate for diminishing balance.

Uses of spreadsheets

From the above discussion, it is obvious that spreadsheets can be used for a variety of applications. This is why the spreadsheet is the most popular application package. Its use is limited only by the imagination of the creator. The following are examples of where spreadsheets can be used:

- **Recordkeeping** Templates can be set up for the general journal, ledger and trial balance. Instead of writing these, the data can simply be entered into the spreadsheet and printed.
- **Budgeting** Cash budgets can be prepared, showing the effect of a change in debt collection policy or whether there is enough cash to fund a certain course of action.
- **Depreciation** Spreadsheets can be used to make calculations and to determine the best method of depreciation for a given asset.
- **Valuation of inventories** The value of inventories can be calculated using the lower of cost and net realisable value rule.
- **Ratio analyses** Certain ratios can be used to analyse a Statement of Profit or Loss and a Statement of Financial Position. The effect of 'what if' decisions – such as whether or not a firm should buy a large parcel of inventories for cash or on credit – can be examined. The cash budget will show whether there is the cash to do it, but the ratio analysis will show whether the whole firm is at risk from the decision in terms of all the elements in the Statement of Financial Position.
- **Provision for doubtful debts** The amount of the provision can be easily calculated.
- **Worksheets and financial statements** These allow the entry of a trial balance and, after entering balance day adjustments, the Statement of Profit or Loss and Statement of Financial Position are generated.
- **Profit models** The profit from a given number of assumptions can be determined. For example, if the firm sells hot dogs for \$2 each, the cost of each hot dog is 75c and other operating expenses are 30 per cent of sales, how much profit is there if 10, 100 or 1000 are sold? What if the firm receives notice that the cost of each bun is rising by 5c? Or if the firm decides to advertise at a cost of \$100?

These are just some of the possible applications. However, because it is such a time-consuming job to prepare and test these applications, it is often possible to buy them ready-made. These ready-made applications are called **templates**. The user loads the spreadsheet package into the computer, opens the template (which is the application without data), and then enters the relevant data for the given situation. This saves a lot of time and effort. All the user must do is enter the relevant data.

The following is a list of spreadsheet applications that are given in this series:

Units 1 and 2		
Chapter 5	Profit model	page 158
	Multiplication table	page 160
	Charts	page 161
	Ledgers	page 167
	Trial balance	page 167
Chapter 9	Financial statements and charts	pages 340, 343
Units 3 and 4		
Chapter 1	Depreciation	pages 78, 83
	Fraud – Benford's Law	page 92
Chapter 2	Provision for doubtful debts	page 98
	Worksheet and financial statements	page 162
	Ratio analysis	page 200
	What if analysis	page 205
Chapter 3	Cash budgets	page 273
Chapter 5	Company ratio analysis	page 379

REVIEW AND REFLECT

This chapter introduced the nature of non-current assets and the distinction between a capital expenditure and an expense. The necessity for preparation and use of the asset register was discussed and illustrated.

Depreciation and amortisation were defined and the cost allocation concept of depreciation was explained. Factors determining the depreciation charge and the methods of calculating it – straight line and diminishing balance – were explained and illustrated. Accounting for the purchase and sale of non-current assets, depreciation for full and part accounting periods, and disposal of non-current assets were included.

The chapter also looked at the nature of internal controls in terms of the general aims, the broad types of controls, the aims specifically related to accounting internal controls and the seven principles around which internal accounting controls are built. The internal controls relating to property, plant and equipment were also discussed.

Technology is an essential part of modern business and managing this technology and the associated business data is crucial for success. The various elements of technology that could be employed in both the bricks and mortar and online environments, the associated risks, the electronic and security measures that could be adopted to minimise those risks, and the assurance and integrity relating to online sites were all discussed. Related to these are issues revolving around privacy, cloud computing, fraud, outsourcing of accounting processes and possible future developments. Spreadsheet applications for the depreciation of non-current assets completed the chapter.

1.75 Chapter summary

Complete the following tasks and questions and you will have constructed a brief summary of the work covered in this chapter.

Non-current assets

- a Non-current assets may be classified as: property, plant and equipment; intangible; other financial assets (investments); and other. Give examples of each.
- b The distinction between capital expenditure and an expense is based on _____ and the _____.
- c Why does depreciation occur?
- d List some of the factors determining the depreciation charge.
- e Name the various methods of calculating the depreciation charge.
- f Give the journal entry necessary to record:
 - i depreciation of a non-current asset
 - ii amortisation of an intangible asset.
- g What are the steps necessary to record the disposal of a non-current asset?

Administrative and accounting controls

- h List the general aims of internal control.
- i Describe accounting controls and administrative controls.
- j List the aims of internal controls built into an accounting system.
- k List the seven principles of internal accounting controls.
- l Name three elements of internal control over the storage of property, plant and equipment.
- m Name three important steps relating to the internal control over the disposal of property, plant and equipment.
- n List some controls over non-current assets other than property, plant and equipment.

Managing business data and technology

- o Is data different from information? Why?
- p List the key hardware components of a typical trading business computer system.
- q Describe the various types of software in a typical trading business computer system and give several examples of each.

- r Describe the following types of application software:
 - i Customer Relationship Management (CRM)
 - ii Supply Chain Management (SCM)
 - iii Business Intelligence (BI)
- s Describe various technologies linked to the Internet and the World Wide Web.
- t A business has the web address www.morton.com.au. Name the various components of that address.
- u Describe the typical process of how a shopper would buy a product or service from an online store. How do the accounting records get updated as a result of this transaction?
- v For an online small trading business to be able to operate, various technologies must be employed. Name these technologies.
- w Why is the protection of a business's data so important?
- x List the technology risks associated with running a business.
- y List some of the electronic and security issues involved in running a business.
- z Businesses may wish to communicate to users that they have a safe and secure website. Name some of the assurance and integrity providers that provide this assurance.
- aa Why is privacy so important for customers interacting with a business, especially in the online environment?
- ab Outline some of the benefits and problems associated with cloud computing.
- ac Name the elements of the Fraud Triangle.
- ad Describe the three main types of occupational fraud and give examples of each.
- ae Why do firms outsource accounting processes? What are some of the issues involved?
- af How might blockchain affect accounting in the future?

1.76 Application case

On 1 July 2019, Drayton Workshop bought a machine for \$15 400 from M Crock & Co Ltd. Installation expenses of \$1320 and freight of \$330 were paid in cash. The estimated life of the machine was five years and its residual value was anticipated to be \$1850. It was decided to depreciate the machine by the straight line method.

On 31 March 2021, the machine was traded in to G Rawley & Co Ltd on a more advanced model for \$6600. The new machine cost \$19 800, and installation expenses and freight cost \$2310. It was decided to depreciate the new machine by the diminishing balance method at a rate of 30 per cent. The estimated residual value of the machine is \$4800. GST is to be recorded.

- a Show the necessary journal entries to record this information to the end of the accounting period 30 June 2021.
- b Show the ledger accounts necessary to record the information, including the Profit or Loss Summary account, for each accounting period.
- c Show how the asset will appear in the Statement of Financial Position of the business at the end of each accounting period.

1.77 Application case

- a The following is an extract from the asset register:

Machine no 12			
Date	Particulars	Original cost	Accumulated depreciation
2021			
June 30		\$10 000	\$8 600

On 30 June, the machine was sold for cash \$1870.

Show how the preceding information would appear in the ledger accounts affected.

Dr				Ledger				Cr
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$	
2020				2020				
					... on Disposal of Non-Current Assets			No ...
					Cash at Bank			No 3103
					Machinery			No 3304
July 1	Balance		45 000					
					Accumulated Depreciation on Machinery			No 3304A
				July 1	Balance		22 000	
					Disposal of Machinery			No 3304.1
					GST Collected			No 4102.2

b The following is extracted from the asset register:

Motor vehicle 099 RPM			
Date	Particulars	Original cost	Accumulated depreciation
2021			
June 30		\$11 400	\$10 000

On 30 June, the motor vehicle was sold to Valmura Traders for \$2200.

Show how the preceding information would appear in the ledger accounts affected.

Dr				Ledger				Cr
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$	
2020				2020				
					... on Disposal of Non-Current Assets			No ...
					Valmura Traders Ltd			No 3105.1
					Motor Vehicles			No 3303
July 1	Balance		22 800					
					Accumulated Depreciation on Motor Vehicles			No 3303A
				July 1	Balance		15 600	
					Disposal of Motor Vehicles			No 3303.1
					GST Collected			No 4102.2

1.78 Conceptual review

- a K Williams, who is not registered for GST, purchased a new machine on 1 July for \$4400. Installation costs of \$550 were paid. Residual value was estimated to be \$950 after five years. Show the necessary journal entries to record the above purchase and depreciation at the end of year 1.
- b Summarise the impact of the GST on the recording of non-current assets.

1.79 Application case

On 1 July, Millson Manufacturing Co bought a new computerised machine for producing one of its products. The price of the machine was \$550 000 (including GST) with a discount of \$11 000 if paid by 14 July. The business took advantage of the cash discount. The following costs (including GST) were incurred in readying the machine for operation:

- freight and insurance: \$1100
- customs duty: \$16 500
- installation costs: \$1100.

The business normally replaces one of the five machines in use each year. The new machine is expected to have a residual value of \$10 000.

Required:

- a Determine the cost of the machine and explain the reasoning involved.
- b Millson is undecided as to whether to use the straight line method of depreciation or the diminishing balance method of depreciation at a rate of 45 per cent. Draw up a chart showing the amounts of depreciation to be charged each year using each of the above methods of depreciation.
- c Calculate and explain the effect of the above on the current year's profits.

1.80 Communication case

G Belcroft has just commenced a courier service business called Belcroft Couriers. Two vehicles have been purchased, registered and insured, and a communications system has been installed in each vehicle. Belcroft has no accounting background and has approached you with the following queries: what records should be kept? Why should they be kept? He knows that an expense called depreciation is a tax-deductible expense. However, he does not know what it is, how to calculate it, or how it should be recorded in the accounting records. He has also heard that depreciation sets aside enough cash to replace the vehicles when necessary, and wants to know if this is so.

Write a letter to Belcroft that answers the above queries. You should discuss at least two methods of depreciation that would be suitable for depreciating the vehicles. Give an example of each method, explaining what information Belcroft must supply and how he should obtain this information.

1.81 Financial reporting case

Refer to the annual reports for JB Hi-Fi by following the weblink. Answer the following questions relating to JB Hi-Fi.

- a What are the net balances for property, plant and equipment (non-current) at 30 June 2018 and 2017?
- b What is the amount of accumulated depreciation for property, plant and equipment at 30 June 2018?
- c How is property, plant and equipment brought to account?
- d What has been the cash flow related to purchases of property, plant and equipment for the year ended 30 June 2018?
- e What useful lives are used in the calculation of depreciation for plant and equipment?



JB Hi-Fi annual reports

1.82 Conceptual review

Describe how a typical transaction would take place when a customer buys goods in a store using a credit card and when a customer buys the same goods over the Internet from an electronic store using a credit card. Explain the similarities and differences.

1.83 Interpretation case

Everything you've been told about passwords is wrong

Louise McCabe and Stephen Craft

The US expert who wrote the standard for password security now says he was wrong – and it's time for a new way.

In 2003, Bill Burr was a technology manager for the US National Institute of Standards and Technology (NIST) when he was tasked with writing some brief guidelines for password security. He recommended that passwords have a minimum of eight characters with a mix of capitals, numbers and symbols, and be updated frequently.

Soon Burr's rules were adopted by organisations around the world. Now he says he not only regrets his recommendations, but that they have inadvertently led people to choose poor passwords that are actually easier for hackers to crack.

...

The aim of Burr's rules was to defeat what are known as 'brute-force' attacks, where hackers use sheer computing power to try thousands of possible passwords, until they stumble on the right combination. By adding more character sets to the mix, you exponentially increase the number of possible combinations an attacker must try.

...

The problem, says Gernot Heiser, Scientia professor at the University of New South Wales' School of Computer Science and Engineering, is that today's hackers rarely start with a blank slate.

Instead, they begin by searching for English words plus common substitutions, such as \$ for S. That makes them very well adapted to breaking exactly the kind of P@ssw0rd\$ users tend to create when struggling to comply with Burr's rules.

The solution, says Heiser, is to use long, memorable passphrases rather than passwords. Ideally, they would be an unforgettable combination of unexpected words, rather than a predictable English sentence. The more characters you add, the longer they'll take to crack.

Source: From 'Everything you've been told about passwords is wrong' by Louise McCabe and Stephen Craft, intheblack.com, 19 February 2018. Copyright © 2018 CPA Australia Ltd. Used by permission.



Passwords

- a Summarise what the authors are saying about passwords.
- b Do you agree with the authors? Why?
- c Why are PINs for bank accounts and credit cards only four digits in length? Do you think they are safe?
- d What are the implications of this article for passwords that people set up in the future?

1.84 Interpretation case

Users Zukerpunched

Jennifer Dudley-Nicholson

FACEBOOK founder Mark Zuckerberg has issued an extraordinary apology for breaching the privacy of 87 million people as he prepares to be grilled before the US Congress today.

It comes as the world's largest social network finally began issuing warnings to the 300 000 Australians swept up in the Cambridge Analytica scandal last night. Zuckerberg will answer questions about the unprecedented data breach before Congress this morning AEST, where he will also talk about how his social network was used to spread Russian propaganda.

In his 2700-word introductory testimony, Mr Zuckerberg revealed as many as 157 million Facebook and Instagram users received 'disinformation' from a Russian outlet known as the Internet Research Agency.

He said the group paid Facebook \$US100 000 (\$A130 000) for 'more than 3000 ads on Facebook and Instagram, which were seen by an estimated 11 million people in the US'.

He admitted that his network 'didn't do enough' on all counts and apologised for fake news, hate speech, a lack of data privacy and foreign interference in the 2016 elections via his platform.

'We didn't take a broad enough view of our responsibility, and that was a big mistake,' he said.

'It was my mistake, and I'm sorry. I started Facebook, I run it, and I'm responsible for what happens here.' He has pledged to hire 5000 extra security and content review specialists by the end of the year, at a huge hit to his profits.

The warnings to Facebook users began from 9pm last night with a statement that Facebook understood 'the importance of keeping your data safe'. None of the messages offer an apology from Facebook. Two of the messages also provide a link to find 'more information' about what to do now.

Source: 'Users Zukerpunched', Jennifer Dudley-Nicholson, *The Courier Mail*, 11 April 2018 p. 9. The use of this work has been licensed by Copyright Agency except as permitted by the Copyright Act, you must not re-use this work without the permission of the copyright owner or Copyright Agency.

- a Summarise what the author is saying about privacy.
- b Were you concerned when you read this article? Why?
- c Use a search engine to determine how Cambridge Analytica was involved in the privacy breach.
- d Using a search engine, research the latest developments in this particular privacy issue. Are you happy or concerned about the outcome? Why?
- e What are the implications for business in relation to the privacy of customers' and employees' data?

1.85 Research case

Use a search engine to investigate the nature of forensic accounting. What types of services are offered? How is this different from auditing?

1.86 Application case

For each of the following situations, what measures could be taken to try to prevent them?

- a Payment of fictitious invoices
- b Payment to fictitious employees
- c Fraudulent refunds given to customers
- d Missing laptop computers
- e Sales assistants giving discounts to friends at the cash register

1.87 Spreadsheet application

Benford's Law helps detect fraud

If we know the normal frequency of digits, then we can identify digit frequencies that violate that normal behaviour. For example, Benford concluded that, out of a group of numbers, the first digit will be '1' about 30 per cent of the time. Similarly, using the same function, we can expect the first digit to be '8' about 5.1 per cent of the time.

If we review accounts payable invoices and determine that the first digit of the invoices is '8' 50 per cent of the time, then we may have either many legitimate payments that start with '8', or we may have fictitious invoice amounts. Fraudsters will often create an amount that starts with a higher number, like 8 or 9, not knowing that auditors are now equipped to identify these abnormal payments.¹⁰

Prepare a spreadsheet to show the probabilities involved in Benford's Law for each of the beginning digits 1–9. Also prepare a chart to visually show the results.

Extra questions and activities

Refer to NelsonNet for extra questions on Chapter 1. These questions include multiple choice, true/false, and a selection of other questions and activities.



Benford's law



Extra questions
and activities

¹⁰ Sources: CL Warner, '10 ways to identify accounts payable fraud', Auditnet, 2018 <auditnet.org/audit-news/articles/accounts-payable-fraud-10-ways-to-identify-it>; and JC Collins, 'Using Excel and Benford's Law to detect fraud', *Journal of Accountancy*, 1 April 2017, <journalofaccountancy.com/issues/2017/apr/excel-and-benfords-law-to-detect-fraud.html>.

2

FINANCIAL STATEMENT REPORTING

LEARNING OBJECTIVES

When you are competent in the work covered by this chapter you should be able to:

- explain the purpose of providing for doubtful debts
- record the entries for bad and doubtful debts, and interest on overdue accounts
- present a fully classified Statement of Profit or Loss and Statement of Financial Position
- prepare all balance day adjustments
- prepare a worksheet and adjusted trial balance
- build a spreadsheet model for a worksheet and adjusted trial balance
- explain the accounting concepts, principles and qualitative characteristics underlying the complete accounting process
- discuss the limitations of financial reports
- calculate ratios to assist the analysis and interpretation of financial reports
- analyse and interpret information contained in comparative financial reports using horizontal analysis and ratios
- build a spreadsheet model with input and report areas to show comparative financial statements using horizontal analysis and ratios.

Financial statement reporting

New accounting entries

- Bad and doubtful debts
- Interest on overdue accounts

Presentation and classification of the Statement of Profit or Loss

- Classification of revenue and expenses
- Service industries
- Trading industries
- Differences between the Statement of Profit or Loss and profit-determining account

Presentation and classification of the Statement of Financial Position

- Classification of assets, liabilities and owner's equity

Balance day adjustments to fully classified financial statements

- Inventories
- Accrued expenses
- Accrued revenues
- Prepaid expenses

- Unearned revenues
- Provision for doubtful debts
- Accumulated depreciation
- GST Clearing entries
- Preparing financial statements from the trial balance incorporating adjustments
- Worksheet and adjusted trial balance
- End of period reports
- Spreadsheet application

Analysis and interpretation of financial reports

- Limitations of financial reports
- Analysis and Interpretation of financial reports for a sole trader
- Ratio analysis of the Statement of Profit or Loss and the Statement of Financial Position for sole traders
- Illustrative example of financial report analysis
- Limitations of analysis and interpretation
- Spreadsheet applications

Review and reflect

New accounting entries

To date, you have examined the whole accounting process and you should be able to recognise many of the individual assets, liabilities, revenues and expenses of a business. In addition, you have prepared an unclassified Statement of Profit or Loss and an unclassified Statement of Financial Position. It is now time to extend your knowledge by including some more accounting entries, examining the classification of the final reports and also extending the tools you have learnt to date for analysing these final reports.

We will now examine two more categories of entries relating to accounts receivable: bad and doubtful debts, and interest on overdue accounts.

Bad and doubtful debts

Whenever a business sells goods on credit, it is inevitable that a certain percentage of accounts receivable will fail to pay their debts. These **bad debts** are an expense to the business and will occur despite the efforts of the credit department to screen people before credit is allowed.

The problem with bad debts is that some of them occur in the accounting period after that in which the credit sale took place. Consider the following example:

June 1	Credit sale of GST-free goods worth \$500 are made to M James.
June 30	Statement of account is sent to M James.
June 30	The accounting period ends.
Aug 1	M James should have settled their account with the business but failed to do so.
Aug 31	A reminder letter is sent asking for payment within the next 30 days.
Sept 30	A letter threatening court action is sent to M James.
Oct 20	The account is declared bad.

Although the sale was made in June and the revenue was recognised in that accounting period, the bad debt would not be declared until at least October, and this would be in the next accounting period:



Because of this possibility of accounts receivable going bad, we therefore have to make entries at balance day that result in the following:

- the amount of accounts receivable shown in the Statement of Financial Position should show not only the amount that is owing to us from credit sales, but also the reduced amount that will be collected if some of these accounts receivable prove to be bad
- the profit figure in the Statement of Profit or Loss reduced by bringing to account an expense for these possible bad debts.

Provision for doubtful debts

To achieve the desired result for an accounting period, the following balance day adjustment is recorded:

		Dr	Cr
	Bad and Doubtful Debts	XXX	
	Provision for Doubtful Debts		XXX

The effect of this entry is twofold:

- to increase the amount of expenses for the period. This is done through a **Bad and Doubtful Debts account**. As well as bad debts, the Bad and Doubtful Debts account will therefore include doubtful debts, which is the estimated amount of the current accounts receivable that will be uncollected. It is accounting for debts that are doubtful of being recovered. Like any other expense item, the Bad and Doubtful Debts account is transferred to the Profit or Loss Summary account at the end of the accounting year
- to create a **Provision for Doubtful Debts account** (sometimes known as Allowance for Doubtful Debts or Provision for Impairment of Accounts Receivable¹), which has the effect of decreasing the amount of accounts receivable shown in the Statement of Financial Position. Because these are only estimated doubtful debts, Accounts Receivable Control cannot yet be credited. It is therefore considered to be a negative asset account.

The purpose of a Provision for Doubtful Debts account is to estimate present accounts receivable that are unlikely to pay their debts in the next accounting period.

Determining the amount of the provision

Various methods can be used to determine the amount of the provision (allowance) for doubtful debts:

- 1 Each accounts receivable can be investigated to determine how long the account is overdue, to check previous credit ratings, to examine the normal payment period of previous accounts receivable and so on. The credit manager could then decide which accounts are doubtful. This total would be the amount of the provision.
- 2 On the basis of past experience, a certain percentage of debts can be estimated to be doubtful. For example, 3 per cent of accounts receivable balances as shown in Figure 2.1 might always be considered to be the amount of doubtful debts.
- 3 The 'ageing the accounts receivable' method looks at how long each accounts receivable account has been outstanding. An ageing of accounts receivable report typically lists individual accounts receivables that have had outstanding accounts for 30, 60, 90 and over 90 days. If accounts receivable accounts are, say, over 90 days overdue, and all reasonable steps have been taken to secure the money, then they must be considered doubtful. They will not be written off as bad debts, however, until perhaps six months have elapsed.
- 4 Another method uses the ageing of accounts receivable report to apply varying percentages of estimated doubtful debts for each group of overdue accounts. This percentage would be based on past experience. For example, it may be found that 1 per cent of accounts receivable that are 30 days overdue do not pay their debts, 5 per cent of accounts receivable that are 60 days overdue do not

¹ AASB 9 Financial Instruments states the expected credit losses from these assets must be brought to account. Impairment simply means there will be a loss attributable to these assets. The published financial reports may use the term 'Provision for Impairment of Accounts Receivable' or 'Impairment of Accounts Receivable', rather than 'Provision for Doubtful Debts'.

pay, while perhaps 50 per cent of accounts receivable that are over 90 days overdue generally do not pay their debts. The amount of the provision may be estimated on this basis. This is the method recommended in the accounting standards.²

Although method 4 is recommended in practice, for simplicity we will often use method 2.

Baker's Trading							
Ageing of Accounts Receivable as at 30 September 2020							
Customer	Credit limit	Balance due	Current	30 days	60 days	90 days	Over 90 days
	\$	\$	\$	\$	\$	\$	\$
Blacklock Traders	10 000	3 000	1 200	1 800			
Harper J	3 000	150	150				
Jackson V	5 000	2 309	2 309				
Lamont Industries	5 000	4 301	1 201	1 293	1 807		
Mullins B		685				685	
Munnt Bros		542					542
Nowles B	1 000	125	125				
Nummins Enterprises		1 789			1 789		
Westmead Industries	5 000	1 000	347	653			
Total due		\$13 901	\$5 332	\$3 746	\$3 596	\$685	\$542
% of total due			38.4%	26.9%	25.9%	4.9%	3.9%

Figure 2.1 Ageing the accounts receivable

2.1

- Explain the meaning of the term 'doubtful debts'.
- What is the purpose of a Provision for Doubtful Debts account? What are the alternative names for this account?

2.2

Calculate the amount of the provision for doubtful debts given the following circumstance:

- The firm provides for doubtful debts each year at 5 per cent of the accounts receivable balance at the end of the financial year. The balance of the Accounts Receivable Control is \$39 000.
- After ageing the accounts receivable, the following details were obtained:

	\$
Current debts	120 000
30 days overdue	40 000
60 days overdue	5 000
90 days overdue	7 000
More than 90 days overdue	2 000

² This approach is called a Provision Matrix in AASB 9, Financial Instruments section B5.5.35.

Past experience has shown that the following percentages of debts prove doubtful:

	%
Current debts	0.04
30 days overdue	2.0
60 days overdue	7.0
90 days overdue	25.0
More than 90 days overdue	60.0

2.3 Spreadsheet application

Your accounting package prepares an ageing of accounts receivable report with the following balances of overdue accounts receivable:

	\$
Current debts	100 000
30 days overdue	59 000
60 days overdue	9 580
90 days overdue	4 000
More than 90 days overdue	1 500

Past experience has shown the following percentage of debts to be doubtful:

	%
Current debts	0.03
30 days overdue	0.50
60 days overdue	6.00
90 days overdue	24.00
More than 90 days overdue	63.00

However, these percentages could change in the future.

- a Prepare a worksheet to calculate the desirable provision for doubtful debts. The following can be used as a guide.

	A	B	C	D	E		A	B	C	D	E
48	INPUT/ASSUMPTIONS					71	REPORT				
49						72					
50	Name of Firm	ABC Enterprises				73	ABC Enterprises				
51						74	Calculation of Doubtful Debts				
52	Date	30-Jun-20				75	as at 30-Jun-20				
53						76					
54	Accounts Receivable Balances					77	Accounts Receivable Balances		Doubtful		Doubtful
55	Category	\$		% Doubtful		78	Category	\$	%		\$
56						79					
57	Current	100000		0.03		80	Current	100,000	0.03		30
58	30 Days	59000		0.50		81	30 Days	59,000	0.50		295
59	60 Days	9580		6.00		82	60 Days	9,580	6.00		575
60	90 Days	4000		24.00		83	90 Days	4,000	24.00		960
61	Over 90 Days	1500		63.00		84	>90 Days	1,500	63.00		945
62						85		\$174,080			
63						86					
64						87	Amount of Doubtful Debts			\$2,805	
65						88					
66						89					
67						90					
68						91					
69											
70											

- b Save it under the name of Prov for Doubtful Debts 1.
- c Print the worksheet in the normal mode.
- d Print the worksheet showing all formulas.
- e Change everything in the Input/Assumptions to XXX or zeros and save it as a template called Prov for Doubtful Debts.

Writing off a bad debt

If a debt is considered doubtful and a provision for doubtful debts has been raised for that amount of debt, then it is logical that when the debt actually becomes bad it would be offset against the provision. If this did not occur, there would be double counting.

Two methods can be used to write off bad debts.

Method 1

Every time a bad debt occurs, the following general journal entry is made:

		Dr	Cr
Provision for Doubtful Debts		XXX	
GST Collected (if applicable)		XXX	
Accounts Receivable			XXX

This has the effect of decreasing the:

- Provision for Doubtful Debts account for the amount of the debt
- GST Collected on the original sale. When these inventories were originally sold, GST would have been charged and hence increased. Because the inventories have not been sold, the GST Collected liability account must decrease. Of course, this debit will not occur if GST was not involved in the original transaction
- Accounts Receivable account for the amount of the debt. This asset account is decreased because the money is no longer expected to be received.

This method can result in debit balances appearing in the Provision for Doubtful Debts account, and is not suitable for adjustments that are made on a yearly basis.

Method 2

Every time a bad debt occurs, the following general journal entry is made:

		Dr	Cr
Bad and Doubtful Debts		XXX	
GST Collected (if applicable)		XXX	
Accounts Receivable			XXX

This has the effect of:

- increasing the Bad and Doubtful Debts account because it is an expense that is increasing
- decreasing the GST Collected on the original sale. When these inventories were originally sold, GST would have been charged and hence increased. Because the inventories have not been sold, the GST Collected liability account must decrease. Of course, this debit will not occur if GST was not involved in the original transaction
- decreasing the Accounts Receivable account for the amount of the debt. This asset account is decreased because the money is no longer expected to be received.

In order to offset actual bad debts against the provision, at the end of the period (be it monthly, quarterly or yearly) those bad debts that were written off are transferred to the provision account. This is achieved by the following general journal entry.

		Dr	Cr
Provision for Doubtful Debts		XXX	
Bad and Doubtful Debts			XXX

For taxation purposes (where only actual bad debts can be claimed as an allowable deduction), this method enables the collection of all actual bad debts for the period to be in a single expense account called Bad and Doubtful Debts. This method, as detailed below, also has the advantage that adjustments can be made monthly, quarterly or yearly, and there can never be a debit balance in the provision account. This is the method that has been adopted in this text.

No matter which method is chosen, the end result is the same: if a debt has been provided for as a doubtful debt, and the debt ultimately becomes bad, then that bad debt will be offset against the provision account.

Accounting for bad and doubtful debts

There are four steps to be followed when accounting for bad and doubtful debts.

Write off bad debts

- 1 Whenever an account is declared bad, write off the individual Accounts Receivable account as bad.

Balance day adjustments

- 2 At the end of the accounting period, transfer the amount of the Bad and Doubtful Debts account to the Provision for Doubtful Debts account that was originally set up to provide for such debts.
- 3 At the end of the accounting period, calculate the required Provision for Doubtful Debts that includes all the debts for this period that are unlikely to be received in the next accounting period. Record the resultant adjustment entry to ensure this balance is in the provision account.

Closing entry

- 4 Close off the Bad and Doubtful Debts expense account to the Profit or Loss Summary account at the end of the financial year.

These steps are done regardless of whether the period is a month, quarter or year.

Step 1 Write off bad debts

As shown previously, when a debt is found to be irrecoverable it is called a bad debt. As the money will never be received, the amount should not be left in the Accounts Receivable account.

When writing off each bad debt, the following entry is made:

		Dr	Cr
Bad and Doubtful Debts		XXX	
GST Collected (if applicable)		XXX	
Accounts Receivable Control (Account receivable's name)			XXX

Step 2 Transfer the amount in the Bad and Doubtful Debts account to the Provision for Doubtful Debts account at the end of the accounting period

The reason for this step is to offset those bad debts that have occurred during the period against the provision that was originally set up to provide for them. This is accomplished by the following balance day adjustment:

		Dr	Cr
Provision for Doubtful Debts		XXX	
Bad and Doubtful Debts			XXX

The Provision for Doubtful Debts account is debited because a negative asset is being decreased. Bad and Doubtful Debts is credited because an expense account is being decreased.

If this particular accounting period is the first period in which a provision for doubtful debts is being recorded, then this step could not be carried out.

Step 3 Calculate the new Provision for Doubtful Debts balance and record the adjustment to ensure this is the balance

The balance day adjustment entry is:

		Dr	Cr
Bad and Doubtful Debts		XXX	
Provision for Doubtful Debts			XXX

This new balance can be calculated in a number of ways, as discussed previously.

It is important to note that we are not trying to estimate a whole year's doubtful debts, only those that are doubtful in the present accounts receivable balance. The amount for this entry is equivalent to any under- or over-provision resulting from the actual bad debts that occurred during the period, plus the estimated present accounts receivable that are unlikely to pay their debts in the next accounting period.

The Bad and Doubtful Debts account is being debited to increase the expense account. The Provision for Doubtful Debts is being credited to increase the negative asset.

Step 4 Close off the expense account to the Profit or Loss Summary account

The closing entry is:

		Dr	Cr
Profit or Loss Summary		XXX	
Bad and Doubtful Debts			XXX

Illustrative example 1

At 1 July 2019, the balance of the Provision for Doubtful Debts account was \$15 000 and the balance of Accounts Receivable Control was \$300 000. During the year, credit sales including GST were \$3 613 000, cash received from customers was \$3 555 000 and \$143 000 worth of bad debts (including GST) had been written off. At 30 June 2020, the balance of the Accounts Receivable Control account was \$215 000 and 5 per cent of this is the desirable amount of provision.

You are required to:

- open ledger accounts for bad and doubtful debts, accounts receivable control, and provision for doubtful debts
- enter the ledger opening balances
- enter the transactions for credit sales and cash received from customers
- write off the bad debts in a journal entry and post to the ledger
- prepare the balance day adjustment entries and post to the ledger
- prepare the closing entry and post to the ledger.

Dr				General Ledger				Cr	
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
				Bad and Doubtful Debts				No 2501	
				2020					
During year	Accounts Receivable	G9	130 000 ¹	June 30	Provision for Doubtful Debts	G9	130 000 ²		
2020									
June 30	Provision for Doubtful Debts	G9	125 750 ³	30	Profit or Loss Summary	G9	125 750 ⁴		
			<u>\$255 750</u>				<u>\$255 750</u>		
				Accounts Receivable Control				No 3104	
2019									
July 1	Balance b/d		300 000	During year	Cash		3 555 000		
During year	Sales		3 613 000		Bad and Doubtful Debts	G9	143 000 ¹		
			<u>\$3 913 000</u>	2020					
2020				June 30	Balance c/d		215 000		
							<u>\$3 913 000</u>		
July 1	Balance b/d		215 000						
				Provision for Doubtful Debts				No 3104A	
2020				2019					
June 30	Bad and Doubtful Debts	G9	130 000 ²	June 1	Balance b/d		15 000		
				2020					
30	Balance c/d		10 750	June 30	Bad and Doubtful Debts	G9	125 750 ³		
			<u>\$140 750</u>				<u>\$140 750</u>		
				July 1	Balance b/d		10 750		

Numbers 1 to 4 in orange relate to the four steps in the previous ledger and to the following general journal:

General Journal					P9
Date	Particulars	Ref	Dr \$	Cr \$	
Write off bad debts					
During year	Bad and Doubtful Debts	2501	130 000		
	GST Collected	4102.2	13 000		
	Accounts Receivable Control	3104		143 000	Step 1
	(Writing off bad debts)				
Make balance day adjustments					
2020					
June 30	Provision for Doubtful Debts	3104A	130 000		
	Bad and Doubtful Debts	2501		130 000	Step 2
	(Transfer of bad debts to provision)				
30	Bad and Doubtful Debts	2501	125 750		
	Provision for Doubtful Debts	3104A		125 750	Step 3
	(Adjustment to ensure estimated provision for doubtful debts is 5% of accounts receivable)				
Make closing entry					
30	Profit or Loss Summary	5103	125 750		
	Bad and Doubtful Debts	2501		125 750	Step 4
	(Closing entry)				

Note to step 3 of Illustrative example 1: in the Provision for Doubtful Debts account, if the opening balance (\$15 000), the amount of bad and doubtful debts for the period (\$130 000), and the final required balance (\$10 750) are known, then the adjusting entry must be the 'hole in the account' for \$125 750. This \$125 750 is the required figure for the adjustment because the bad and doubtful debts balance of \$130 000 has been offset against the provision for doubtful debts (\$130 000 – \$15 000), a difference of \$115 000 plus the new \$10 750 required balance.

Statement of Financial Position (extract) as at 30 June 2020

	\$	\$
Current Assets		
Accounts Receivable Control	215 000	
Less Provision for Doubtful Debts	<u>10 750</u>	204 250

Statement of Profit or Loss (extract) for year ended 30 June 2020

	\$
Finance Expense	
Bad and Doubtful Debts	125 750

In the Statement of Financial Position, the desirable closing balance in the Provision for Doubtful Debts account is 5 per cent of \$215 000, which is \$10 750. Remember that we are only estimating those debts that are part of the \$215 000 that are considered doubtful. We are not trying to estimate the whole

of next year's bad or doubtful debts. As will be shown later in the chapter, current assets and finance expenses are classifications used in financial reports.

In this example, the full Accounts Receivable Control account was shown for the year. Often only the final year-end balance of \$215 000 is shown. Step 1 (writing off bad debts during the period) would result in \$130 000 appearing in the Bad and Doubtful Debts account. The credit entry is then not shown because it is included in the closing balance of \$215 000 in the Accounts Receivable Control account.

Be aware that this sequence of journal entries will only occur if there is an existing balance in the Provision for Doubtful Debts account; that is, a provision has been created for doubtful debts. If there is no balance, probably because it is the first year that the provision has been created, then the entry in step 2 will not be made.

2.4

- a Why does providing for doubtful debts bring about a much better view of accounts receivable in the financial statements?
- b What is the purpose of the balance day adjustment that transfers bad debts to the Provision for Doubtful Debts account?

2.5

Record the following transactions in Savage's Gardens general journal. The business does not use control accounts:

July	1	Write off Jaiwan Pty Ltd's account of \$275 (including GST) as a bad debt.
Aug	2	M Allen owes the business \$700 for GST-free goods. He is declared bankrupt and can only pay 30c in the dollar. Record the amount of bad debt.
Sept	3	Received notice that R Miller could only pay 60c in the dollar on her account of \$880, including GST. Record the bad debt.

2.6

At 1 January, Herbert's Metals total accounts receivable were \$25 000 and there was \$700 provision for doubtful debts. The business uses control accounts and subsidiary ledgers, and GST is not applicable. During the year, the following transactions took place:

Jan	17	Wrote off Matain Pty Ltd's account of \$700 as a bad debt.
Mar	26	M Waters advised that she could only pay \$75 of a total debt of \$670.
Oct	19	R Adamson advised that he was declared bankrupt. He paid 25c in the dollar on his \$900 account.
Dec	31	Desirable provision for doubtful debts is \$200.

Assuming that the accounting period ends at 31 December, show:

- a all necessary journal entries
- b Accounts Receivable Control, Provision for Doubtful Debts, and Bad and Doubtful Debts accounts in the general ledger
- c Statement of Profit or Loss (extract).

2.7

A firm had a provision for doubtful debts of \$7620 at the end of last year. During the year, \$93 500 worth of bad debts (including GST) was written off. At the end of this year, estimated doubtful debts are \$6000.

- a What is the expense for bad debts?
- b How will bad and doubtful debts appear in the Statement of Profit or Loss?

2.8

The four cases below do not include GST.

- a At 1 July 2019, the balance of the Provision for Doubtful Debts account was \$22 000. During the year, \$215 000 worth of debts were written off. At 30 June 2020, the balance of the Accounts Receivable Control account was \$300 000 and the desirable amount of provision was 3 per cent of this.
- b At 1 July 2019, the balance of the Provision for Doubtful Debts account was \$15 000. During the year, \$170 000 worth of bad debts had been written off. At 30 June 2020, the balance of the Accounts Receivable Control account was \$215 000 and the desirable amount of provision was \$7000.
- c On 1 July 2019, the balance of the Accounts Receivable Control account was \$70 000 and the Provision for Doubtful Debts account was \$700. During the year, credit sales amounted to \$800 000, cash from accounts receivable was \$688 700, and bad debts of \$10 000 had been written off. The desirable Provision for Doubtful Debts account at 30 June 2020 was 2 per cent of the Accounts Receivable Control account balance.
- d On 1 July 2019, the balance of the Provision for Doubtful Debts account was \$300 and the Accounts Receivable Control account was \$30 000. During the year, credit sales were \$950 500, sales returns were \$46 000, cash from debtors was \$802 500, interest received was \$300, and bad debts of \$35 800 were written off. The desired Provision for Doubtful Debts account is to be 1 per cent of the Accounts Receivable account.

For each case, show:

- i Bad and Doubtful Debts, Accounts Receivable Control, Provision for Doubtful Debts, and Profit or Loss Summary accounts
- ii journal entries, assuming the period ends at 30 June each year
- iii Statement of Profit or Loss and Statement of Financial Position extracts.

2.9

Tsar Transport commenced business on 30 September 2019. Prepare the accounting records at 30 June 2020 from the following information:

- Bad debts during the period were \$200 (no GST).
- Accounts receivable at 30 June 2020 are \$15 000.
- Estimated provision for doubtful debts at 30 June is 1 per cent of accounts receivable.

2.10

After ageing the accounts receivable at 30 June 2020, Millerson Trading had the following details about accounts receivable:

	\$
Current debts	90 000
30 days overdue	30 000
60 days overdue	9 000
90 days overdue	4 000
More than 90 days overdue	6 000

Past experience has shown the following percentages of debts prove doubtful:

	%
Current debts	0.05
30 days overdue	2.5
60 days overdue	8.0
90 days overdue	22.0
More than 90 days overdue	65.0

The existing balance of the Provision for Doubtful Debts account is \$5500. Bad debts written off during the year were \$70 000 and GST is not applicable.

- a Prepare the journal entries to provide for doubtful debts.
- b Show how the accounts would appear in the financial statements.

Under- and over-provisions

An **under-provision** arises whenever the opening balance of the Provision for Doubtful Debts account is less than the bad debts that occurred during the period. In Illustrative example 1 on page 102, the opening balance of the Provision for Doubtful Debts account was \$15 000 and the bad debts that actually occurred during the period were \$130 000. An under-provision therefore existed. This under-provision can occur if the provision relates to one month and the bad debts relate to a whole financial year.

However, the situation may arise where the provision is greater than the bad debts for the period. An **over-provision** exists whenever the opening balance of the Provision for Doubtful Debts account is **greater** than the bad debts that occurred during the period. This could also happen when balance day adjustments are done monthly instead of yearly. Where an over-provision occurs, the following example illustrates the accounting procedure that applies the same recording of entries as shown in the previous example.

Illustrative example 2

On 1 July, the balance of the Provision for Doubtful Debts account was \$15 000. During the year, \$11 000 worth of bad debts (including GST) was written off. At 30 June 2020, the balance of Accounts Receivable Control account was \$215 000 and 5 per cent of this was the desirable amount of provision.

Dr				General Ledger				Cr	
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
				Bad and Doubtful Debts				No 2501	
During year	Accounts Receivable		10 000	2020					
2020				June 30	Provision for Doubtful Debts	G91	10 000		
June 30	Provision for Doubtful Debts	G91	5 750	30	Profit or Loss Summary	G91	5 750		
			<u>5 750</u>						
			<u>\$15 750</u>						<u>\$15 750</u>
				Accounts Receivable Control				No 3104	
2020									
July 1	Balance b/d		215 000						
				Provision for Doubtful Debts				No 3104A	
2020				2019					
June 30	Bad and Doubtful Debts	G91	10 000	July 1	Balance b/d		15 000		
30	Balance c/d		10 750	2020					
			<u>10 750</u>	June 30	Bad and Doubtful Debts	G91	5 750		
			<u>\$20 750</u>				<u>5 750</u>		<u>\$20 750</u>
				July 1	Balance b/d		10 750		

In the Accounts Receivable Control account, \$215 000 comprises all transactions that have occurred during the year, including the writing off of \$11 000 worth of bad debts (with GST).

General Journal					P91	
Date	Particulars	Ref	Dr \$		Cr \$	
During year	Bad and Doubtful Debts	2501	10 000			
	GST Collected	4102.2	1 000			
	Accounts Receivable Control	3104			11 000	
	(Writing off bad debts)					
2020						
June 30	Provision for Doubtful Debts	3104A	10 000			
	Bad and Doubtful Debts	2501			10 000	
	(Transfer of bad debts to provision)					
30	Bad and Doubtful Debts	2501	5 750			
	Provision for Doubtful Debts	3104A			5 750	
	(Provision for doubtful debts estimated at 5% of accounts receivable)					
30	Profit or Loss Summary	5103	5 750			
	Bad and Doubtful Debts	2501			5 750	
	(Closing entry)					

Statement of Financial Position (extract) as at 30 June 2020		
	\$	\$
Current Assets		
Accounts Receivable Control	215 000	
Less Provision for Doubtful Debts	<u>10 750</u>	204 250

Statement of Profit or Loss (extract) for year ended 30 June 2020		
	\$	\$
Finance Expenses		
Bad and Doubtful Debts	5 750	

Note: the desirable closing balance in the Provision for Doubtful Debts account is 5 per cent of \$215 000, which is \$10 750. Because there is an over-provision of \$5000 (opening balance of provision is \$15 000 less bad debts of \$10 000), \$5000 is still left in the Provision for Doubtful Debts account. If the desirable provision is \$10 750, only an extra \$5750 has to be provided for.

2.11

Two separate cases are given below.

- a On 1 July 2019, the balance of the Provision for Doubtful Debts account was \$10 000. During the year, \$8800 worth of bad debts was written off. At 30 June 2020, the balance of the Accounts Receivable Control account was \$300 000 and the desirable amount of provision was 1 per cent of this.
- b On 1 July 2019, the balance of the Provision for Doubtful Debts account was \$1600. During the year, only \$1650 worth of bad debts was written off. At 30 June 2020, the balance of the Accounts Receivable Control account was \$100 000, with the desirable provision being \$2000.

For each of the cases, show:

- i Bad and Doubtful Debts, Accounts Receivable Control, Provision for Doubtful Debts, and Profit or Loss Summary accounts, assuming GST is applicable
- ii journal entries, assuming the period ends at 30 June each year
- iii Statement of Profit or Loss and Statement of Financial Position extracts.

2.12

On the basis of the following information, show:

- a Bad and Doubtful Debts and Provision for Doubtful Debts accounts
- b how bad and doubtful debts will appear in the Statement of Profit or Loss
- c how the Accounts Receivable Control and Provision for Doubtful Debts accounts will appear in the Statement of Financial Position.

Trial Balance (extract) as at 30 June 2020		
Account	Debit \$	Credit \$
Bad and Doubtful Debts	70 000	
Accounts Receivable Control	515 000	
Provision for Doubtful Debts		6 000
<i>Adjustment</i>		
Provision for Doubtful Debts is to be 1 per cent of		
Accounts Receivable Control		

2.13

Using the following information, show how Bad and Doubtful Debts, the Accounts Receivable Control and Provision for Doubtful Debts will appear in the financial statements.

Trial Balance (extract) as at 31 December 2020		
Account	Debit \$	Credit \$
Bad and Doubtful Debts	13 025	
Accounts Receivable Control	62 000	
Provision for Doubtful Debts		1 050
<i>Adjustment</i>		
Make provision for Doubtful Debts at 2 per cent of Accounts Receivable Control.		

2.14

Using the following information, show how Bad and Doubtful Debts, Accounts Receivable Control and Provision for Doubtful Debts will appear in the financial statements.

Trial Balance (extract) as at 31 December 2020		
Account	Debit \$	Credit \$
Bad and Doubtful Debts	20 000	
Accounts Receivable Control	142 000	
Provision for Doubtful Debts		22 000
<i>Adjustment</i>		
Make provision for Doubtful Debts at 3 per cent of Accounts Receivable Control.		

Bad debts recovered

It is possible that, at some time in the future, an accounts receivable that had previously been written off as a bad debt (and perhaps wishing to restore a good reputation and creditworthiness) pays the amount that was originally owed.

For example, on 16 March 2020 the business received a cheque for \$396 from P Watts. This account had been written off as a bad debt on 30 September 2016. It had included GST. P Watts's account would look like this:

Dr				General Ledger				Cr	
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
				P Watts				No 3104.1	
2016				2016					
Sept 1	Balance b/d		396	Sept 30	Bad and Doubtful Debts		396		

The entry for the receipt of cash will be:

General Journal					P21
Date	Particulars	Ref	Dr \$	Cr \$	
2020 Mar 16	Cash at Bank P Watts* (*If applicable, control accounts may be used)	3103 3104.1	396		396

The ledger account would then appear as:

General Ledger								Dr	Cr
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
P Watts				No 3104.1					
2016				2016					
Sept 1	Balance b/d		396	Sept 30	Bad and Doubtful Debts		396		
			<u>\$396</u>				<u>\$396</u>		
				2020					
				Mar 16	Cash	G21	396		

P Watts has a credit balance as a result, indicating that the business owes her money. To overcome this, the following entry is recorded:

General Journal					P21
Date	Particulars	Ref	Dr \$	Cr \$	
2020 Mar 16	P Watts GST Collected Bad Debts Recovered (Recovery of debt previously written off as bad)	3104.1 4102.2 1108	396		36 360

P Watts's account must indicate that money is owed to the business and so is debited to increase the asset. When the bad debt was written off, the GST Collected account was debited to cancel the GST owed. Now that the debt has been recovered, the GST must be collected again. The GST Collected account is credited to increase the liability. Bad Debts Recovered is a revenue account that is increasing.

The ledger will appear as follows:

General Ledger							
Dr							Cr
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$
Bad Debts Recovered				No 1108			
2020				2020			
June 30	Profit or Loss Summary		360	Mar 16	P Watts	G21	360
					P Watts		No 3104.1
2016				2016			
Sept 1	Balance b/d		<u>396</u>	Sept 30	Bad and Doubtful Debts		<u>396</u>
			<u>\$396</u>				<u>\$396</u>
2020				2020			
Mar 16	Bad Debts Recovered	G21	<u>396</u>	Mar 16	Cash	G21	<u>396</u>
			<u>\$396</u>				<u>\$396</u>

The Bad Debts Recovered account is closed off to the credit of the Profit or Loss Summary account and is usually classified as an operating revenue item in the Statement of Profit or Loss.

This treatment assumes that the debt is recovered in a different accounting period from which it was written off. If a bad debt is recovered in the same period as the debt was written off, then the entry that originally wrote off the debt is merely reversed. For example, if in September 2019 an accounts receivable called W Jones had been written off as bad and the account had no applicable GST, the entry would have been:

		Dr	Cr
Bad and Doubtful Debts		XXX	
Accounts Receivable Control (W Jones)			XXX

If in May 2020 (assuming that 30 June 2020 is the end of the financial year) W Jones's debt was recovered, the entry would be:

		Dr	Cr
Accounts Receivable Control (W Jones)		XXX	
Bad and Doubtful Debts			XXX

2.15

- Explain why an accounts receivable might wish to pay a debt that had previously been written off as bad.
- Record the following transaction in the journals of Armstrong Furniture:

Sept 6 Received \$6820 from Major Ltd, whose account had previously been written off as a bad debt in a different financial year. GST was applicable.

Interest on overdue accounts

Depending upon the firm's credit policy, interest may be charged on customers' overdue accounts. When interest is charged, the customer will be notified on the statement of account. The journal entry to charge interest on a customer's account is:

		Dr	Cr
Accounts Receivable		XXX	
Interest Revenue			XXX

The Accounts Receivable account is debited because the customer owes more money and is therefore an asset increasing. The Interest Revenue account is credited because a revenue account is increasing. GST does not affect interest.

Of course, if our business is late in paying accounts, then we could be charged interest by our suppliers. The journal entry for being charged interest by a supplier is:

		Dr	Cr
Interest Expense		XXX	
Accounts Payable			XXX

The Interest Expense account is debited because an expense account is increasing. The Accounts Payable account is credited because the supplier is now owed more money and is therefore a liability increasing.

2.16

- Why do you think a firm would charge interest on any overdue accounts?
- Why might a firm not charge interest on overdue accounts?
- Prepare general journal entries for the following transactions:

Sept	1	Charged Gator Industries \$12 interest on an overdue account.
	8	Received notification that Mantor Enterprises had charged us interest of \$25.
	9	Charged J Handon 10% interest for one month on an overdue account of \$8400.

Presentation and classification of the Statement of Profit or Loss

Any business owner or manager wants to know how their business is going in terms of the amount of profit being earned and the overall financial position of the firm. As the prime aim of accounting is to present information to interested parties, the financial statement that determines the profit of a business is called a Statement of Profit or Loss. A firm must report on a yearly basis in terms of its normal financial year reporting. However, many firms require this report on a weekly, fortnightly or monthly basis. With the aid of accounting software, this statement can be prepared at any time.

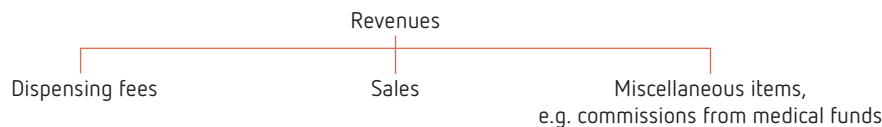
A Statement of Profit or Loss is a report for presentation to interested parties, showing details of the profit (or loss) for the period.

The Statement of Profit or Loss is normally classified in order to give more meaningful information. The grouping of items into categories gives the reader a clearer guide to the financial position of the enterprise. Both revenue and expenses are classified.

Classification of revenue and expenses

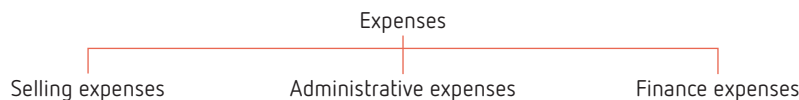
Classification means to arrange items into groups or classes of similar items. Such classification would depend on the type of organisation or business involved: its size, activities and type of ownership. Some businesses will earn revenues from services, some from selling goods, some from both, so they would classify their revenues to suit these activities. Almost all will have some administrative and office expenses. Some have to put major efforts into their selling and promotional operations. Some businesses may have to borrow large amounts of money to operate, and might like to have a grouping or classification of expenses called finance expenses.

For a pharmacist, an appropriate subdivision showing different types of revenue might be:



Note that sales could be further subdivided into sales from various sources – sales of cosmetics, sales of pharmaceutical lines and so on. In this case, there would be more than one Sales account to be credited.

Similarly, expenses could be subdivided into various groups based on areas of responsibility within an organisation. A common classification of expenses is:



This can be varied to suit particular types of businesses. A trading business would have a further classification for cost of sales. Businesses providing services would generally not require a classification for cost of sales, but may require a category for the cost of services provided. Decisions on expense categories would be made depending on the activities in which businesses engage. For example, an auctioneer or real estate agent may require a classification for occupancy expenses. A financial organisation, such as a bank or credit union, may change the name of the classification from ‘selling expenses’ to ‘promotion expenses’.

Selling expenses include all expenses incurred in promotion, selling and distribution:

- promotion (e.g. advertising, window display)
- actual selling (e.g. sales salaries and commissions)
- delivery (e.g. delivery van expenses, depreciation on delivery van, freight outwards).

Administrative expenses include all expenses incurred in running the office and any other general expenses:

- office expenses (e.g. office wages, telephone)
- general expenses (e.g. insurance, rates, loss on disposal of motor vehicle).

Finance expenses include all expenses associated with either financing the enterprise's activities or expenses incurred in collecting cash:

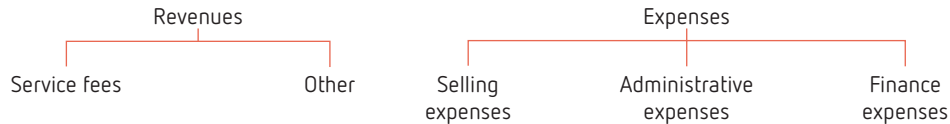
- financing the enterprise (e.g. interest on loans, bank charges)
- collecting cash (e.g. bad debts, credit card charges).

The groupings and placement of various items within the groupings is flexible and should be made to suit the needs of the management of the organisation.

Such classification is useful in all larger organisations to allow comparisons of groups between different time periods and comparisons with other organisations. In this way, an organisation might find that its selling expenses are twice what they were five years ago, or that it is spending three times the amount that competitors spend on administration. It must then ask why this is the case, and what can be done to change the situation and improve profitability. How such comparisons are made is explained in more detail later in the chapter.

Service industries

A common classification for service industries is:



The following is an example of a Statement of Profit or Loss for a painter. Because this is a relatively uncomplicated business with a small number of expenses, classification may not be regarded as necessary:

J Harrison		
Statement of Profit or Loss for year ended 30 June 2020		
	\$	\$
Revenue		
Service Charges		50 000
Less Expenses		
Hire of Trestles and Ladders	1 500	
Paint	10 000	
Sundry Materials Used	1 000	
Vehicle Expenses	3 000	
Telephone and Internet Expenses	500	
Wages of Apprentice	7 000	23 000
Net profit		<u><u>\$27 000</u></u>

A larger and more complicated business such as a firm of auctioneers would almost certainly prepare a fully classified statement.

V Primmer – Auctioneer
Statement of Profit or Loss for year ended 30 June 2020

Revenue	\$	\$	\$
Fees			100 000
Less Selling Expenses			
Advertising	11 000		
Auctioneer's Commission	10 000		
Travelling Expenses	<u>1 500</u>	22 500	
Less Occupancy Expenses			
Rates	1 000		
Rent	2 000		
Repairs to Building	<u>1 500</u>	4 500	
Less Administrative Expenses			
Office Expenses	1 500		
Office Salaries	15 000		
Telephone and Internet Expenses	<u>1 500</u>	18 000	
Less Finance Expenses			
Bank Charges	500		
Debt Collection Fees	3 500		
Interest on Mortgage	<u>1 500</u>	<u>5 500</u>	<u>50 500</u>
Net profit			<u><u>\$49 500</u></u>

2.17

From the following information for the year 2020, prepare a fully classified Statement of Profit or Loss for T Saxon, a real estate agent. The following categories of expenses are required: selling expenses, occupancy expenses, general and administrative expenses, and finance expenses.

T Saxon
Trial Balance (extract) as at 31 December 2020

Account	Debit	Credit
	\$	\$
Interest Expense	500	
Office Wages	7 000	
Fees		150 000
Sales Salaries	25 000	
Telephone	500	
Sales Commission	5 000	
Advertising	4 000	
Rent	2 000	
Office Expenses	1 500	
Rates	1 000	
Bank Charges	100	
Stationery Expenses	200	
Gain on Disposal of Non-Current Assets		200
Depreciation of Motor Vehicle	1 000	

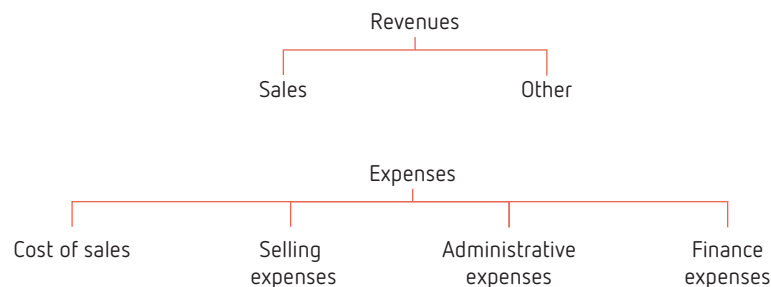
2.18

From the following information for a month, prepare a fully classified Statement of Profit or Loss for Black's Garage, a service station. The categories to be used are: selling expenses, cost of materials used, administrative expenses, and finance expenses.

Black's Garage		
Trial Balance (extract) as at 30 June 2020		
Account	Debit	Credit
	\$	\$
Office Expenses	500	
Bad and Doubtful Debts	350	
Interest Expense	850	
Fees		20 000
Spare Parts Expenses	5 000	
Bank Charges	150	
Sales of Petrol		50 000
Office Wages	5 000	
Advertising	2 100	
Provision for Doubtful Debts		50
Accounts Receivable Control	2 500	
Accumulated Depreciation on Furniture		500
Depreciation on Furniture	500	
Cost of Petrol	30 000	

Trading industries

The main difference between trading and service industries is that goods are purchased with the intention of reselling them at a profit. Therefore, the main type of revenue for a trading business is sales. Other revenues might include commission and rent. A main expense of operating such a business is cost of sales.



Cost of sales

Using the perpetual inventory method, the cost price of goods sold is calculated and recorded in the Cost of Goods Sold account for each sale.

The following is an example of a fully classified Statement of Profit or Loss.

Thomas Industries			
Statement of Profit or Loss for month ended 30 June 2020			
	\$	\$	\$
Sales		100 000	
Less Sales Returns		<u>5 000</u>	95 000
Less Cost of Sales			
Cost of Goods Sold			<u>21 000</u>
Gross profit			74 000
Add Other Revenue			
Commission Revenue		1 000	
Interest Revenue		4 800	
Rent Revenue		<u>1 000</u>	<u>6 800</u>
			80 800
Less Other Expenses			
<i>Selling Expenses</i>			
Advertising	4 000		
Delivery Vehicle Expenses	500		
Sales Salaries	10 000		
Sales Commission	<u>4 000</u>	18 500	
<i>Administrative Expenses</i>			
Electricity	1 000		
Insurance	2 000		
Loss on Disposal of Non-Current Assets	4 000		
Office Salaries	<u>10 000</u>	17 000	
<i>Finance Expenses</i>			
Bank Charges	500		
Credit Card Fees	1 500		
Interest Expense	<u>8 000</u>	<u>10 000</u>	<u>45 500</u>
Net profit			<u><u>\$35 300</u></u>

Differences between the Statement of Profit or Loss and profit-determining account

Several differences between the Statement of Profit or Loss and the profit-determining account can be noted:

Profit-determining account	Statement of Profit or Loss
Profit or Loss Summary account:	Statement of Profit or Loss:
• is prepared in the ledger • forms part of the double-entry procedure • is a ledger account • is prepared only at the end of the accounting year • contains information that is not classified.	• is prepared outside the ledger • does not form part of the double-entry procedure • is a report • may be prepared at any time (interim and final reports) • contains information that is classified.

2.19

Explain why it is useful to classify items in financial statements.

2.20

What are the differences between the profit-determining account and the Statement of Profit or Loss?

2.21

What is the main difference between trading and service businesses? How does this affect revenue and expenses?

2.22

From the following information, prepare a fully classified Statement of Profit or Loss for Kumar Fabrics:

Kumar Fabrics Trial Balance (extract) as at 30 June 2020		
Account	Debit	Credit
	\$	\$
Sales		10 000
Cost of Goods Sold	1 500	
Rent Revenue		400
Advertising	500	
Sales Salaries	500	
Office Salaries	700	
Insurance	250	
Credit Card Fees	150	
Bank Charges	50	
Interest Expense	100	
Depreciation of Computers	500	

2.23

From the following information for a month, prepare a fully classified Statement of Profit or Loss for A F Wholesalers for the year ended 31 December 2020.

A F Wholesalers Trial Balance (extract) as at 31 December 2020		
Account	Debit	Credit
	\$	\$
Commission Revenue		200
Cost of Goods Sold	4 500	
Sales Returns	110	
Advertising	1 000	
Insurance	200	
Sales		10 000
Office Salaries	400	
Sales Salaries	800	
Bank Charges	100	
Loss on Disposal of Non-Current Asset	200	
Electricity	300	
Delivery Van Expenses	100	
Stationery	200	
Interest Expense	180	
Rent Revenue		200
Accumulated Depreciation on Delivery Van		750
Provision for Doubtful Debts		250
Bad and Doubtful Debts	250	
Depreciation on Delivery Van	750	

2.24

Present a fully classified Statement of Profit or Loss from the following yearly figures for Zhang Trimmings:

Zhang Trimmings Trial Balance (extract) as at 30 June 2020		
Account	Debit \$	Credit \$
Sales		20 000
Sales Returns	2 000	
Interest Revenue		100
Cost of Goods Sold	7 000	
Sales Commission	1 500	
Sales Salaries	1 750	
Bad and Doubtful Debts	675	
Interest Expense	2 000	
Electricity	1 000	
Office Salaries	2 000	
Credit Card Fees	100	
Dividends Received		1 600
Rent Revenue		200
Advertising	500	
Accounts Receivable Control	3 500	
Provision for Doubtful Debts		175
Depreciation on Motor Vehicle	1 500	
<i>Additional information</i>		
The electricity was used equally in the selling departments and the office.		

Presentation and classification of the Statement of Financial Position

A Statement of Financial Position can be prepared either directly from the asset, liability and owner's equity accounts in the ledger or from a trial balance with sufficient additional information to enable balance day adjustments to be taken into account.

Classification of assets, liabilities and owner's equity

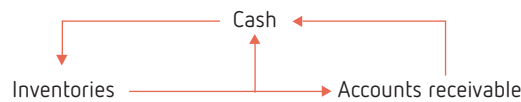
Statements of Financial Position were prepared previously, but in order to give management more detail, it is normal to classify the assets and liabilities.

Assets

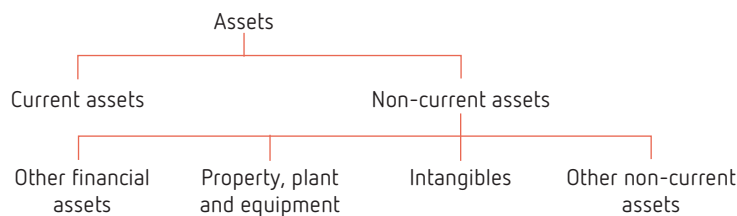
Assets are classified primarily on a time basis. The main classification is between those assets that will be retained for longer than one year (non-current assets) and those that will be consumed or converted to cash within one year from the current date (current assets).



The principal types of current assets are cash, accounts receivable, inventories, prepaid expenses and accrued revenues. Current assets are listed in order of liquidity (meaning being able to be converted into cash). In the normal operations of a business, the order of liquidity of assets would be cash, accounts receivable, inventories. Prepaid expenses and accrued revenues are generally included at the end of the list. Current assets are constantly being converted from one item to another within this category in a circular manner. This is generally called the **operating cycle**. In a normal cycle, as illustrated, cash is converted to inventories when purchases are made. These are sold to accounts receivable, who will then pay the business cash to begin the cycle again. A shorter cycle will occur if sales are made for cash. In this case, inventories are converted back to cash immediately after a sale is made.



Non-current assets can be further subdivided into other financial assets (investments); property, plant and equipment; intangibles and other non-current assets.



Other financial assets or investments are items anticipated to be held for longer than one year. They are held for revenue-producing purposes and include items such as bonds or shares and debentures in other companies. Investments could only be included as current assets if there is a probability that they will be converted into cash in the following year. They then represent cash temporarily held in this form to meet future commitments.

Property, plant and equipment are long-lived assets acquired for use in the operation of the business and not intended for resale. Typical examples are land, buildings, equipment, furniture and vehicles.

Intangible assets lack physical substance and this category includes patents, copyrights, franchises and goodwill (the value of the business's good reputation, good location and established custom). To be recorded, the amounts must be part of an external purchase transaction.

Liabilities

Liabilities are also classified on a time basis. The main classification is between those liabilities that will be paid within one year from the current date (current liabilities) and those for which the period of indebtedness is longer than one year (non-current, deferred or long-term liabilities).



The principal types of **current liabilities** are bank overdraft, accounts payable, GST clearing (payable), short-term loans, accrued expenses and unearned revenues. These are normally listed in the

order of payment. The principal types of **non-current liabilities** are loans secured by mortgages and long-term loans.

Owner's equity

It would be possible to show owner's equity simply in terms of the final balance in the Capital account. However, accountants usually show any changes made to the Capital account during the accounting period. This means that we would begin with the opening balance, add any additional capital brought in or profit made, and subtract any losses or drawings to give a final capital figure.

An example of a fully classified Statement of Financial Position, presented in both account form and narrative form, is given here. Two variations of the narrative form are shown: account and narrative.

a Account form

Darth Industries Statement of Financial Position as at 30 June 2020						
	\$	\$	\$		\$	\$
Current Assets				Current Liabilities		
Cash at Bank		2 000		Accounts Payable	1 500	
Accounts Receivable	3 800			GST Clearing (payable)	300	
Less Provision for Doubtful Debts	<u>500</u>	3 300		Accrued Expenses	125	
Inventories		10 000		Unearned Revenues	<u>50</u>	1 975
Accrued Revenues		25				
Prepaid Expenses		<u>50</u>	15 375	Non-Current Liabilities		
				Mortgage	210 000	
Non-Current Assets				Loan from Finance Co (due on 1 Feb 2023)	<u>10 000</u>	<u>220 000</u>
<i>Other Financial Assets</i>						221 975
Shares in XYZ Ltd		1 500				
5% Debentures		<u>1 200</u>	2 700			
<i>Property, Plant and Equipment</i>				Owner's Equity		
Vehicles	14 000			Capital (1 July 2019)	170 000	
Less Accum. Deprec.	<u>2 000</u>	12 000		Add Net profit	<u>20 000</u>	
Furniture	13 500				190 000	
Less Accum. Deprec.	<u>1 500</u>	12 000		Less Drawings	<u>7 400</u>	182 600
Buildings	130 000					
Less Accum. Deprec.	<u>5 000</u>	125 000				
Land		<u>225 000</u>	374 000			
<i>Intangibles</i>						
Goodwill		11 000				
Patents		<u>1 500</u>	<u>12 500</u>			
			<u>\$404 575</u>			<u>\$404 575</u>

b Narrative form – without working capital

Darth Industries			
Statement of Financial Position as at 30 June 2020			
	\$	\$	\$
Assets			
Current Assets			
Cash at Bank		2 000	
Accounts Receivable	3 800		
Less Provision for Doubtful Debts	<u>500</u>	3 300	
Inventories		10 000	
Accrued Revenues		25	
Prepaid Expenses		<u>50</u>	15 375
Non-Current Assets			
<i>Other Financial Assets</i>			
Shares in XYZ Ltd	1 500		
5% Debentures	<u>1 200</u>	2 700	
<i>Property, Plant and Equipment</i>			
Vehicle	14 000		
Less Accumulated Depreciation	<u>2 000</u>	12 000	
Furniture	13 500		
Less Accumulated Depreciation	<u>1 500</u>	12 000	
Buildings	130 000		
Less Accumulated Depreciation	<u>5 000</u>	125 000	
Land		<u>225 000</u>	374 000
<i>Intangibles</i>			
Goodwill	11 000		
Patents	<u>1 500</u>	<u>12 500</u>	<u>389 200</u>
			404 575
Liabilities			
Current Liabilities			
Accounts Payable	1 500		
GST Clearing (payable)	300		
Accrued Expenses	125		
Unearned Revenues	<u>50</u>	1 975	
Non-Current Liabilities			
Mortgage	210 000		
Loan from Finance Co (due on 1 Feb 2023)	<u>10 000</u>	<u>220 000</u>	<u>221 975</u>
Net assets			<u>\$182 600</u>
Owner's Equity			
Capital (1 July 2019)		170 000	
Add Net profit		<u>20 000</u>	
		190 000	
Less Drawings		<u>7 400</u>	<u>\$182 600</u>

c Narrative form – with working capital

Darth Industries Statement of Financial Position as at 30 June 2020				
	\$	\$	\$	\$
Assets				
Current Assets				
Cash at Bank			2 000	
Accounts Receivable		3 800		
Less Provision for Doubtful Debts		<u>500</u>	3 300	
Inventories			10 000	
Accrued Revenues			25	
Prepaid Expenses			<u>50</u>	15 375
Less Current Liabilities				
Accounts Payable			1 500	
GST Clearing (payable)			300	
Accrued Expenses			125	
Unearned Revenues			<u>50</u>	<u>1 975</u>
Working capital				13 400
Add Non-Current Assets				
<i>Other Financial Assets</i>				
Shares in XYZ LTD		1 500		
5% Debentures		<u>1 200</u>	2 700	
<i>Property, Plant and Equipment</i>				
Vehicle	14 000			
Less Accumulated Depreciation	<u>2 000</u>	12 000		
Furniture	13 500			
Less Accumulated Depreciation	<u>1 500</u>	12 000		
Buildings	130 000			
Less Accumulated Depreciation	<u>5 000</u>	125 000		
Land		<u>225 000</u>	374 000	
<i>Intangibles</i>				
Goodwill		11 000		
Patents		<u>1 500</u>	<u>12 500</u>	<u>389 200</u>
				402 600
Less Non-Current Liabilities				
Mortgage			210 000	
Loan from Finance Co (due on 1 Feb 2023)			<u>10 000</u>	<u>220 000</u>
Net assets				<u>\$182 600</u>
Owner's Equity				
Capital (1 July 2019)			170 000	
Add Net profit			<u>20 000</u>	
			190 000	
Less Drawings			<u>7 400</u>	
				<u>\$182 600</u>

Both the account and narrative forms of presentation are used in practice. The narrative form has the advantage of being more readily understood by persons without an accounting background; it is more easily adapted to showing comparative figures, and also has the advantage of showing the figure for working capital. Unless you are told otherwise, use the narrative form of presentation.

Working capital is obtained by subtracting current liabilities from current assets to indicate the firm's ability to convert its current assets into cash to meet its immediate debts. Working capital is an indication of the financial soundness of the business in the short term.

Working capital is the net amount of liquid funds the firm will have available to meet its commitments in the next accounting period.

Real-world application



Crime and accountants – the rules get tougher

Will the new NOCLAR [Non-compliance with Laws and Regulations] changes help CAs in the fight against crime?

In brief

- A Melbourne accountant was fined \$53 880 under accessorial liability laws.
- The Fair Work Ombudsman has put accountants on notice that they can and will be penalised for client breaches of which they are aware.
- NOCLAR rolled out on 1 January [2018] in Australia. Accountants can now safely report criminal activity, setting aside client confidentiality.

Accountants be warned. In a new tougher anti-crime climate, Australian authorities have made it clear that accountants will be fined and prosecuted for being knowingly concerned in misdealings carried out by their clients – especially those which underpay workers.

'We are in a new era of accountability in which organisations and the actions of their suppliers are inextricably linked — whether it's wages compliance, safety or an environmental breach,' warn Clayton Utz lawyers Hilary Searing and Shae McCartney. 'Think 7-Eleven, Coles and Dominos, to name a few. Turning a blind eye or pleading ignorance does not wash.'

Acting Fair Work Ombudsman Kristen Hannah has made it clear that accountants are among those being targeted. 'External business advisers need to understand that they must put compliance with the law above their own personal interests – or face serious consequences,' she warned in November last year.

The warning comes after legal action by the Fair Work Ombudsman resulted in \$53 880 in fines being imposed on a Melbourne accountant by a court, which found the firm knowingly facilitated underpayment of a Taiwanese worker by its client, a fast food operator.

The Federal Circuit Court fined Ezy Accounting 123 after ruling the accountant as an accessory to worker exploitation by providing payroll services to Japanese client, fast-food operator Blue Impression. The client was separately fined \$115 706 over underpayment of two Taiwanese workers.

It's the first time the Fair Work Ombudsman has used accessorial liability laws to penalise a professional services firm for knowingly helping one of its clients exploit a vulnerable worker.

The laws extend not only to culpable in-house managers at businesses that exploit staff, but also to external advisers who facilitate worker underpayment, says Ms Hannah. Lawyers say that accessories to Fair Work Act breaches can include directors, human resources advisers, accountants, recruiters, head franchisors and potentially lawyers.

What are the penalties?

Personal financial penalties for a finding of accessorial liability include up to \$10 800 for an individual and \$54 000 for a corporation, plus enforcement investigations and legal proceedings with costs and reputational damage, says Clayton Utz.

...

NOCLAR came into force in Australia 1 Jan 2018

Under new NOCLAR requirements that took effect in Australia on 1 January, all accountants are permitted to report to officials any suspicious criminal activity they see in the affairs of their clients or employers. This can include:

- Fraud, corruption and bribery
- Money laundering, terrorist financing and proceeds of crime
- Securities markets and trading
- Banking and other financial products and services
- Data protection
- Tax and pension liabilities and payments
- Environmental protection
- Public health and safety

Accountants are not required to proactively seek out NOCLAR or have a level of knowledge of laws and regulations that is greater than that expected for their role.

Under Australia's Code of Ethics for Professional Accountants, NOCLAR allows accountants to now set aside their duty of confidentiality when they come across non-compliance. NOCLAR allows accountants to report illegal acts which are suspected or uncovered during the course of their professional work.

'There is no longer an option to turn a blind eye and simply withdraw from the engagement or resign from the employing organisation,' Zowie Pateman, Senior Policy Advisor, Leadership and Advocacy at CA ANZ, told Acuity.

'The amendments take the unprecedented step of allowing accountants to set aside the principle of confidentiality in the Code of Ethics and speak up when it appears that laws and regulations are not being followed by a client or employer.' NOCLAR came into effect in New Zealand on 15 July 2017.

...

Source: 'Crime and accountants – the rules get tougher', Shelley Dempsey, *Acuity Mag*, 5 January 2018, <https://www.acuitymag.com/finance/crime-and-accountants---the-rules-get-tougher>

2.25

From the following information, present a fully classified Statement of Financial Position for R Muller:

- a in account form
- b in narrative form showing working capital
- c in narrative form without showing working capital.

R Muller		
Trial Balance as at 31 December 2020		
Account	Debit \$	Credit \$
Capital (1 Jan 2020)		125 000
Equipment	8 000	
Cash at Bank	1 000	
Prepaid Expenses	200	
Unearned Revenue		50
Accounts Receivable	11 000	
Mortgage		6 000
Investments (to mature on 31 Mar 2021)	2 000	
Patents	500	
Vehicles	4 000	
Accrued Revenues	300	
Inventories	3 000	
Investments (to mature on 31 Dec 2026)	5 000	
Accounts Payable		6 500
GST Clearing (payable)		500
Land	110 000	
Loan from Bank (to be repaid on 21 May 2021)		1 000
Drawings	3 550	
Accrued Expenses		500
Goodwill	1 000	
<i>Additional information</i>		
Net profit for the year ended 31 December 2020 is \$10 000.		

2.26

M Melson extracted the following trial balance from the general ledger for the month. On the basis of this information, show a fully classified Statement of Profit or Loss and Statement of Financial Position (including working capital).

Melson Tiles Trial Balance as at 30 June 2020			
Account	Debit	Credit	
	\$	\$	
Inventories	10 688		
Telephone	291		
Cost of Goods Sold	2 805		
Drawings	1 000		
Interest	784		
Advertising	500		
Land	110 000		
Electricity	130		
Accounts Receivable	1 524		
Stationery	220		
Rent	1 000		
Sales Salaries	4 200		
Delivery Vehicle Expenses	552		
Insurance	312		
Motor Vehicles	9 000		
Office Equipment	1 200		
Traveller's Expenses	300		
Office Salaries	2 000		
Rent Revenue		300	
Sales		16 988	
Accounts Payable		4 000	
GST Clearing (payable)		366	
Bank		2 034	
Capital – M Melson		122 818	
	<u>\$146 506</u>	<u>\$146 506</u>	

2.27

The following is information about the business of Kasper Trading at 30 June 2020. Prepare a fully classified Statement of Profit or Loss and Statement of Financial Position in narrative form without working capital.

Kasper Trading Trial Balance as at 30 June 2020		
Account	Debit \$	Credit \$
R Kasper – Capital		239 000
R Kasper – Drawings	1 240	
Advertising	2 160	
Bank		4 028
Cost of Goods Sold	47 490	
Rent Revenue		1 640
Accounts Payable		5 000
GST Clearing (payable)		480
Accounts Receivable	8 790	
Delivery Vehicle	3 000	
Delivery Vehicle Expenses	1 110	
Bank Charges	170	
Commission Revenue		1 100
Insurance	320	
Interest on Mortgage	1 600	
Loan on Mortgage		17 000
Office Furniture	13 720	
Land	113 500	
Buildings	134 000	
Accumulated Depreciation on Delivery Vehicle		1 900
Accumulated Depreciation on Office Furniture		612
Provision for Doubtful Debts		500
Accumulated Depreciation on Building		2 500
Bad Debts Recovered		100
Rates	1 040	
Goodwill	4 000	
Sales		86 000
Sales Salaries	4 010	
Sales Returns	600	
Inventories	22 060	
Sundry Office Expenses	250	
Loss on Disposal of Assets	800	
	<u>\$359 860</u>	<u>\$359 860</u>

Balance day adjustments to fully classified financial statements

As discussed previously, a business must be able to determine how efficiently it has been operating in the past and what its prospects are for the future. To enable this to be done, the life of the business is divided into arbitrary periods (the accounting period assumption) and a profit figure is determined for that period (usually one year and commonly referred to as the financial year). Monthly, fortnightly or weekly financial reports can also be prepared if necessary.

Not all transactions fit exactly into this period, so certain adjustments have to be made. Traditionally, the approach was to match the expenses for the period against the relevant revenues for the period so that the profit was as accurate as possible. This was called the matching concept. However, rather than using a matching process the emphasis now is on determining conceptually whether an item fits the definition of revenue, whether an item fits the definition of an expense, and then subtracting all expenses from all revenues to obtain a profit figure. As well, the approach is much broader than concentrating on only the revenues and expenses. This broader approach entails recognising that all the relevant assets, liabilities, revenues and expenses for the period are recorded, to ensure that both the resultant financial statements are accurate.

Adjusting entries are required because the general ledger may not be complete for the accounting period under consideration. This could occur for the following reasons:

- Events may occur daily in the business but are not recorded daily. For example, it is not practical to pay employees daily. They are generally paid weekly, fortnightly or monthly, and the records may not be complete at balance day. Another example is the use of supplies that may be used daily, but will not be tracked and expensed daily.
- Unrecorded transactions may relate to external parties. For example, interest may be earned for a month, but has not yet been received in cash. Another example is electricity, which might be paid quarterly, but the expense for electricity is brought to account each month.
- Events may occur through the passage of time. This means the future economic benefit is used up over time. For example, a payment for a year's insurance is treated as an asset and for each period (month) the relevant expense is brought to account (used up). Another example is the cost of an asset being allocated over its life in the form of depreciation.
- Current assets are shown at a realistic amount. For example, the amount of accounts receivable is reduced by the estimated amount that may be bad. Another example, which will be explained shortly, is the amount for inventories adjusted at balance day for inventory shortages and 'the lower of cost and net realisable value' rule.

In all these situations, there will be a change in two places – to the Statement of Profit or Loss (either a revenue or an expense) and a change to the Statement of Financial Position (either an asset or a liability).

We have discussed some balance day adjustments previously. They are summarised here to show the adjustments necessary at the end of an accounting period/year and only brief explanations will be given. For further details, refer back to Chapter 9 of *Units 1 & 2* and Chapter 1 in this book. The major balance day adjustments are for:

- inventories
- accrued expenses
- accrued revenues
- prepaid expenses
- unearned revenues
- provision for doubtful debts
- accumulated depreciation.

In most situations with these balance day adjustments, it is easier to concentrate first on the asset or the liability being affected. For example, if there is outstanding interest on an investment bank account, then money is owed to us so it is an asset and therefore an accrued revenue. If at the end of the period, money is owed for wages, then we have a liability and therefore an accrued expense. If the balance of the provision for doubtful debts has to be 4 per cent of accounts receivable, then that is a negative asset being affected. Think about what is happening to the asset or liability first and the other side of the double entry involving a revenue or an expense will follow.

In addition to these balance day adjustments, entries must also be made to clear the accounts for GST. This was discussed in Chapter 9 in *Units 1 & 2*. The complete accounting process we have developed is shown in Figure 2.2.

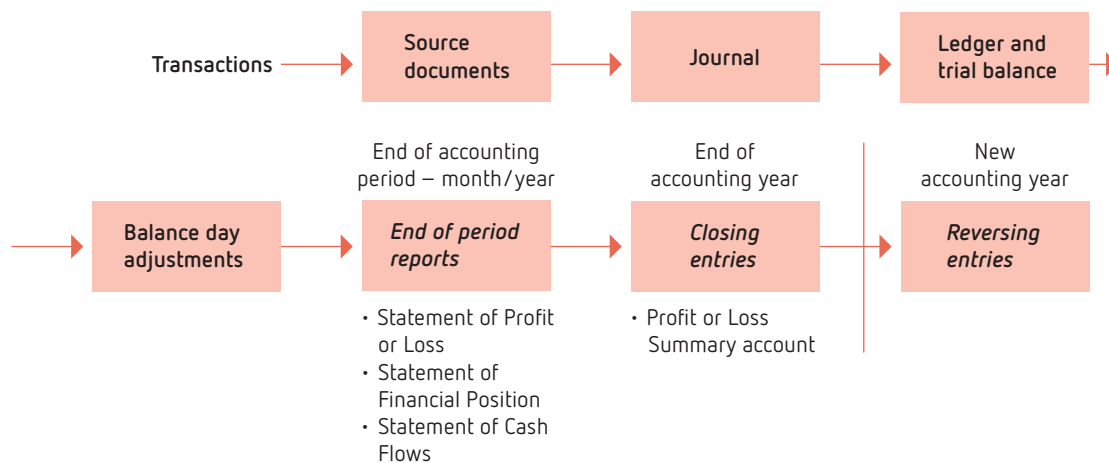


Figure 2.2 The complete accounting process

Inventories

Inventory adjustments can be made for two reasons. The first was mentioned in *Units 1 & 2*, where stock item records show the value of inventory that should be on hand. This method gives better control because inventory losses are readily determined. It is also usual to have a yearly stocktake so that the inventory losses and shortages can be brought into the accounts. If the stocktake reveals fewer items in stock than are represented on the stock item record, the record is adjusted to show the actual quantity on hand. The value of the inventory shortage is then recorded by a balance day adjustment. The general journal entry is:

	Dr	Cr
Inventory Adjustment	XXX	
Inventories Control		XXX

This entry has the effect of:

- decreasing the gross profit figure, as the inventory shortage is a cost of sales expense to the business. This account is closed off to the Profit or Loss Summary at the end of the accounting year and appears with cost of goods sold in the Statement of Profit or Loss
- decreasing the Inventories Control account, as the inventories are no longer on hand.

If the actual quantity on hand is found to be greater than that recorded, the reverse of this balance day adjustment is made. This would result in an inventory gain.

The following ledger accounts illustrate this adjustment.

Dr				Ledger				Cr	
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
2020				2020					
				Inventories Control				No 3106	
Apr 30	Balance b/d		250	Apr 30	Cost of Goods Sold		2 350		
30	Cash/Accounts Payable		3 600	May 3	Accounts Payable				
May 31	Cash/Accounts Payable		2 500		(purchases returns)		100		
June 30	Cash/Accounts Payable		3 000	31	Cost of Goods Sold		3 000		
30	Cost of Goods Sold (sales returns)		300	June 30	Cost of Goods Sold		3 480		

On 30 June, a physical stocktake revealed a shortage of \$120 worth of stock. The adjusting entry required is:

General Journal					
Date	Particulars	Ref	Dr \$	Cr \$	
2020 June 30	Inventory Adjustment Inventories Control (Inventory shortfall found by physical stocktake)	2106 3106	120		120

This would be posted as follows:

Dr				Ledger				Cr	
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
2020				2020					
				Inventory Adjustment				No 2106	
June 30	Inventories Control		120	June 30	Profit or Loss Summary		120		
			<u>\$120</u>				<u>\$120</u>		
				Inventories Control				No 3106	
Apr 30	Balance b/d		250	Apr 30	Cost of Goods Sold		2 350		
30	Cash/Accounts Payable		3 600	May 3	Accounts Payable				
May 31	Cash/Accounts Payable		2 500		(purchases returns)		100		
June 30	Cash/Accounts Payable		3 000	31	Cost of Goods Sold		3 000		
30	Cost of Goods Sold (sales returns)		300	June 30	Cost of Goods Sold		3 480		
				30	Inventory Adjustment		120		
				30	Balance c/d		600		
			<u>\$9 650</u>				<u>\$9 650</u>		
July 1	Balance b/d		600						

The Statement of Profit or Loss shows:

Statement of Profit or Loss (extract) for year ending ...		
	\$	\$
Sales		XXX
Less Cost of Sales		
Cost of Goods Sold	XXX	
Inventory Adjustment	<u>120</u>	<u>XXX</u>
Gross profit		XXX

The second reason for an inventory adjustment concerns the valuation of inventories. It is generally agreed that inventories are valued at cost. This usually means historical cost. However, if management suspects that particular inventory items have a net realisable value lower than cost, the 'lower of cost and net realisable value' rule will be applied. As an example, this could occur for inventories of technology or fashion items. This rule simply means that, when valuing inventories, the accountant should:

- determine the cost of the inventories
- determine the net realisable value of the inventories
- use the lower amount.

One of the main problems with this rule is trying to determine the 'cost' of the inventories. As previously shown, cost can be ascertained by using any one of the following methods: specific identification, First-In First-Out (FIFO) or weighted average cost. The accountant has to decide which method is to be used to determine cost. Once this decision is made it must be applied consistently from year to year.

Net realisable value (NRV) is the amount that the business estimates it could sell the item for, less any estimated marketing, selling or distribution costs that are necessary to make the sale. The NRV may be lower than cost because of deterioration, obsolescence or a change in demand. A problem with NRV is actually obtaining a value, as it will be an estimated figure.

In Illustrative example 3, where the NRV is lower than the cost price, the NRV is used. This results in recognising a \$50 anticipated loss and therefore gives a lower gross profit figure. (This loss corresponds to the difference between cost and NRV.)

Illustrative example 3

A business bought the following inventories:

Item X	\$100
Item Y	\$300
Item Z	\$200

Sales for the period were \$900 and cost of goods sold were \$300. At the end of the period, the following details were available for closing inventories:

	Cost	NRV	Lower of cost and NRV
Item X	50	\$ 60	50
Item Y	150	\$100	100
Item Z	<u>100</u>	<u>\$120</u>	<u>100</u>
	<u>\$300</u>		<u>\$250</u>

<i>Profit calculation using cost</i>		<i>Profit calculation using the rule 'the lower of cost and NRV'</i>	
Sales	900	Sales	900
Less Cost of Sales		Less Cost of Sales	
Cost of Goods Sold	300	Cost of Goods Sold	300
		Inventory adjustment	50
Gross profit	<u>\$600</u>	Gross profit	<u>350</u>
		<u>\$50 loss recognised</u>	

The general journal entry to record the \$50 loss would be:

General Journal				P1
Date	Particulars	Ref	Debit	Credit
June 30	Inventory Adjustment	2106	50	
	Inventories Control	3106		50
	(Loss due to lower of cost and NRV)			

In the Statement of Financial Position, the amount for inventories would be shown as \$250 instead of \$300.

Also note that under accrual accounting, revenue is recognised for the sale of inventories when the goods have been delivered not when the cash is received.

2.28

- Explain the 'lower of cost and NRV' rule.
- What is the meaning of 'cost' and 'NRV'?

2.29

The following information relates to an item of inventory held by a stereo supplier.
Calculate the NRV.

Normal selling price	\$1 200
Selling costs	10
Freight to customer	55

2.30

Calculate the NRV for the following inventory item:

Normal selling price	\$400
Cost of purchase	250
Selling costs	14
Freight	26

2.31

You are given the following information about the inventory items of P Johnson:

Item	Cost	NRV
Item A	\$200	\$250
Item B	175	150
Item C	614	604
Item D	314	320

Calculate the total value of inventories on hand and show the journal entry to record the loss.

Accrued expenses

Accrued expenses are expenses incurred in the current accounting period, but not yet paid. The general journal entry for the adjustment of accrued expenses is:

	Dr	Cr
Expense Account	XXX	
Accrued Expenses		XXX

The entry has the effect of:

- increasing the expense account to the amount it should have been
- creating a liability account (Accrued Expenses) because at balance day this amount is owed.

Consider the following trial balance extract as at 30 June:

Trial Balance (extract) as at 30 June ...		
Account	Debit \$	Credit \$
Advertising	500	
<i>Adjustment</i> Advertising still owing, \$200.		

The ledger appears as follows:

Dr				Cr			
Ledger							
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$
Advertising				No 2301			
June 30	Amount to date		500				
	30 Accrued Expenses		200				
Accrued Expenses				No 4104			
				June 30	Advertising		200

As a result of the adjustment, \$700 worth of advertising appears in the Profit or Loss Summary account at the end of the accounting year and in the **selling expenses section of the Statement of Profit or Loss**. The Statement of Financial Position shows:

Statement of Financial Position (extract) as at 30 June ...	
	\$
Current Liabilities	
Accrued Expenses	200

Accrued revenues

Accrued revenues are revenues that have been earned in the current accounting period but have not yet been received. The general journal entry for the adjustment of accrued revenues is:

	Dr	Cr
Accrued Revenues	XXX	
Revenue		XXX

The entry has the effect of:

- creating the asset account (Accrued Revenues) to show that money is owed to the business on balance day
- increasing the revenue account to the correct amount.

Consider the following trial balance extract as at 30 June:

Trial Balance (extract) as at 30 June ...		
Account	Debit \$	Credit \$
Commission Revenue		600
<i>Adjustment</i> Outstanding commission, \$50.		

The ledger after adjustment appears as follows:

Dr				Ledger				Cr
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$	
					Commission Revenue			No 1103
				June 30	Amount to date		600	
				30	Accrued Expenses		50	
					Accrued Revenues			No 3108
June 30	Commission Revenue		50					

As a result of the adjustment, an amount of \$650 for commission revenue appears in the Profit or Loss Summary account at the end of the accounting year and as **other revenue in the Statement of Profit or Loss**.

The Statement of Financial Position shows:

Statement of Financial Position (extract) as at 30 June ...	
	\$
Current Assets	
Accrued Revenues	50

Prepaid expenses

Prepaid expenses are expenses that have been paid in the current accounting period and recorded as assets until the economic benefits are used up in a future accounting period. Benefits from this prepayment will occur over the next accounting period.

The general journal entry for the adjustment of prepaid expenses is:

	Dr	Cr
Expense account	XXX	
Prepaid Expenses		XXX

The entry has the effect of:

- increasing the expense account as the future economic benefit has been used up
- decreasing the asset account (Prepaid Expenses) because the business has paid an extra amount of money and is owed that money at balance day.

For example, the following is the trial balance extract as at 30 June.

Trial Balance (extract) as at 30 June ...		
Account	Debit \$	Credit \$
Prepaid Insurance	350	
<i>Adjustment</i> Insurance paid in advance, \$70.		

The ledger after adjustment appears as follows:

Dr				Ledger				Cr
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$	
				Insurance				No 2408
June 30	Prepaid insurance		280					
				Prepaid Insurance				No 3109
June 30	Amount to date		350	June 30	Insurance		280	

As a result of the adjustment, an amount of \$280 for insurance appears in the Profit or Loss Summary account at the end of the accounting year and in the **administrative expenses section of the Statement of Profit or Loss**.

The Statement of Financial Position shows:

Statement of Financial Position (extract) as at 30 June ...		\$
Current Assets		
Prepaid Expenses		70

Unearned revenues

Unearned revenues are revenues that have been received in the current accounting period, but that will be earned in a future accounting period. The general journal entry for the adjustment of revenue received in advance is:

	Dr	Cr
Revenues	XXX	
Unearned Revenue		XXX

The entry has the effect of:

- decreasing the revenue account, as the extra money received does not belong to this period
- creating the liability account (Unearned Revenues) as, at the balance date, this amount is owed by the business.

Consider the following trial balance extract as at 30 June:

Trial Balance (extract) as at 30 June ...		
Account	Debit \$	Credit \$
Rent Revenue		1 000
<i>Adjustment</i> Rent received in advance, \$100.		

The ledger after adjustment appears as follows:

Dr				Ledger				Cr	
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
				Rent Revenue				No 1106	
June 30	Unearned Revenues		100	June 30	Amount to date		1 000		
				Unearned Revenues				No 4105	
				June 30	Rent Revenue		100		

As a result of the adjustment, an amount of \$900 for rent revenue appears in the Profit or Loss Summary account at the end of the accounting year and in the **other revenue section of the Statement of Profit or Loss**.

The Statement of Financial Position shows:

Statement of Financial Position (extract) as at 30 June ...	
	\$
Current Liabilities	
Unearned Revenues	100

Provision for doubtful debts

The provision for doubtful debts shows the estimated amount of accounts receivable that are unlikely to be received when due in the following period.

Two balance day adjustment entries are necessary:

- 1 Bad and doubtful debts are transferred to the Provision for Doubtful Debts account set up to accommodate them. This is accomplished by the entry:

	Dr	Cr
Provision for Doubtful Debts	XXX	
Bad and Doubtful Debts		XXX

The entry has the effect of:

- decreasing the Provision for Doubtful Debts account to make way for this year's estimate
 - decreasing the Bad and Doubtful Debts account to offset those bad debts that occurred during the period against the provision that was originally set up to provide for them.
- 2 The new Provision for Doubtful Debts balance is calculated and the adjustment is recorded to ensure this is the balance. This is accomplished by the entry:

	Dr	Cr
Bad and Doubtful Debts	XXX	
Provision for Doubtful Debts		XXX

The entry has the effect of:

- increasing the expenses of the period (bad and doubtful debts). This is the amount that is closed off to the Profit or Loss Summary account at the end of the accounting year
- increasing the Provision for Doubtful Debts account by an amount that makes the closing balance equal to the estimated doubtful debts on the present accounts receivable. Remember that the whole year's doubtful debts are not being estimated, but only the portion that appears in the balance of accounts receivable that is likely to become bad in the next accounting period.

For example, at 30 June 2020 the trial balance extract appears as follows:

Trial Balance (extract) as at 30 June 2020		
Account	Debit \$	Credit \$
Bad and Doubtful Debts	3 200	
Accounts Receivable Control	50 000	
Provision for Doubtful Debts		300
<i>Adjustment</i>		
Desired provision for Doubtful Debts to be 1 per cent of Accounts Receivable Control.		

The ledger after adjustment appears as follows.

Dr				Ledger				Cr	
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
Bad and Doubtful Debts								No 2501	
2020				2020					
June 30	Amount to date		3 200	June 30	Provision for Doubtful Debts ^a		3 200		
30	Provision for Doubtful Debts ^b		3 400						
Accounts Receivable Control								No 3104	
2020									
June 30	Balance		50 000						
Provision for Doubtful Debts								No 3104A	
2020				2019					
June 30	Bad and Doubtful Debts ^a		3 200	July 1	Balance		300		
30	Balance c/d		500 ^c	2020					
			<u>\$3 700</u>	June 30	Bad and Doubtful Debts ^b		3 400		
							<u>\$3 700</u>		
				July 1	Balance b/d		500 ^c		

Notes to the ledger

- a** Closing the Bad and Doubtful Debts account to the existing Provision for Doubtful Debts account.
- b** Creating the new provision (amount must be sufficient to leave a balance of \$500, which is the amount of the new provision).
- c** Being 1 per cent of Accounts Receivable Control.

As a result, bad and doubtful debts of \$3400 would be closed to the Profit or Loss Summary account at the end of the accounting year and appear in the **finance expenses section of the Statement of Profit or Loss**.

The amounts that appear in the Statement of Financial Position are:

Statement of Financial Position (extract) as at 30 June 2020		
	\$	\$
Current Assets		
Accounts Receivable Control	50 000	
Less Provision for Doubtful Debts	<u>500</u>	49 500

If the unusual situation arises where the Provision for Doubtful Debts is greater than the bad debts for the year (an over-provision), refer back in this chapter to see how this is accounted for. Should no provision exist, the step in note **a** would not apply.

Accumulated depreciation

The aim of providing for depreciation is to spread the cost of the asset over each of the years it is used (cost allocation concept). Therefore, the adjusting entry is:

		Dr	Cr
Depreciation on ...		XXX	
Accumulated Depreciation on ...			XXX

This entry has the effect of:

- creating an expense account (Depreciation on ...) because part of the asset has been consumed. This account is closed to the Profit or Loss Summary account at the end of the accounting year and appears in the Statement of Profit or Loss as an administrative expense (unless it is a selling item)
- increasing the Accumulated Depreciation on ... account to show the accumulated depreciation over the life of the asset. This appears in the Statement of Financial Position as a negative non-current asset.

Consider the following trial balance extract as at 30 June.

Trial Balance (extract) as at 30 June 2020		
Account	Debit \$	Credit \$
Motor Vehicle	15 000	
Accumulated Depreciation on Motor Vehicle		6 000
<i>Adjustment</i>		
Write off Depreciation on Motor Vehicle using 20 per cent straight line method (i.e. \$3000).		

The general journal entry would be:

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
June 30	Depreciation on Motor Vehicle Accumulated Depreciation on Motor Vehicle (Depreciation of 20 per cent straight line on \$15 000)		3 000	3 000

The ledger after adjustment appears as follows:

Dr				Cr			
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$
Depreciation on Motor Vehicle				No 2406			
June 30	Accumulated Depreciation		3 000				
Motor Vehicle				No 3303			
June 30	Balance		15 000				
Accumulated Depreciation on Motor Vehicle				No 3303A			
June 30	Balance c/d		9 000	June 30	Balance		6 000
				30	Depreciation		3 000
			<u>\$9 000</u>				<u>\$9 000</u>
				July 1	Balance b/d		9 000

As a result of the adjustment, depreciation on the motor vehicle worth \$3000 appears in the Profit or Loss Summary account at the end of the accounting year and in the **administrative expenses section of the Statement of Profit or Loss**.

The Statement of Financial Position shows:

Statement of Financial Position (extract) as at 30 June ...		
	\$	\$
Non-Current Assets		
<i>Property, Plant and Equipment</i>		
Motor Vehicle (at cost)	15 000	
Less Accumulated Depreciation on Motor Vehicle	<u>9 000</u>	6 000

GST Clearing entries

Although this entry is not a balance day adjustment because it does not affect profit, it is necessary to clear the GST Collected and GST Credits Received accounts to the GST Clearing (Payable) account at the end of every month. This is required to complete the accounting process, to show the net amount of GST in the Statement of Financial Position and to determine the amount payable to the Australian Taxation Office (ATO).

The general journal entry to clear the GST Collected is:

	Dr	Cr
GST Collected	XXX	
GST Clearing (Payable)		XXX

This entry has the effect of:

- clearing the liability account (decreasing) GST Collected
- increasing the liability account GST Clearing (Payable).

The general journal entry to clear the GST Credits Received is:

	Dr	Cr
GST Clearing (Payable)	XXX	
GST Credits Received		XXX

This entry has the effect of:

- clearing the negative liability account (decreasing) GST Credits Received
- decreasing the liability account GST Clearing (Payable).

Consider the following trial balance extract as at 30 June.

Trial Balance (extract) as at 30 June ...		
Account	Debit \$	Credit \$
GST Collected		7 400
GST Credits Received	4 800	

Dr				Ledger				Cr	
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
				GST Clearing (Payable)				No 4102.1	
June 30	GST Credits Received		4 800	June 30	GST Collected		7 400		
30	Balance c/d		2 600						
			<u>\$ 7 400</u>				<u>\$ 7 400</u>		
				July 1	Balance b/d		2 600		
				GST Collected				No 4102.2	
June 30	GST Clearing (Payable)		7 400	June 30	Amount to date		7 400		
				GST Credits Received				No 4102.2A	
June 30	Amount to date		4 800	June 30	GST Clearing (Payable)		4 800		

As a result of the clearing entries, GST Clearing (Payable) \$2600 appears in the Statement of Financial Position as a liability. This amount will be paid to the ATO at the appropriate time.

Preparing financial statements from the trial balance incorporating adjustments

The Statement of Profit or Loss and Statement of Financial Position can be prepared by working from a trial balance prepared before adjustments are taken into account.

Of course, adjustments would have to be made to some of the figures in the trial balance because the balance day adjustments occur after doing the trial balance. Imagine that the following balance day adjustments still have to be recorded:

- 1 inventory recorded at \$10 000 to be adjusted for a shortage of \$95
- 2 insurance paid in advance \$2400; insurance for period \$200
- 3 wages owing \$500; wages recorded at \$800
- 4 rent owing \$500; rent revenue recorded at \$2000
- 5 commission revenue of \$100 has been unearned; commission revenue recorded at \$1000.

The adjustments to the balances in the trial balance could be determined and simply pencilled in alongside existing figures, and any new accounts noted underneath. For example, with insurance paid in advance, an original prepaid insurance figure of, say, \$2400 in the trial balance would need to be decreased by the period amount of \$200 to leave the insurance expense of \$200 to appear in the Statement of Profit or Loss. A new account, Insurance Expenses of \$200, will be pencilled in underneath the trial balance.

This process for the above balance day adjustments has been summarised in the table on page 144. Make sure you can understand how each balance day adjustment affects the Statement of Profit or Loss and the Statement of Financial Position.

Of course, each of these figures can be checked against the amounts appearing in the ledger accounts.

From the table, you should see that for each one of the balance day adjustments outside the trial balance, two accounts are affected:

- one account in the Statement of Profit or Loss
- one account in the Statement of Financial Position.

This is to be compared to those items inside the trial balance. They will only appear once – either in the Statement of Profit or Loss or the Statement of Financial Position.

Adjustment	Effect/resultant general journal entry	Adjusted trial balance figure appearing in Statement of Profit or Loss	Adjusted trial balance figure appearing in Statement of Financial Position
1 Inventory shortage \$95	Increase Inventory Adjustment \$95 Decrease asset Inventory \$95	Inventory Adjustment \$95	Inventories \$9905
2 Insurance \$200	Increase Insurance by \$200 Decrease Prepaid Insurance by \$200	Insurance \$200	Prepaid Insurance \$2200
3 Wages owing \$500	Increase Wages by \$500 Increase Accrued Expenses by \$500	Wages \$1300	Accrued Expenses \$500
4 Rent owing \$500	Increase Accrued Revenue by \$500 Increase Rent Revenue by \$500	Rent Revenue \$2500	Accrued Revenue \$500
5 Commission received in advance \$100	Decrease Commission Revenue by \$100 Increase Unearned Revenue by \$100	Commission Revenue \$900	Unearned Revenue \$100

The only other entry that must be recorded is the clearing entry to the GST Clearing account. If the GST Credits Received was \$150 and the GST Collected was \$400, this would be recorded as follows:

Clearing	Effect/resultant general journal entry	Adjusted trial balance figure appearing in Statement of Profit or Loss	Adjusted trial balance figure appearing in Statement of Financial Position
Clear GST Credits Received \$150 and GST Collected \$400	Decrease GST Credits Received \$150 and GST Collected \$400 Increase Liability GST Clearing		GST Clearing (Payable) \$250

2.32

From the following information:

- a show journal entries for the balance day adjustments and clearing entries
- b prepare a fully classified Statement of Profit or Loss and Statement of Financial Position in narrative form showing working capital.

Knight Riding
Trial Balance as at 30 June 2020

Account	Debit \$	Credit \$
Sales		50 000
Sales Returns	1 000	
Cost of Goods Sold	18 750	
Commission Revenue		2 000
Advertising	1 000	
Interest Expense	750	
Rent Revenue		250
Selling Expenses	1 100	
Office Salaries	875	
Stationery	200	
Office Expenses	400	
Lighting	400	
Cash at Bank	8 000	
Accounts Receivable	7 000	
Inventories	11 000	
Land	21 800	
Buildings	30 000	
Delivery Vehicles	20 000	
Accounts Payable		6 600
GST Collected		400
GST Credits Received	200	
Loss on Disposal of Delivery Vehicle	200	
Mortgage		10 000
Capital		54 425
Drawings	1 000	
	<u>\$123 675</u>	<u>\$123 675</u>

Additional information

- Inventories at 30 June 2020 were \$10 700.
- Advertising of \$200 was prepaid.
- Office salaries owing were \$800.
- Clear accounts to GST Clearing (Payable).

2.33

From the following information for D Zhang, prepare a fully classified Statement of Profit or Loss and Statement of Financial Position (showing working capital).

D Zhang Trial Balance as at 30 June 2020		
Account	Debit \$	Credit \$
Interest Expense	150	
Office Wages	13 000	
Sales		150 000
V Campbell	1 350	
D Hall		875
Rent Revenue		1 275
Office Furniture	10 000	
Inventories	10 500	
Advertising	3 000	
Cash at Bank	10 000	
Sales Returns	1 500	
Equipment	20 000	
Selling Expenses	13 000	
Vehicles	20 000	
Buildings	15 000	
Land	19 000	
Cost of Goods Sold	75 750	
Mortgage		13 200
Goodwill	50 000	
Prepaid Insurance	1 000	
Debentures in TX Co	9 000	
Office Expenses	2 770	
S Mayne	880	
M Wallace		600
GST Collected		1 200
GST Credits Received	1 000	
Capital		118 750
Drawings	9 000	
	<u>\$285 900</u>	<u>\$285 900</u>
<i>Additional information</i>		
• Advertising owing was \$500.		
• Insurance prepaid was \$250.		
• Rent received in advance was \$275.		
• Interest owing on mortgage was \$500.		
• Clear accounts to GST Clearing (Payable).		

2.34

From the following information, prepare:

- a journal entries for the adjustments
- b a fully classified Statement of Profit or Loss
- c a fully classified Statement of Financial Position (showing working capital).

Khalife Industries		
Trial Balance as at 30 June 2020		
Account	Debit \$	Credit \$
Dividends Received		1 000
Cash at Bank	10 000	
Mortgage		50 000
Inventories	9 000	
Loss by Burglary	1 000	
Shares in Other Companies	18 000	
Sales Returns	3 000	
Bad and Doubtful Debts	500	
Office Furniture	15 000	
B Edwards	1 750	
Loan from Bank		20 000
Gain on Disposal of Non-Current Asset		1 000
Drawings	10 000	
Capital – A Cooper		84 750
Cash in Hand	1 000	
D Davis	8 750	
Prepaid Insurance	6 000	
Sales		98 000
Commission Revenue		2 000
Office Expenses	4 000	
Delivery Van Expenses	3 500	
Interest Expense	5 000	
Goodwill	10 000	
Cost of Goods Sold	25 000	
Rent Revenue		5 000
Land	50 000	
Advertising	10 000	
B Murray	3 500	
W Hall		2 500
GST Collected		1 100
GST Credits Received	350	
Vehicles	20 000	
Buildings	50 000	
	<u>\$265 350</u>	<u>\$265 350</u>
<i>Additional information</i>		
• Insurance prepaid was \$1000. • Rent received in advance was \$250. • Advertising owing was \$2000. • Commission Revenue owing was \$575. • Interest owing on Loan from Bank was \$2000. • Clear accounts to GST Clearing (Payable).		

Worksheet and adjusted trial balance

When there are numerous balance day adjustments, some business organisations find it necessary to prepare a **worksheet** in order to prepare the Statement of Profit or Loss and Statement of Financial Position before actually entering the balance day adjustments into the records. This worksheet is sometimes called a **10-column trial balance**, with:

- columns 1 and 2 being the original trial balance
- columns 3 and 4 being the adjustments in the form of debit and credit
- columns 5 and 6 being the adjusted trial balance
- columns 7 and 8 being the adjusted debit and credit entries appearing in the Statement of Profit or Loss
- columns 9 and 10 being the adjusted debit and credit entries appearing in the Statement of Financial Position.

As well, some organisations with many balance day adjustments prepare more than one trial balance. This is especially easy when a computer system is being used. The first is prepared at balance date, but before the balance day adjustment entries. Another adjusted trial balance may be prepared after all of the balance day adjustment entries have been recorded. This is to ensure that debit equals credit before preparing the Statement of Profit or Loss and Statement of Financial Position.

In this situation, the accounting process or cycle would therefore appear as shown in Figure 2.3.

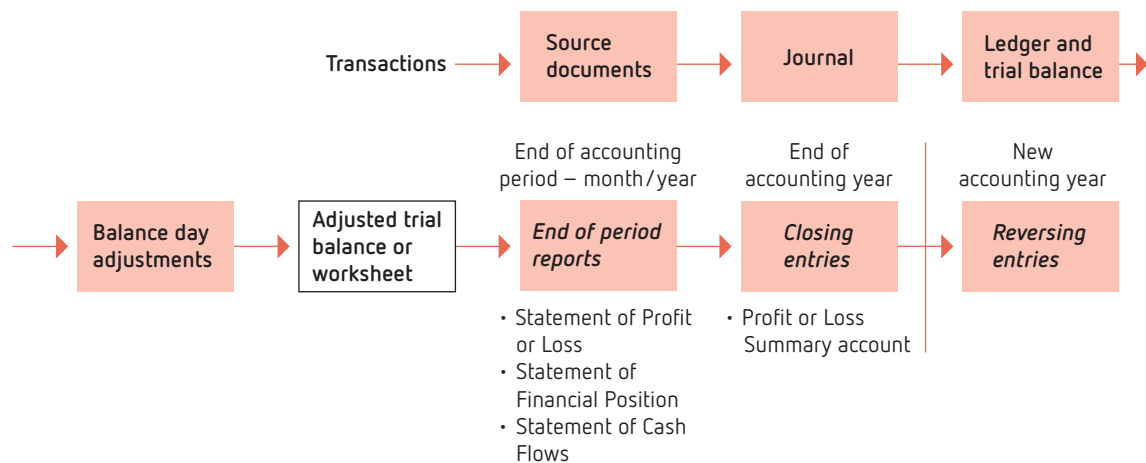


Figure 2.3 The complete accounting process (using a worksheet)

Finally, it should be remembered that once the chart of accounts has been prepared, and all accounts have been put into the correct order, the accounts appearing in the trial balance will be in the same order every time a trial balance is prepared. Consequently, a trial balance spreadsheet and 10-column worksheet/trial balance spreadsheet are generally used to show all the account numbers and names on the left-hand side. Whenever a trial balance needs to be prepared, it is then a simple matter to fill in the amounts in the correct column.

Some accounts will have zero balances. In this case, the column is usually left blank. In the exercises that you prepare it is usual to leave these zero balance accounts out of the trial balance and to show those accounts with a balance. This is perfectly acceptable because it saves time in the working of the exercises and because you will rarely be given the full chart of accounts.

A summary of the balance day adjustments and the GST Clearing entries is shown in Table 2.1.

End of period reports

The end of period reports comprise the Statement of Profit or Loss and the Statement of Financial Position. These are reports that are prepared outside the ledger. They can be prepared from the ledger or from a trial balance or a worksheet. In an accounting package, they are available at the press of a key. These reports are generally fully classified and are vital in allowing the owner to see how the business has been

performing. Later in the chapter you will be shown how to fully interpret these reports and how to make recommendations for improving performance. Fully classified Statements of Profit or Loss are shown on pages 115 and 117. Fully classified Statements of Financial Position are shown on pages 122–24.

Table 2.1 Summary of adjustments

Balance day adjustment	Accounts involved	Type of account	Effect required	Resultant journal entry	Reversing entry
Inventories	Inventory adjustment Inventories	Expense Current Asset	Increase Cost of Sales Decrease Inventories	Inventory adjustment Dr Inventories Cr	No
Accrued Expense	Expense Accrued Expense	Expense Current Liability	Increase Expense Increase Accrued Expense	Expense Dr Accrued Expense Cr	Yes
Accrued Revenue	Accrued Revenue Revenue	Current Asset Revenue	Increase Accrued Revenue Increase Revenue	Accrued Revenue Dr Revenue Cr	Yes
Prepaid Expense	Expense Prepaid Expense	Expense Asset	Increase Expense Decrease Prepaid Expense	Expense Dr Prepaid Expense Cr	No
Unearned Revenue	Revenue Unearned Revenue	Revenue Current Liability	Decrease Revenue Increase Unearned Revenue	Revenue Dr Unearned Revenue Cr	Yes
Provision for Doubtful Debts	Provision for Doubtful Debts	Negative Current Asset	Decrease Provision for Doubtful Debts	Provision for Doubtful Debts Dr	No
	Bad and Doubtful Debts	Finance Expense	Decrease Bad and Doubtful Debts	Bad and Doubtful Debts Cr	
	Bad and Doubtful Debts Provision for Doubtful Debts	Finance Expense Negative Current Asset	Increase Bad and Doubtful Debts Increase Provision for Doubtful Debts	Bad and Doubtful Debts Dr Provision for Doubtful Debts Cr	
Accumulated Depreciation	Depreciation on ...	Expense	Increase Depreciation on ...	Depreciation on ... Dr	No
	Accumulated Depreciation on ...	Negative Non-Current Asset	Increase Accumulated Depreciation on ...	Accumulated Depreciation on ... Cr	
Clearing GST Clearing	GST Collected	Current Liability	Decrease GST Collected	GST Collected Dr	No
	GST Clearing	Current Liability	Increase GST Clearing	GST Clearing Cr	
	GST Clearing	Current Liability	Decrease GST Clearing	GST Clearing Dr	
	GST Credits Received	Negative Current Liability	Decrease GST Credits Received	GST Credits Received Cr	

Note: With all balance day adjustments, one amount will be affected in the Statement of Profit or Loss and one amount will be affected in the Statement of Financial Position.

Illustrative example 4

The following trial balance has been extracted from AJ's Equipment's ledger:

AJ's Equipment Trial Balance as at 30 June 2020			
No	Account	Debit \$	Credit \$
1101	Sales		73 180
1101A	Sales Returns	1 620	
1103	Commission Revenue		320
1105	Interest Revenue		1 350
1106	Rent Revenue		7 000
2105	Cost of Goods Sold	18 190	
2303	Delivery Vehicle Expenses	850	
2305	Sales Salaries	13 400	
2307	Loss on Disposal of Delivery Vehicle	100	
2411	Office Salaries	24 340	
2413	Rates	310	
2416	Stationery	720	
2501	Bad and Doubtful Debts	1 000	
2502	Bank Charges	250	
2504	Interest Expense	2 280	
3103	Cash at Bank	800	
3104	Accounts Receivable	10 000	
3104A	Provision for Doubtful Debts		80
3106	Inventories	20 000	
3109	Prepaid Insurance	570	
3201	Bonds	6 000	
3302	Delivery Vehicles	12 000	
3302A	Accum. Deprec. on Delivery Vehicles		3 000
3305	Building	25 000	
3305A	Accum. Deprec. on Building		2 500
3306	Land	114 000	
4101	Accounts Payable		8 700
4102.2	GST Collected		900
4102.2A	GST Credits Received	400	
4202	Loan on Mortgage		15 000
5101	Capital – A Jonis		140 000
5101A	Drawings – A Jonis	200	
		<u>\$252 030</u>	<u>\$252 030</u>

Additional information

- Inventories at 30 June 2020 are \$19 500.
- Provision for Doubtful Debts is to be 1 per cent of Accounts Receivable.
- Sales Salary still owing is \$80.
- Interest still to be received is \$190.
- Prepaid Insurance is \$70.
- Received rent in advance is \$200.
- Depreciation on Building is to be calculated at 5 per cent on cost.
- Depreciation on Delivery Vehicle is to be calculated at 30 per cent diminishing balance.
- Clear relevant accounts to GST Clearing (Payable).

Using this information:

- 1 show the Profit or Loss Summary account as it would appear at the end of the financial year
- 2 prepare a 10-column worksheet (if required)
- 3 prepare a fully classified Statement of Profit or Loss and Statement of Financial Position.

Approach

Adjustments The first thing that must be done is to record the adjusting entries (see page 152). These adjustments are general journal entries, so the accounts in the ledger will be affected as well.

Remember that each of the **balance day adjustments** made after the trial balance has been prepared will affect *two accounts*:

- one account in the Statement of Profit or Loss (Profit or Loss Summary account)
- one account in the Statement of Financial Position.

On the other hand, those items in the trial balance will only appear once – either in the Statement of Profit or Loss or in the Statement of Financial Position.

In addition to these balance day adjustments, a **clearing entry** to clear the accounts for the GST must also be made.

Worksheet (if required) The following steps occur in order to prepare a 10-column worksheet:

- The original trial balance is prepared in the first two columns.
- Any balance day adjustments are entered into the adjustment columns. In an exercise, if a balance day adjustment affects an account that is not in the trial balance it is simply added to the bottom. However, in practice or if a spreadsheet is used, the trial balance will probably deal with the whole chart of accounts and so the adjustment would be entered in the appropriate account.
- The clearing entries to the GST Clearing account in the adjustment columns are shown.
- The original figures changed by any balance day adjustments are entered into the adjusted trial balance columns.
- Those figures in the adjusted trial balance columns that affect the Statement of Profit or Loss are entered into the Statement of Profit or Loss columns. The difference between the debit and credit column is the net profit (or loss).
- Those figures in the adjusted trial balance columns that affect the Statement of Financial Position are entered into the Statement of Financial Position columns. The net profit figure is transferred to the Statement of Financial Position.

A 10-column trial balance is shown on pages 154.

Adjustments outside trial balance	Effect/ resultant general journal	Adjusted trial balance figure entry appearing in the Statement of Profit or Loss (Profit or Loss Summary account)	Adjusted trial balance figure appearing in the Statement of Financial Position
a Closing inventories \$19 500	Increase Inventory Adjustment \$500 Decrease Inventories \$500	Inventory Adjustment \$500	Inventories \$19 500
b Provision for Doubtful Debts to be 1% of Accounts Receivable (1% of 10 000 = \$100)	Decrease Provision for Doubtful Debts by \$1000 Decrease Bad and Doubtful Debts by \$1000 Increase Bad and Doubtful Debts by \$1020 Increase Provision for Doubtful Debts by \$1020	Bad and Doubtful Debts \$1020	Provision for Doubtful Debts \$100
c Sales salary still owing \$80	Increase Sales Salaries by \$80 Increase Accrued Expense by \$80	Sales Salary \$13 480	Accrued Expense \$80
d Interest still to be received \$190	Increase Accrued Revenues by \$190 Increase Interest Revenue by \$190	Interest Revenue \$1540	Accrued Revenue \$190
e Prepaid Insurance \$70	Increase Insurance by \$500 Decrease Prepaid Insurance by \$500	Insurance \$500	Prepaid Insurance \$70
f Received rent in advance \$200	Decrease Rent Revenue by \$200 Increase Unearned Revenue by \$200	Rent Revenue \$6800	Unearned Revenue \$200
g Depreciation on Building at 5% on cost (5% of \$25 000 = \$1250)	Increase Depreciation on Building by \$1250 Increase Accumulated Depreciation on Building by \$1250	Depreciation on Building \$1250	Accumulated Depreciation on Building \$3750
h Depreciation on Delivery Vehicle at 30% diminishing balance (30% of \$12 000 – \$3000 = \$2700)	Increase Depreciation on Delivery Vehicle by \$2700 Increase Accumulated Depreciation on Delivery Vehicle by \$2700	Depreciation on Delivery Vehicle \$2700	Accumulated Depreciation on Delivery Vehicle \$5700
i GST Clearing	Decrease GST Collected \$900 Increase GST Clearing \$900 Decrease GST Clearing \$400 Decrease GST Credits Received \$400	—	GST Clearing (Payable) \$500

Dr				Ledger				Cr	
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$		
2020				2020					
Profit or Loss Summary								No 5102	
June 30	Sales Returns		1 620	June 30	Sales		73 180		
30	Cost of Goods Sold		18 190	30	Commission Revenue		320		
30	Inventory Adjustment		500	30	Interest Revenue		1 540		
30	Delivery Vehicle Expenses		850	30	Rent Revenue		6 800		
30	Sales Salary		13 480						
30	Depreciation on Delivery Vehicle		2 700						
30	Loss on Disposal of Delivery Vehicle		100						
30	Insurance		500						
30	Office Salaries		24 340						
30	Rates		310						
30	Stationery		720						
30	Depreciation on Building		1 250						
30	Bad and Doubtful Debts		1 020						
30	Bank Charges		250						
30	Interest Expense		2 280						
30	Capital (net profit)		13 730						
			<u>\$81 840</u>				<u>\$81 840</u>		

Worksheet of AJ's Equipment for year ended 30 June 2020

No	Title	Trial Balance		Adjustments		Adjusted Trial Balance		Statement of Profit or Loss		Statement of Financial Position	
		Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
1101	Sales		73 180				73 180				
1101A	Sales Returns and Allowances	1 620				1 620		1 620			
1103	Commission Revenue		320				320				320
1105	Interest Revenue		1 350		190 d		1 540				1 540
1106	Rent Revenue		7 000	200 f			6 800				6 800
2105	Cost of Goods Sold	18 190				18 190		18 190			
2106	Inventory Adjustment			500 a			500		500		
2303	Delivery Vehicle Expenses	850				850		850			
2304	Deprec. on Delivery Vehicle			2 700 h			2 700		2 700		
2305	Sales Salaries	13 400		80 c		13 480		13 480			
2307	Loss on Disposal of Delivery Vehicle	100				100		100			
2403	Deprec. on Building			1 250 g			1 250		1 250		
2408	Insurance			500 c			500		500		
2411	Office Salaries	24 340				24 340		24 340			
2413	Rates	310				310		310			
2416	Stationery	720				720		720			
2501	Bad and Doubtful Debts	1 000				1 020 b		1 020			
2502	Bank Charges	250				250		250			
2504	Interest Expense	2 280				2 280		2 280			
3103	Cash at Bank	800				800				800	
3104	Accounts Receivable	10 000				10 000					10 000

Worksheet of AJ's Equipment for year ended 30 June 2020

No	Title	Trial Balance			Adjustments			Adjusted Trial Balance			Statement of Profit or Loss			Statement of Financial Position		
		Dr	Cr	\$	Dr	Cr	\$	Dr	Cr	\$	Dr	Cr	\$	Dr	Cr	\$
3104A	Provision for Doubtful Debts		80		1000 b	1020 b				100						100
3106	Inventories	20 000				500 a		19 500						19 500		
3107	Accrued Revenue				190 d			190						190		
3109	Prepaid Insurance	570				500 c		70						70		
3201	Bonds	6 000						6 000						6 000		
3302	Delivery Vehicles	12 000						12 000						12 000		
3302A	Accum. Deprec. on Delivery Vehicles		3 000			2700 h				5 700						5 700
3305	Building	25 000						25 000						25 000		
3305A	Accum. Deprec. on Building		2 500			1250 g				3 750						3 750
3306	Land	114 000						114 000						114 000		
4101	Accounts Payable		8 700							8 700						8 700
4202.1	GST Clearing (Payable)				400 i	900 i				500						500
4202.2	GST Collected		900		900 i											
4202.2A	GST Credits Received	400				400 i										
4104	Accrued Expenses					80 c				80						80
4105	Unearned Revenue					200 f				200						200
4202	Loan on Mortgage		15 000							15 000						15 000
5101	Capital – A Jomis		140 000							140 000						140 000
5101A	Drawings	200						200						200		
		\$252 030	\$252 030		\$8 740	\$8 740		\$255 870	\$255 870		68 110	81 840		187 760	174 030	
	Net profit (loss)										13 730				13 730	
											\$81 840	\$81 840		\$187 760	\$187 760	

AJ's Equipment
Statement of Profit or Loss for year ended 30 June 2020

	\$	\$	\$
Sales		73 180	
<i>Less Sales Returns</i>		<u>1 620</u>	71 560
<i>Less Cost of Sales</i>			
Cost of Goods Sold		18 190	
Inventory Adjustment		<u>500</u>	<u>18 690</u>
Gross profit			52 870
<i>Add Other Revenue</i>			
Commission Revenue		320	
Interest Revenue		1 540	
Rent Revenue		<u>6 800</u>	<u>8 660</u>
			61 530
<i>Less Other Expenses</i>			
<i>Selling Expenses</i>			
Delivery Vehicle Expenses	850		
Depreciation on Delivery Vehicle	2 700		
Sales Salary	13 480		
Loss on Disposal of Delivery Vehicle	<u>100</u>	17 130	
<i>Administrative Expenses</i>			
Depreciation on Building	1 250		
Insurance	500		
Office Salaries	24 340		
Rates	310		
Stationery	<u>720</u>	27 120	
<i>Finance Expenses</i>			
Bad and Doubtful Debts	1 020		
Bank Charges	250		
Interest Expense	<u>2 280</u>	<u>3 550</u>	<u>47 800</u>
Net profit			<u><u>\$13 730</u></u>

AJ's Equipment
Statement of Financial Position as at 30 June 2020

	\$	\$	\$	\$
Assets				
Current Assets				
Cash at Bank			800	
Accounts Receivable	10 000			
Less Provision for Doubtful Debts	<u>100</u>	9 900		
Inventories		19 500		
Accrued Revenue		190		
Prepaid Insurance		<u>70</u>	30 460	
Non-Current Assets				
<i>Other Financial Assets</i>				
Bonds		6 000		
<i>Property, Plant and Equipment</i>				
Delivery Vehicle (at cost)	12 000			
Less Accum. Deprec. on Delivery Vehicle	<u>5 700</u>	6 300		
Building (at cost)	25 000			
Less Accum. Deprec. on Building	<u>3 750</u>	21 250		
Land (at cost)	<u>114 000</u>	<u>141 550</u>		
			<u>147 550</u>	
Total assets				178 010
Liabilities				
Current Liabilities				
Accounts Payable	8 700			
GST Clearing (payable)	500			
Accrued Expenses	80			
Unearned Revenue	<u>200</u>	9 480		
Non-Current Liabilities				
Loan on Mortgage		<u>15 000</u>		
Total liabilities			<u>24 480</u>	
Net assets				<u>\$153 530</u>
Owner's Equity				
Capital – A Jonis		140 000		
Add Net profit		<u>13 730</u>		
		153 730		
Less Drawings		<u>200</u>		
			<u>\$153 530</u>	

2.35

Why do some balance day adjustments require reversing entries and others do not?

2.36

Describe the accounting theory relevant to the determination of profit for a period.

2.37

Hadid Exhausts and Parts' trial balance at 30 June 2020 is set out below.

- Show the general journal entries for each of the balance day adjustments and the GST Clearing account.
- Show the effect of these entries on the relevant ledger accounts.
- Prepare a properly classified Statement of Profit or Loss and Statement of Financial Position.

Hadid Exhausts and Parts Trial Balance as at 30 June 2020		
Account	Debit \$	Credit \$
Building	155 000	
Sales		40 000
Sales Returns	1 746	
Drawings	3 000	
Inventories	17 000	
Cost of Goods Sold	14 486	
Motor Vehicle	8 000	
Land	115 000	
Advertising	3 000	
Interest Expense	2 000	
Commission Revenue		1 560
Prepaid Insurance	1 600	
Rates	400	
Telephone	235	
Rent Revenue		4 600
Accounts Receivable Control	8 000	
Accounts Payable Control		6 600
GST Collected		400
GST Credits Received	150	
Cash at bank	5 650	
Bonds	7 850	
Interest Revenue		200
Goodwill	12 000	
Mortgage on Land and Buildings		55 000
Capital – J Hadid		254 757
Office Salaries	8 000	
	<u>\$363 117</u>	<u>\$363 117</u>
<i>Adjustments</i>		
- Inventories by physical stocktake at 30 June 2020 are \$16 800. - Rent Received in Advance is \$100. - Salaries still owing are \$840. - Telephone Expense still owing is \$40. - Prepaid Insurance is \$300. - Provision for Doubtful Debts to be created at 2 per cent of Accounts Receivable. - Accrued Interest Received is \$250.		

2.38

The following trial balance has been extracted from the books of Kent Carpets. On the basis of this, prepare:

- journal entries to record the adjustments and GST clearing
- a fully classified Statement of Profit or Loss and Statement of Financial Position.

Kent Carpets Trial Balance as at 30 June 2020

Account	Debit \$	Credit \$
Capital – A Kent		219 000
Drawings	80	
Cash at Bank	2 670	
Cash in Hand	180	
Accounts Receivable	1 700	
Accounts Payable		1 750
GST Credits Received	100	
GST Collected		250
Motor Vehicle	6 000	
Accumulated Depreciation on Motor Vehicle		5 000
Premises	110 000	
Land	108 000	
Mortgage on Premises		11 000
Cost of Goods Sold	23 460	
Salaries – Office	1 860	
Salaries – Sales	2 640	
Rates	350	
Motor Vehicle Expenses	400	
Advertising	800	
Cartage on Sales	240	
Provision for Doubtful Debts		700
Office Expenses	260	
Bank Charges	40	
Interest Revenue		30
Bad and Doubtful Debts	50	
Rent Revenue		200
Sales		25 000
Inventories	4 000	
Sales Returns	100	
	<u>\$262 930</u>	<u>\$262 930</u>

Adjustments

- Rent still owing to Kent is \$200.
- Accrued Advertising is \$200.
- Accrued Salaries – Office: \$165
– Sales: \$150.
- Rates still owing are \$125.
- Depreciation on Premises is \$1200.
- Depreciation on Motor Vehicle is \$300.
- Provision for Doubtful Debts to increase to \$800.

2.39

On the basis of Cheung Books' trial balance as at 31 December 2020, show the general journal entries for each of the balance day adjustments and clearing, classified Statement of Profit or Loss and Statement of Financial Position.

Cheung Books Trial Balance as at 31 December 2020		
Account	Debit \$	Credit \$
Delivery Expenses	1 460	
Accounts Receivable Control	14 000	
Car Expenses – Sales	1 300	
Sales		150 640
Telephone	750	
Inventories	16 700	
General Administrative Expenses	5 990	
Commission – Sales	2 300	
Cost of Goods Sold	67 500	
Retail Fittings	3 600	
Sales Returns	1 400	
Bad and Doubtful Debts	2 100	
Electricity	400	
Accounts Payable Control		6 000
GST Collected		600
GST Credits Received	400	
Advertising	2 600	
Manager's Car	15 800	
Interest Expense	300	
Stationery	870	
Accumulated Depreciation on Retail Fittings		400
Cash in Hand	40	
Prepaid Insurance	700	
Salaries – Sales	28 600	
Provision for Doubtful Debts		170
Office Rent	10 200	
Office Equipment	2 300	
Bank		8 700
Capital – T Cheung		9 250
Goodwill	4 500	
Drawings	500	
Commission Revenue		8 300
Gain on Sale of Non-current Assets		250
	<u>\$184 310</u>	<u>\$184 310</u>
<i>Adjustments</i>		
- Inventories as per physical stocktake at 31 December 2020 are \$16 300 - Salaries outstanding are \$50 - Accrued Electricity is \$40 - Prepaid Insurance is \$300. - Commission still to be received is \$250. - Estimated Provision for Doubtful Debts is to be \$200. - Depreciation to be written off: Retail Fittings – 20% reducing balance Manager's Car – 25% straight line Office Equipment – 10% straight line. - Stock of Stationery at 31 December 2020 is \$100.		

2.40

The following is the trial balance of Hoover Cosmetics as at 31 December 2020. On the basis of this information, prepare a properly classified Statement of Profit or Loss and Statement of Financial Position.

Hoover Cosmetics Trial Balance as at 31 December 2020

Account	Debit \$	Credit \$
Sales		148 210
Bank	1 390	
Salaries – Sales	41 080	
Prepaid Insurance	460	
Rates	210	
Delivery Vehicles	20 480	
Office Salaries	16 900	
Sales Returns	2 610	
Bank Charges	140	
Accounts Receivable	15 000	
Delivery Vehicle Expenses	1 840	
Office Furniture	10 300	
Building	80 300	
Advertising	680	
Rent of Building		8 410
Accumulated Depreciation on Delivery Vehicle		5 600
Interest Revenue		390
Bad and Doubtful Debts	2 150	
Office Expenses	390	
Cost of Goods Sold	88 100	
Accumulated Depreciation on Office Furniture		3 090
Postage	190	
Stationery	240	
Drawings	1 100	
Provision for Doubtful Debts		200
Commission Revenue		270
Inventories	15 200	
Telephone	1 270	
Mortgage on Building		40 000
Accounts Payable		18 000
GST Collected		1 180
GST Credits Received	400	
Capital – E Hoover		190 000
Electricity	890	
Bonds	8 000	
Land	110 000	
Accumulated Depreciation on Building		4 000
Cash in Hand	30	
	<u>\$419 350</u>	<u>\$419 350</u>

Adjustments

- Interest on Mortgage still owing is \$2000.
- Rent received in advance is \$400.
- Prepaid Insurance is \$30.
- Stock of Stationery at 31 December 2020 is \$150.
- Provision for Doubtful Debts to be 2% of accounts receivable.
- Interest still to be received is \$390.
- Depreciation to be written off:
 - Building – the building has an estimated life of 20 years
 - Delivery vehicles – 25% reducing balance
 - Office furniture – 15% straight line.

2.41

After preparing the solution to Question 2.40, calculate the following:

- a** the amount of difference the effect of the balance day adjustments has on the revenue items
- b** the amount of difference the effect of the balance day adjustments has on the expense items
- c** the amount of difference the effect of the balance day adjustments has on the final profit figure.

Are these balance day adjustments justifiable? Why

Spreadsheet application

2.42

The following is a 10-column worksheet that automatically prepares the Statement of Profit or Loss and Statement of Financial Position.

	A	B	C	D	E	F	G	H	I	J	K	L
1	INPUT/ASSUMPTIONS						INPUT/ASSUMPTIONS					
2												
3				Worksheet of		AJ's Equipment						
4				for year ended		30 June 2020						
5												
6			Trial Balance		Adjustments		Adjusted Trial		Statement of		Statement of	
7							Balance		Profit or Loss		Financial Position	
8	Account	Account title	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
9	No											
10												
11	1101	Sales		73,180				73,180		73,180		
12	1101A	Sales Returns & Allow	1,620				1,620		1,620			
13	1103	Commission Revenue		320				320		320		
14	1105	Interest Revenue		1,350		190		1,540		1,540		
15	1106	Rent Revenue		7,000	200			6,800		6,800		
16	2105	Cost of Goods Sold	18,190				18,190		18,190			
17	2106	Inventory Adjustment	0		500		500		500			
18	2301	Advertising	0				0		0			
19	2302	Cartage Outwards	0				0		0			
20	2303	Delivery Vehicle Expenses	850				850		850			
21	2304	Deprec on Delivery Veh	0		2,700		2,700		2,700			
22	2305	Sales Salaries	13,400		80		13,480		13,480			
23	2307	Loss on Disposal of Del Veh	100				100		100			
24	2403	Deprec on Building	0		1,250		1,250		1,250			
25	2405	Deprec on Office Furniture	0				0		0			
26	2407	Electricity	0				0		0			
27	2408	Insurance	0		500		500		500			
28	2410	Office Expenses	0				0		0			
29	2411	Office Salaries	24,340				24,340		24,340			
30	2412	Postage	0				0		0			
31	2413	Rates	310				310		310			
32	2416	Stationery	720				720		720			
33	2419	Telephone	0				0		0			
34	2501	Bad and Doubtful Debts	1,000		1,020	1,000	1,020		1,020			
35	2502	Bank Charges	250				250		250			
36	2504	Interest Expense	2,280				2,280		2,280			
37	3103	Cash at Bank	800				800				800	
38	3104	Accounts Receivable	10,000				10,000				10,000	
39	3104A	Prov for Doubtful Debts		80	1,000	1,020		100				100
40	3106	Inventories	20,000			500	19,500				19,500	
41	3107	Accrued Revenue	0		190		190				190	
42	3108	Prepaid Expenses	0				0				0	
43	3109	Prepaid Insurance	570			500	70				70	
44	3201	Bonds	6,000				6,000				6,000	
45	3301	Office Furniture	0				0				0	
46	3301A	Accum Deprec on Office Furn		0				0				0
47	3302	Delivery Vehicles	12,000				12,000				12,000	
48	3302A	Accum Deprec on Delivery Veh		3,000		2,700		5,700				5,700
49	3305	Building	25,000				25,000				25,000	
50	3305A	Accum Deprec on Building		2,500		1,250		3,750				3,750

	A	B	C	D	E	F	G	H	I	J	K	L
51	3306	Land	114,000				114,000				114,000	
52	4101	Accounts Payable		8,700				8,700				8,700
53	4202.1	GST Clearing (Payable)			400	900		500				500
54	4202.2	GST Collected		900	900							
55	4202.2A	GST Credits Received	400			400						
56	4104	Accrued Expenses				80		80				80
57	4105	Unearned Revenue				200		200				200
58	4202	Loan on Mortgage		15,000				15,000				15,000
59	5101	Capital - A Jonis		140,000				140,000				140,000
60	5101A	Drawings	200				200				200	
61			252,030	252,030	8,740	8,740	255,870	255,870	68,110	81,840	187,760	174,030
62		Net Profit (- Loss)							13,730			13,730
63									81,840	81,840	187,760	187,760
64												
65		Proof - Trial Balance	0									
66		Proof - Adjustments	0									
67		Proof - Adj Trial Balance	0									
68		Proof - State Profit or Loss	0									
69		Proof - State Fin Position	0									
70		Proof - Net Profit	0									
71		Proof - State Fin Position Totals	0									

	A	B	C	D	E	F	G
1	REPORT						
2							
3	AJ's Equipment						
4	Statement of Profit or Loss						
5	for year ended 30 June 2020						
6					\$	\$	\$
7							
8	Sales					73,180	
9	Less Sales Returns					1,620	71,560
10							
11	Less Cost of Sales						
12	Cost of Goods Sold					18,190	
13	Inventory Adjustment					500	18,690
14	GROSS PROFIT						52,870
15							
16	Add Other Revenue						
17	Commission Revenue					320	
18	Interest Revenue					1,540	
19	Rent Revenue					6,800	8,660
20							61,530
21	Less Other Expenses						
22							
23	Selling Expenses						
24	Advertising				0		
25	Cartage Outwards				0		
26	Delivery Vehicle Expenses				850		
27	Deprec on Delivery Vehicles				2,700		
28	Sales Salaries				13,480		
29	Loss on Disposal of Del Veh				100	17,130	
30							
31	Administrative Expenses						
32	Deprec on Building				1,250		
33	Deprec on Office Furniture				0		
34	Electricity				0		
35	Insurance				500		
36	Office Expenses				0		
37	Office Salaries				24,340		
38	Postage				0		
39	Rates				310		
40	Stationery				720		
41	Telephone				0	27,120	
42							
43	Finance Expenses						
44	Bad and Doubtful Debts				1,020		
45	Bank Charges				250		
46	Interest Expense				2,280	3,550	47,800
47	NET PROFIT						\$13,730
48							

	A	B	C	D	E	F	G
49	AJ's Equipment						
50	Statement of Financial Position						
51	as at	30 June 2020					
52							
53				\$	\$	\$	\$
54	ASSETS						
55	Current Assets						
56	Cash at Bank					800	
57	Accounts Receivable				10,000		
58	Less Prov for Doubtful Debts				100	9,900	
59	Inventories					19,500	
60	Accrued Revenue					190	
61	Prepaid Expenses					0	
62	Prepaid Insurance					70	30,460
63							
64	Non-Current Assets						
65							
66	Other Financial Assets						
67	Bonds					6,000	
68							
69	Property, Plant & Equipment						
70	Office Furniture			0			
71	Less Accum Deprec on Off Fur			0	0		
72							
73	Delivery Vehicle (at cost)			12,000			
74	Less Accum Deprec on Del Veh			5,700	6,300		
75							
76	Building (at cost)			25,000			
77	Less Accum Deprec on Build			3,750	21,250		
78							
79	Land				114,000	141,550	147,550
80	Total Assets						178,010
81							
82	LIABILITIES						
83	Current Liabilities						
84	Accounts Payable				8,700		
85	GST Clearing (Payable)				500		
86	Accrued Expenses				80		
87	Unearned Revenue				200	9,480	
88							
89	Non-Current Liabilities						
90	Loan on Mortgage					15,000	
91							24,480
92	NET ASSETS						\$153,530
93							
94	OWNER'S EQUITY						
95	Capital					140,000	
96	add Net Profit					13,730	
97						153,730	
98	Less Drawings					200	
99							\$153,530
100							

- a Prepare a model for the 10-column worksheet and financial reports and save it under the name of Worksheet 1. The whole 10-column worksheet will become the input/assumptions area for this model and should be in a worksheet called Input Assumptions. It will spread across possibly two screens. Create another worksheet called Reports for your report area (Statement of Profit or Loss and Statement of Financial Position).

	A	B	C	D	E	F	G	H	I	J
1	INPUT/ASSUMPTIONS					INPUT/ASSUMPTIONS				
2										
3				Worksheet of		AJ's Equipment				
4				for year ended		30 June 2020				
5										
6				Trial Balance		Adjustments		Adjusted Trial		Statement of
7								Balance		Profit or Loss
8	Account	Account title	Dr	Cr	Dr	Cr	Dr	Cr	Dr	Cr
9	No									
10										
11	1101	Sales		73180				=C11+D11-E11+F11		=H11
12	1101A	Sales Returns & Allow	1620				=C12-D12+E12-F1	=G12		
13	1103	Commission Revenue		320				=C13+D13-E13+F13		=H13
14	1105	Interest Revenue		1350		190		=C14+D14-E14+F14		=H14
15	1106	Rent Revenue		7000	200			=C15+D15-E15+F15		=H15
16	2105	Cost of Goods Sold	18190				=C16-D16+E16-F1	=G16		
17	2106	Inventory Adjustment	0		500		=C17-D17+E17-F1	=G17		
18	2301	Advertising	0				=C18-D18+E18-F1	=G18		
19	2302	Cartage Outwards	0				=C19-D19+E19-F1	=G19		
20	2303	Delivery Vehicle Expenses	850				=C20-D20+E20-F2	=G20		
21	2304	Deprec on Delivery Veh	0		2700		=C21-D21+E21-F2	=G21		
22	2305	Sales Salaries	13400		80		=C22-D22+E22-F2	=G22		
23	2307	Loss on Disposal of Del Veh	100				=C23-D23+E23-F2	=G23		
24	2403	Deprec on Building	0		1250		=C24-D24+E24-F2	=G24		

In the screen above, a separate worksheet has been set up for Input Assumptions. All of the data will be entered in these cells.

	A	B	C	D	E	F	G
1	REPORT						
2							
3	=Input Assumptions!F3						
4	Statement of Profit or Loss						
5	for year ended	=Input Assumptions!F4					
6						\$	\$
7							
8	Sales					=Input Assumptions!J11	
9	Less Sales Returns					=Input Assumptions!J12	=F8-F9
10							
11	Less Cost of Sales						
12	Cost of Goods Sold					=Input Assumptions!J16	
13	Inventory Adjustment					=Input Assumptions!J17	=SUM(F12:F13)
14	GROSS PROFIT						=G9-G13
15							
16	Add Other Revenue						
17	Commission Revenue					=Input Assumptions!J13	
18	Interest Revenue					=Input Assumptions!J14	
19	Rent Revenue					=Input Assumptions!J15	=SUM(F17:F19)
20							=G19+G14
21	Less Other Expenses						
22							
23	Selling Expenses						
24	Advertising				=Input Assumptions!J18		
25	Cartage Outwards				=Input Assumptions!J19		

In the screen on the previous page, which shows the Reports worksheet, all the formulas in column F that require data from the Input Assumptions area show a formula with a link. This is very simply done. In the Reports worksheet, where you want the figure to appear, click on the cell and type an = sign; click on the input Assumptions worksheet along the bottom of the screen; click on the cell you want to link in the input Assumptions worksheet and press Enter.

- b Print the worksheet in the normal mode.
- c Print the worksheet showing all formulas.
- d Open the worksheet called Worksheet 1 and adjust the worksheet so that all figures are zero. Save this template as Worksheet.
- e From the data in Question 2.40, use the Worksheet template to obtain the financial reports.

Real-world application



Firms are adapting to global disruption

Renee Feltrin

In SA (South Australia), along with the rest of the world, the accounting profession is facing significant change, with much more diversity and disruption than experienced in the past.

The *Advertiser's* survey reflects the shift currently taking place in the profession – the traditional accounting activities centred on bookkeeping, tax and audit have now been overtaken, with consulting and advisory services becoming the fastest-growing service lines.

The view of the profession of today – as an analytical, black-and-white and traditional role – is now giving way to the profession of the future. We are sense makers, growth accelerators, critical thinkers and digitally savvy. This is the same trend that came to light from Chartered Accountants Australia and New Zealand's (CA ANZ) Strategic Review last year, which instigated our organisation-wide transformation.

It is critical that the SA accounting profession thrives as the world changes around it with leaps in technology, mobility, artificial and augmented intelligence, and globalisation.

The fact that the 26 firms surveyed have accurately identified these as challenges in the near future is a step many other businesses and professions have yet to take.

The next step is to expand capacity and capabilities to embrace new technologies and apply core accounting skills to a wider range of services such as solving highly complex business problems.

Source: 'SA Accounting Firms are adapting to global disruption', Renee Feltrin, *The Advertiser*, 29 May 2018, <https://www.adelaidenow.com.au/>. The use of this work has been licensed by Copyright Agency except as permitted by the Copyright Act, you must not re-use this work without the permission of the copyright owner or Copyright Agency.

Analysis and interpretation of financial reports

Limitations of financial reports

The accounting system of a firm attempts to provide information for a wide variety of users. As has previously been discussed, three financial reports are prepared: the Statement of Profit or Loss, the Statement of Financial Position and the Statement of Cash Flows. These three statements form the cornerstone of financial information that is provided to interested parties.

Accountants in the past have tried to satisfy the majority of users by producing general purpose statements based on accounting principles that are generally accepted. Increasingly, they are now producing reports specially prepared for particular groups of users. For example, some businesses produce a version of their annual report for employees. Such moves overcome some of the criticisms levelled at general purpose reports. But this is a costly approach and does not overcome other more general limitations of accounting reports.

These general limitations are due mainly to the fact that accountants prepare their reports based on accounting concepts and principles. You have already been applying many accounting concepts and principles as you have been preparing your accounting reports and analysing your results. It is now timely to revisit them and to integrate your understanding as we move onto expanding the analysis of financial reports.

Financial reports have been prepared based on the following **accounting concepts**:

- **Accounting Period concept** This concept assumes that the life of the business is divided into arbitrary time periods in order for periodic reporting to be done on the performance of the business.
- **Accounting Entity concept** This concept separates the owner from the business and recognises that for the purposes of accounting, all transactions are recorded from the viewpoint of the business.

The main **principles** which you have been applying in your accounting are:

- **Monetary principle** This principle states that all transactions are recorded in the common monetary unit in use (dollars and cents).
- **Going concern principle** This principle requires that the business is going to continue its operations indefinitely and is not likely to be liquidated in the foreseeable future.
- **Historical cost principle** This principle states that all assets are initially recorded at the amount of cash or cash equivalents paid at the time of acquisition.

In addition, information should have certain characteristics in order to be included in general purpose financial reports. These are called the **qualitative characteristics**³ of financial information and have been judged to be the characteristics of most use to those decision makers who are relying on these financial reports. The fundamental characteristics are as follows:

- **Relevance (including materiality)** Relevant financial information is information that is capable of making a difference in the decisions made by users. It can make a difference if it is going to assist in confirming information that already exists or helps in predicting future information that will assist users in making current decisions. For example, the provision of timely revenue information for this year can assist in confirming past revenue trends and also in predicting future revenue information.

Relevance of information is affected by materiality. Materiality refers to the importance of an item to the particular entity. Information is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. The size or nature of the item, or a combination of both, could be the determining factor. Materiality is a relative concept and so it needs to be determined with the particular organisation in mind. What is material for one entity may be immaterial for another entity. Judgement is important in these circumstances. Although accounting entries must be kept in an accurate fashion, the published reports may delete immaterial information.

³ *Framework for the Preparation and Presentation of Financial Statements*, Australian Accounting Standards Board (AASB), 2016, pp. 36–43.

For example, cents are ignored or rounded to the nearest dollar, and even dollars may be rounded to the nearest one thousand (\$'000) or one million dollars (\$m) in larger organisations.

- **Faithful representation** For information to be most useful it should be as complete as possible, as neutral as possible and as free from error as possible. To be as complete as possible, information might need to be presented in both numeric and non-numeric terms. To be as neutral as possible, information must be relevant but not biased. To be as free from error as possible means that the item can be an estimate, but that all information about how the estimate was derived should be provided.
- **Comparability** It is desirable to compare aspects of an entity over a period of time. It is also desirable to compare one entity with others and/or with industry averages at a point in time or over a period of time. Consistent measurement and display is important if proper comparability is to be achieved. However, if a change in accounting method or policy is desirable, comparability will have to be sacrificed. This change would then be disclosed to interested parties to aid their decision making.
- **Verifiability** Users are assured that the information presented does represent the economic events that have occurred. For information to be verifiable, different independent observers should reach a consensus that the figures presented are a faithful representation of economic events.
- **Timeliness** Timely information is available to decision makers in time for it to be capable of influencing their decisions. There can be a trade-off between timeliness and accuracy. However, where the information presented is an estimate, then the basis of the estimate should be disclosed.
- **Understandability** Information should be presented in the most understandable manner possible without sacrificing relevance or faithful representation. General purpose reports should be prepared with the interests of users in mind. However, accounting is complex, and preparers should not misstate information by trying to oversimplify its presentation. Users must exercise diligence and appropriate expertise in reviewing reports.

Each of these concepts, principles and characteristics affects the preparation and/or presentation of accounting reports. Two of these that cause particular problems or conflicts, and may limit the usefulness of the final reports, are:

- **Accounting period** The adoption of the accounting period concept often **leads to a degree of estimation** being included in the reports. Doubtful debts, depreciation and inventory valuations are particularly affected. This concept is thus to some extent in conflict with the desirable characteristics of faithful representation and comparability.
- **Historical cost** The strict adoption of the historical cost principle means that many assets are recorded in terms of their historical cost, although their true value may be quite different. It also means that no attempt is made to cater for changes in money values – a serious problem in times of price-level changes. Historical cost certainly lessens the degree of relevance and understandability of the financial information in accounting reports.

In particular, it must be appreciated that published reports often only show what is required by law, and/or are shown in a way dictated by laws or standards. Only key figures may be disclosed. So it is likely that few readers of accounting reports have all the necessary information or knowledge needed to make perfect decisions. Notes appended to the reports give more details and describe how laws and standards have been applied. These are most helpful but must be read carefully.

Limitations of the Statement of Profit or Loss

When reading a Statement of Profit or Loss, many people mistakenly believe that the reported profit or loss figure is the only possible figure that could have been obtained. It is sometimes claimed that because the Profit or Loss Summary account or Statement of Profit or Loss balances when profit or loss is included, the resulting profit (or loss) must be correct.

In fact, for a number of reasons, this reported profit figure is only an estimate of whatever the true profit may be. The reported profit figure is nothing more than a balancing figure and is simply the difference

between the revenues and expenses. Therefore, the fact that the account or statement balances proves nothing.

The true profit figure (disregarding price level changes) can really only be determined at the end of the business's life. However, as users require more frequent profit figures, the accounting period concept is adopted.

Accounting standard setters have made changes over the years to bring about a more consistent accounting treatment of all transactions so that accounting reports prepared in one country are similar to reports prepared in another country. This is the objective, but it has not yet been fully achieved. There are still many estimates and interpretations that can be made in determining periodic profit. These will now be discussed.

Inventory

The inventory figures used to calculate cost of sales (cost of goods sold and inventory adjustment) can differ widely, depending on the inventory system and valuation methods used. The accuracy of the stock figures depends on the accuracy of stocktaking and/or record keeping employed. Generally, more control can be gained by employing a perpetual inventory system.

Due to the application of accounting standards, inventories are usually valued at 'the lower of cost and net realisable value'. This may result in lower inventory figures, and thus lower profit figures, than an application of each of these systems used consistently. However, both 'cost' and 'net realisable value' are difficult figures to determine. Cost determined under the **historical cost principle** may be interpreted as specific identifiable cost, FIFO, weighted average cost or standard cost. Each of these different meanings for cost will give different figures for inventory, cost of goods sold and profit.

Determining net realisable value (NRV) is no less of a problem. Even if it is clearly decided that NRV means the estimated proceeds of sales less the estimated costs of marketing, selling and distribution, there is still the problem of actually arriving at a figure for this. As both the sales and cost figures relate to the future, there is considerable room for error or difference of judgement in such estimations.

Considering the degree of interpretation and the estimate involved in arriving at the inventory figure, it is clear why cost of goods sold and the reported profit figure must be used with some care.

Depreciation

The depreciation figure also involves estimation. The calculation of the depreciation figure in any year includes three factors: the cost of the asset, its estimated life and its estimated residual value. The last two of these involve a degree of estimation. As discussed earlier, different methods of calculating the depreciation – such as the straight line or diminishing balance methods – can also result in widely differing depreciation figures. Often one method is chosen for use with all depreciable assets owned by the business when a variety of methods may be more suited to the type of assets owned.

Clearly, then, there is no one 'correct' depreciation charge to be included in the Statement of Profit or Loss.

Doubtful debts

A further figure in the Statement of Profit or Loss that involves estimation is that for doubtful debts. Following the **accounting period concept**, a judgement is made as to those debts that might prove irrecoverable. This judgement will influence the amount of the bad and doubtful debts expense and will therefore affect the profit figure.

Price changes

Limitations in the use of the Statement of Profit or Loss other than those discussed so far are also caused by price changes. Price changes mean that even if reports are prepared on a consistent basis, their results will not be comparable from one period to another due to the change in the **purchasing power of money**. Due to inflation,

a \$1 million profit at the present time would not be equal to a \$1 million profit 10 years ago. Valid comparisons could only be made if all the items in the statements were stated in dollars for a common year.

Price changes also highlight the problem of **additivity** of items in the Statement of Profit or Loss. Revenues are usually expressed in terms of dollars for the current period, but some of the expense items, such as depreciation and cost of goods sold (which have already been discussed), are expressed in out-of-date figures. Some accountants claim that the following are a large limitation: the addition of current costs (for items such as wages) to out-of-date costs (for items such as depreciation), and the subtraction of them from current revenues.

Manipulation

To highlight how the profit figure can be affected or even manipulated for short-term gain, suppose you were a manager who has just been appointed to a new position. You will receive a bonus if the profit figure in your first year increases by 20 per cent. The firm has just purchased a new machine, which costs \$300 000 with a life of four years and a residual value of \$20 000. In reality, the machine should be depreciated using diminishing balance depreciation. If this were the case, using the formula on page 13, the rate would be 49.19 per cent and depreciation in the first year should be \$147 570. However, if the straight line method is chosen, the amount of depreciation in the first year will be \$70 000. If you were the manager and the decision was yours, which method would you choose? If straight line is chosen, the manager has not done anything technically wrong in terms of the accounting standards. However, profit will be \$77 570 more and the manager would receive a higher bonus. As you already know, this could only occur for a short period of time because the same total amount of depreciation will be written off over the four years regardless of the method. However, the method chosen is what makes the yearly depreciation figures different and so the final profit figure in any year can be manipulated.

Limitations of the Statement of Financial Position

As with the Statement of Profit or Loss, many people believe that if the Statement of Financial Position 'balances' it must be correct. This is not true. It simply indicates that double-entry accounting procedures have been properly followed throughout the accounting period.

Many people also see the Statement of Financial Position as providing an indication of the value or worth of the business and its net assets. ***A Statement of Financial Position prepared under the historical cost principle does not attempt to provide a figure for the value of the assets to the business, either in terms of service potential to the business, or in terms of a realisation value.*** Assets are not listed at the price the business could sell them for, or according to how much they will earn the business. They are generally listed at historical cost (less accumulated depreciation). This limits the usefulness of the Statement of Financial Position in the eyes of people who would use it as a value statement.

Other things that limit the usefulness of the Statement of Financial Position include the following points.

Accounts receivable or debtors

As shown previously, the calculation of the figure for the provision or allowance for doubtful debts requires judgement and estimation. Subtracting this allowance or provision from the accounts receivable figure therefore influences its usefulness as an indicator of what will actually be collected from accounts receivable.

Inventories

It has already been shown that inventory or stock figures are influenced by the application of the 'lower of cost and net realisable value' rule. Because cost is generally lower than net realisable value, the total figure for inventories is thus usually well below the NRV of the stock on hand.

The usefulness of the inventories figure is also reduced by the difficulty of calculating the actual figures, by differences of judgement on appropriate methods of valuing inventories, and by the degree of estimation involved in the calculation.

Stores or stocks of consumable items used in the business

Here *materiality* suggests that small amounts of items such as stamps, stationery, oil and fuel should not be included in the Statement of Financial Position. They should be written off as an expense. Although such an approach is obviously practical, it is not theoretically correct and, taken in conjunction with other small omissions from the Statement of Financial Position, may limit the accuracy and usefulness of the report.

Property, plant and equipment

Such assets, usually being for very large amounts, are often seen as the most important items in the Statement of Financial Position. Yet they are also the items for which accountants are most criticised when preparing their reports. Under the *historical cost principle*, such assets are normally recorded at their original cost. From this original cost, accumulated depreciation up to the balance date is deducted. Accumulated depreciation was arrived at by adding depreciation calculated each year to determine profit under the *accounting period concept*.

Even if this depreciation figure is accurate, the resulting unallocated cost figure at which the non-current asset is shown in the Statement of Financial Position (carrying amount) is of limited use. It is seldom the value for which the asset could be sold at the present time. Nor does it represent the value to the business in terms of service potential available. An asset could be fully depreciated and shown as worth nothing in the books, but still be earning good profits for the business.

Such strict applications of the *historical cost principle* also mean that increases in the value of assets are seldom shown in the Statement of Financial Position. A glaring example of the effect of this is seen in relation to land. Some smaller businesses show property bought 20 years ago for \$150 000 at this cost despite the fact that it could now be sold for \$900 000.

In order to conform to the qualitative characteristics of relevance and understandability, many businesses do decide to revalue such assets based on proper valuation reports. Non-current assets can be valued at cost or at fair value. If fair value is chosen, then it must be disclosed and revaluations made when appropriate. Obviously, fair value will present a more realistic picture in the Statement of Financial Position. However, there is no such requirement for revaluation of non-current assets to occur in many organisations and so it is left up to each organisation to make the decision.

Intangible assets

Many types of assets are included under this heading. Goodwill may be purchased with or by a business and therefore have a definite cost. In many other cases, although large amounts of goodwill could exist they will not be recorded in the business's books.

Patents and copyrights may be purchased at a definite cost or they may be valued – usually according to the amount of research and development costs expended on them. At least there is a set time established by law that gives some guide as to the time over which these items may be written down. Brands and trademarks are obviously very valuable, but are not recorded as assets unless purchased.

These items are thus treated in a very inconsistent manner. Seldom does their recorded value in the Statement of Financial Position represent the true value to the business.

Liabilities

Liabilities do not generally create many limitations to using the Statement of Financial Position. Most are for fixed amounts with definite repayment times. Small inaccuracies may occur only in items such as provisions (for company tax) or balance day adjustments where some estimation is needed.

The treatment of items such as the liabilities for leaseholds and contingent liabilities⁴ can lead to some problems, both for accountants and for users of Statements of Financial Position. Generally, however, liabilities cause fewer concerns than assets.

⁴ Contingent liabilities are likely future liabilities of the firm whose certainty is contingent on the happening of some event, such as the awarding of damages in a legal action against the firm or a request to honour a guarantee given on another's loan. As they are not fixed and certain at balance date, they are usually only shown in the final reports as a Note to the Statement of Financial Position.

Owner's equity

Contributed capital causes few problems. However, due to previous estimates, retained earnings and reserves are sometimes misleading or inaccurate. Critics point out that if inventories are consistently undervalued and excessive allowances are made for depreciation and doubtful debts, 'secret reserves' are built up. As these excessive provisions are not actually shown as reserves, this obviously means that the true state of affairs is not disclosed. It is also possible that the opposite could occur, eroding the capital base of the firm. Inadequate provisions will lead to inflated profits and excess dividends or drawings. Furthermore, any limitations discussed previously regarding assets and liabilities must also affect owner's equity. The owner's equity section of the Statement of Financial Position does not then show the true 'net worth' of the business. The business may be worth more or less than this figure.

Price changes

Price changes also cause limitations in the use of the Statement of Financial Position. As with the Statement of Profit or Loss, comparability between years is not really possible when items expressed in the dollars of one period are compared with items expressed in dollars with a **different purchasing power**.

Additivity is also a problem because of the attempt to add items (or groups of items) expressed in terms of different purchasing powers. To obtain a total for the Statement of Financial Position, groups of assets must be added together. Many assets, but some non-current assets in particular, may be expressed in very out-of-date historical cost dollar values. These are then added to items such as accounts receivable and cash expressed in current values. This process is seen by some as having serious limitations.

There has been a great deal of criticism of one of the principles on which conventional accounting has been based – the historical cost principle. Many people have suggested replacing **historical** cost with **current** cost. This would not mean that accounting as we know it will disappear. All the other concepts, principles and qualitative characteristics would remain in use in the same way.

Many attempts have been made to overcome these weaknesses of conventional accounting during times of price-level changes. Of these, current cost accounting, which would replace the concept of historical costs with current costs, was the most popular. However, most people still prefer the objectivity of historical cost accounting and feel that, so long as the concepts and principles on which it is based are understood by users of its products, it is the best system.

2.43

State the various concepts, principles and six qualitative aspects of financial information, and describe each one briefly.

2.44

A number of independent situations are given below. You are required to examine each one carefully and to:

- a indicate whether you agree or disagree with the treatment being suggested
- b justify your answer by reference to the accounting concepts, principles or qualitative characteristics that are relevant.
 - i Dr Grice is a surgeon in private practice. She is paid a salary every week. Over the years, she has accumulated a personal investment portfolio of securities, which have been purchased from her salary. The investment portfolio is shown in the accounting records of her medical practice.
 - ii Last year a wastebasket was purchased for \$15. The basket was expected to last for six years. This year another basket is purchased, but a different accounting treatment is used for it from that used last year.

- iii Negotiations are under way for your firm to build a new bridge across the river to connect the north and south sides of the city. It is estimated that the project will make a \$1 million profit for your firm. The manager estimates that the contract will be signed next week. The \$1 million profit is not shown in the firm's records.
- iv Because of a change in accounting standards, your firm has decided to change the basis of valuation for all items it owns. The change, the reason for the change, and the monetary effect of the change are all disclosed by way of a footnote to the reports presented to various users.

2.45

Explain and briefly illustrate how the adoption of certain concepts/principles affects the usefulness of various accounting reports.

2.46

Complete the following table, identifying each aspect of the limitations relating to the Statement of Profit or Loss and the Statement of Financial Position:

Aspect	Limitation	Applicable concept, principle or characteristic	Brief explanation of issue
Statement of Profit or Loss			
Inventory figures	Accuracy Estimation	Accounting period Historical cost	Based on accuracy of stocktake Based on 'lower of cost and net realisable value' rule Based on differing meanings of cost
Depreciation	Estimation	Accounting period	
Doubtful debts	Estimation		
Price changes	Change in purchasing power of money Additivity		
Manipulation	Manipulation for advantage		
Statement of Financial Position			
Accounts receivable			
Inventories			
Stores		Materiality	
Property, plant and equipment			
Intangible assets			
Liabilities			
Owner's equity			
Price changes			

2.47

'A Statement of Financial Position is a list of asset and liability account balances for a business, and therefore shows the net worth of a business at the date of those balances.' Is this statement true or false? Give reasons for your answer.

2.48

Explain how the following items could be used to manipulate the financial statements of a business:

- a doubtful debts
 - b depreciation.
-

Analysis and interpretation of financial reports for a sole trader

To make an analysis means to separate or distinguish the main elements or relationships contained in something. To carry out an interpretation means to translate or explain the meaning of something in a more understandable or useful way. In accounting, analysis and interpretation are used together to convey information to people so that they can make better decisions. Analysis can usually be done in a fairly objective, quantitative manner, involving calculation of various ratios and percentages that show the relationships between items in the financial reports. Interpretation is often more subjective and qualitative, involving judgement and decision making based on these ratios and percentages. Irrespective of which type of analysis is conducted (see below), more information can be obtained about the organisation if the results being analysed for the year become part of a trend. The most common way to do this is to compare individual results for this year with those of past years (up to 10 years) to obtain an idea as to whether this year is in line with past results or is completely different. This is called **trend analysis**. So, if this year the gross profit ratio is 50 per cent, but we can see that in the past years it has always been 60–70 per cent, then this pattern shows an area that we might wish to consider in more depth. Likewise, comparison with **industry benchmarks** provides a glimpse into the figures for our firm compared to other firms in the same industry. This also gives us further areas to examine in greater depth.

Accountants use three main types of analysis:

- **Vertical analysis** is the analysis of relationships between items or groups of items within the financial statements for one accounting period. To assist such analysis, they may present Statements of Profit or Loss with key figures expressed as a percentage of sales, and Statements of Financial Position with key figures expressed as a percentage of total assets. Vertical analysis will be covered in greater detail in Chapter 5.
- **Horizontal analysis** is the analysis of relationships between items or groups of items within the financial statements for consecutive accounting periods. To assist such analysis, they may present comparative financial statements, which provide information for two or more accounting periods. (In fact, the Corporations Act stipulates that companies must provide figures for both the current and the previous year for comparative purposes.)

Horizontal analysis is not confined to comparative statements showing differences between periods. As the focus is on one line item of the financial statements, with the purpose of determining the increase or decrease that has taken place expressed as either an amount or a percentage, this analysis can be used in any series of financial statement data over a period of time. For example, a

base year is chosen and then all percentage increases or decreases are taken from this base period. Let us use XYZ Airlines as an example where the following data for passenger revenue (\$m) is available:

2020	2019	2018	2017
\$13 857	\$13 961	\$13 667	\$13 242

If we assume that 2017 is the base year of 100 per cent, we can then measure all increases or decreases from this base and express it as a percentage, as shown in Table 2.2.

Table 2.2

XYZ Airlines			
Total passenger revenue (\$m)			
Base period 2017			
2020	2019	2018	2017
\$13 857	\$13 961	\$13 667	\$13 242
104.6%	105.4%	103.2%	100%

Thus, when applying horizontal analysis, we can determine that passenger revenue increased by 3.2 per cent from 2017 to 2018 ($\$13\,667/\$13\,242 \times 100$). Likewise, passenger revenue has increased by 4.6 per cent from 2017 to 2020 ($\$13\,857/\$13\,242 \times 100$).

- **Ratio analysis** is the analysis of relationships between items or groups of items within the financial statements expressed as ratios. Accountants and the users of financial reports have developed a series of special calculations that show more clearly the structural relationships between items in the reports. These are usually called **financial ratios**. Again, these ratios should be compared over time to see if any trends are developing. They will also allow further comparisons with other firms and industries, and with industry averages or predetermined standards, if these are available.

All of these types of analysis, but particularly the financial ratios, help to indicate:

- profitability
- liquidity
- financial stability.

A survey of calculations used by analysts reveals that there are many variations in the calculation of the same ratio. The important point to realise is that consistency in the preparation of the reports and in the calculation of the ratios from year to year or period to period is necessary to allow meaningful comparison and consideration of trends. Obviously, if comparison with industry averages is desired, calculations must also be done in the same way as these. Calculation of these ratios also varies slightly for the different ownership structures. Because of the basic similarities between sole trader and partnership businesses, they can be dealt with together. Companies will be considered separately in Chapter 5.

Ratio analysis of the Statement of Profit or Loss and the Statement of Financial Position for sole traders

We have examined two sets of ratios, profitability ratios and liquidity ratios, that can be calculated to assist in an assessment of a business's performance. The ratios that have been examined to date appear on page 178 in Table 2.3.

Table 2.3 Ratio analyses

Ratio	Formula	Measures	Benchmark
Profitability			
Net profit ratio	$\frac{\text{Net profit}}{\text{Net service revenue or net sales}} \times 100$	Net profit per dollar of service/sales revenue	Industry average
Gross profit ratio	$\frac{\text{Gross profit}}{\text{Net sales}} \times 100$	Gross profit per dollar of net sales	Industry average
Return on owner's equity	$\frac{\text{Net profit}}{\text{Average owner's equity}} \times 100$	Return on investment provided by owners	Current interest rates
Liquidity			
Turnover of inventories*	$\frac{\text{Cost of goods sold}}{\text{Average inventories}}$	How quickly inventory is sold, and thus indicates liquidity of inventories	Industry average
Turnover of accounts receivable*	$\frac{\text{Net credit sales}}{\text{Average accounts receivable}}$	Effectiveness of collections and whether accounts receivable are too high	Industry average

*If turnover is required in days, the turnover rate as calculated above must be divided into 365 or the number of days in the period that is relevant

Profitability ratios

We will now examine an additional profitability ratio: the **return on total assets ratio**. Some other profitability ratios will also be discussed.

Return on total assets (or total funds) ratio

The rate of return on total assets ratio is the ratio of net operating profit plus interest expense to total assets (or owner's equity plus liabilities):

$$\frac{\text{Net profit} + \text{Interest expense}}{\text{Average total assets}} \times 100$$

Once again, it is believed that the appropriate measure would be average total assets for the period rather than total assets at the beginning or end of the period. Most analysts would prefer to eliminate the effects of obtaining funds from different sources (gearing or leverage) by adding back to net profit any interest on external debt. It is necessary to add interest back to net profit in the numerator to reflect the fact that the efficient use of resources is not influenced by the method of finance used to acquire the assets.

If net profit is \$19 000, interest paid is \$15 000 and average total funds or average total assets are \$477 500, the appropriate calculation would be:

$$\frac{19\,000 + 15\,000}{477\,500} \times 100$$

and the rate of return would be 7.12 per cent.

Some analysts may prefer not to add back the interest. In this case, the rate of return would be only 3.98 per cent.

This ratio indicates the rate of return on all funds or assets employed. It therefore gives a better indication of the earning capacity of the business than the return on just owner's equity. Again, trends

and inter-business comparisons will enable decisions to be made concerning alternative investment opportunities and the effectiveness with which funds are being employed.

To improve this ratio, a business needs to either increase net profit or reduce total assets. Some assets may be contributing very little to profits and could be sold.

Other profitability ratios

The following may or may not be calculated:

- **Ratios of expenses to sales** Various ratios can be calculated relating expenses to net sales. Individual expense items, groups of expenses or total operating expenses can be expressed as a percentage of net sales. In measuring profitability, expenses are simply the other side of the coin to profits. As in the earlier ratios in this section, variations from period to period and comparisons with other businesses help to indicate profitability.
- **Ratios of expense groups to total operating expenses** Ratios of expense groups to total operating expenses (which include cost of sales, selling, administrative and finance expenses) indicate the percentage that each group of expenses (such as selling expenses or cost of sales) is to total operating expenses. Profitability will be enhanced by keeping each group to a reasonable proportion of the total and can be assessed by reference to trends and by relevant comparisons.

Liquidity ratios

In the short term, liquidity ratios are an indicator of the ability to meet financial commitments. We have already examined the turnover of accounts receivable and inventory turnover. We now examine two additional ratios.

Current (or working capital) ratio

The current (or working capital) ratio is the ratio of current assets to current liabilities. It indicates the ability of the business to meet its debts as they fall due in the short term.

The ratio is expressed as:

$$\frac{\text{Current assets}}{\text{Current liabilities}}$$

If current assets total \$130 000 and current liabilities are \$76 000, then the ratio is 130 : 76 or 1.71 : 1.

No optimum figure can really be established for this ratio, although, as a rule of thumb, a ratio of 2 : 1 is generally desirable. Stock turnover, creditworthiness, management ability and general economic conditions must all be considered.

A ratio below 1 : 1 means that current assets are less than current liabilities. All current obligations therefore may not be able to be paid without liquidating some of the business's non-current assets. This process may reduce the operating capability of the business and make its future less viable.

If the ratio is below 2 : 1, the situation must at least be viewed with some concern. However, many businesses that budget well and provide services or turn their stock over quickly can function satisfactorily below this level and even below 1 : 1. A firm such as an airline providing a service and receiving most of its income in cash could operate on a much lower ratio than a department store with large inventories that sells most of its goods on credit.

To improve this ratio, a business would have to decrease current liabilities or increase current assets. Increasing revenues and decreasing costs are the best ways to do this as these will flow through to current assets and liabilities. If appropriate, some short-term loans or other liabilities could be converted to long-term ones. If the ratio were too high, the business could invest in long-term assets or pay off long-term liabilities.

Quick asset (or acid test) ratio

The quick asset (or acid test) ratio is the ratio of 'quick assets' to 'quick liabilities'. Quick assets are cash plus those assets that will be converted into cash within a short period. This is usually taken to mean all current assets except inventories and prepayments (such items are not easily converted to cash, and hence are eliminated). Quick liabilities are those that must be repaid within a short period. This is commonly taken to mean all current liabilities.

The ratio is therefore expressed as:

$$\frac{\text{Cash} + \text{Near cash assets} + \text{Receivables}}{\text{Current liabilities}}$$

Near cash assets include items that are being held short term and can be quickly converted to cash. These include short-term bank fixed deposits and marketable securities (short-term money market and bonds).

Receivables include accounts receivables, accrued revenues (which are a type of receivable) and bills receivable (if applicable). If cash assets + receivables equal \$36 000 and current liabilities equal \$76 000, then the ratio would be 36 : 76 or 0.47 : 1.

This ratio indicates the business's ability to meet its immediate financial obligations. Again, although it may often be lower than the working capital ratio, where this ratio falls below 1 : 1, there is some cause for concern. As with other ratios, trends and comparisons are often more important than the actual figure itself.

A third class of ratios, in addition to the profitability and liquidity ratios, is the stability ratio group.

Stability ratios

Stability ratios assist in an assessment of the ability of the firm to continue to operate in the longer term. They indicate the stability of the underlying firm and its ability to continue to meet its obligations in the longer term.

Equity ratio

The equity ratio is the ratio or percentage of owner's equity to total assets. It is usually calculated by using end-of-period figures. The ratio indicates how the business is financed by revealing the percentage of total assets provided from internal sources (i.e. owner's funds). The rest of the assets must be financed/provided by outside liabilities.

The necessary calculation is:

$$\frac{\text{Owner's equity}}{\text{Total assets}} \times 100$$

If owner's equity is \$324 000 and total assets are \$520 000, then the ratio is 62.31 per cent. This indicates that 62.31 per cent of total assets were provided by the owners, and 37.69 per cent were provided by outsiders. The higher the ratio, the higher the owner's control or ownership of the firm's total assets, and the lower the level of gearing or reliance on borrowed funds. At the same time, it is a measure of protection to outside liabilities. For example, the higher the ratio, the greater the margin of safety for creditors and accounts payable if the firm was in financial trouble and facing liquidation. In this case, outside liabilities would be paid before owners receive any return of funds.

Generally, owners and analysts are happy with a ratio of around 50 per cent. This can be adjusted by contributing (or withdrawing) capital, or by repaying (or incurring) outside debt.

Debt ratio

The debt ratio is the ratio of outside liabilities (debts) to total assets. It indicates the percentage of assets financed/provided by external sources:

It is calculated as:

$$\frac{\text{Total liabilities}}{\text{Total assets}} \times 100$$

If total liabilities are \$196 000 and total assets are \$520 000, the ratio is 37.69 per cent. This means that 37.69 per cent of the firm's assets have been provided by various forms of debt financing, not from owners. Debts may be long or short term. Most will have a fixed date for repayment. Some may require interest payments. It would therefore appear that the lower this ratio, the better for all involved with the firm. As there is no strict compulsion to pay a return on funds obtained from internal sources or to repay the money at a fixed date, such internal/owner's funds are more flexible. They give less control to outsiders. A low debt ratio also means more safety for accounts payable in the event of a liquidation. Unfortunately, many firms cannot obtain sufficient funds to survive and grow from only internal sources. There is a limit to how much money can be internally generated or obtained from owners. It may be more easily obtained through a secured loan (as with debentures or a loan on mortgage), where the lender is more assured of a fixed income and the return of the investment. Indeed, many successful businesses rely very heavily on borrowed money as their main source of funds. As long as the return gained by employing borrowed money is greater than the interest paid, it obviously increases the return on owner's equity.

You should investigate the Statement of Financial Position of a number of different types of businesses to see the different debt and equity ratios on which they operate. As we indicated above, these are just different sides of the same coin, so you should note the following relationship:

$$\text{Debt ratio} + \text{Equity ratio} = 100\%$$

As indicated above, if the debt ratio is over 50 per cent, the owner may wish to inject more equity and try to pay off some liabilities.

Times interest earned (interest cover)

This ratio relates profit to interest expense. It indicates the ability of the business to meet interest payments from current profits. The ratio is expressed as:

$$\frac{\text{Net profit} + \text{interest expense}}{\text{Interest expense}}$$

If net profit is \$19 000 and interest expense is \$15 000, the calculation is:

$$\frac{19\,000 + 15\,000}{15\,000}$$

and the result is 2.27 times.

Interest expense is added back to profit because the ratio is measuring the available profit to pay the interest. The ratio indicates the number of times the profit can cover the interest expense and is therefore sometimes expressed as 'interest cover'. The rule of thumb for this cover is three to four times.

As the resultant calculation is only 2.27 times, this indicates that a problem exists. The amount of debt should be decreased and so the interest expense will decrease. Alternatively, any measure to increase profit will improve the ratio.

Other indicators

Another key indicator that is often used by many businesses is **sales per full-time equivalent (FTE) person**. This gives an indication of efficiency in terms of how much sales are generated in relation to the number of full-time staff employed. For example, if Sales were \$1 400 000 and the number of FTE people

were one owner working full time and six staff (five working full time and three working the equivalent of one full-time person), the calculations would be:

$$\begin{aligned}\text{Sales per FTE person} &= \frac{\text{Sales}}{\text{Number of FTE persons}} \\ &= \frac{\$1\,400\,000}{7} \\ &= \$200\,000\end{aligned}$$

The resulting \$200 000 sales per FTE person can be compared to industry averages to determine if too many staff were being employed to generate the sales.

Comparison with benchmarks

After such ratios have been calculated and comparisons made with previous years, benchmarking can occur.

Benchmarking is the practice of making comparisons between the organisation's results and other standards such as:

- other firms in the same industry
- industry averages, and
- pre-determined standards.

These comparisons, whether individually or collectively, are directed towards future improvement.

There are a number of sources that can act as benchmarks:

- The Australian Taxation Office (ATO) has a very useful website, which you can access by following the weblink. The site allows the user to view financial ratios and benchmarks for various industries. The profiles are based on turnover (sales) ranges with the raw data provided by the ATO. An example for book retailing is shown in Table 2.4. Explanations and a video are provided at the weblink.



ATO benchmark



Table 2.4 ATO benchmarks for book retailing businesses

Key benchmark range	Annual turnover range		
	\$65 000–\$250 000	\$250 001–\$750 000	More than \$750 000
Cost of sales/turnover	42–61%	51–60%	55–60%
Average cost of sales	52%	56%	58%
Total expenses/turnover	74–86%	85–91%	89–93%
Average total expenses	80%	88%	91%

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- The Bank of Melbourne also provides a benchmarking tool at the weblink. If data was entered for a retail organisation, the typical result would appear as in Figure 2.4.

Bank of
Melbourne
benchmarking
tool

Key Business Ratios	Your result	Victorian Industry Median	Australian Industry Median
Net Profit Margin What does net profit margin measure? This ratio determines the amount re-employed by a company and which is used for dividends and reserves. It is an indicator of a firm's ability to withstand adverse conditions such as falling prices, rising costs and declining sales. Companies not making adequate profits are vulnerable.	10.0%	8.0%	8.5%
Return on Total Assets What does return on total assets measure? This ratio is the key indicator of profitability for a firm. Companies which use their assets efficiently will have a relatively high return while less well-run businesses will have a relatively lower return.	6.3%	5.2%	8.4%
Debt Ratio What does debt ratio measure? This ratio demonstrates the extent of permanently invested funds as compared to other forms of debt and borrowings. Low positive ratios provide the most protection for creditors, low negatives the least.	37.5%	69.3%	79.4%
Sales Per Employee What does sales per employee measure? This calculation provides you with an indicative productivity/efficiency measure.	\$166,667	\$216,758	\$200,744
Inventory Turnover What does inventory turnover measure? This ratio measures the number of times a company is selling the equivalent of its inventory levels on an annual basis.	8.3	8.2	7.9

Copyright Bank of Melbourne – a Division of Westpac Banking Corporation – Benchmarking Tool.
This benchmarking tool contains information inputted by the author.

Figure 2.4 Key ratios from Bank of Melbourne business benchmarking tool

- State government business sites. The Queensland government provides advice on benchmarking at the weblink.



Queensland government benchmarking advice

Interesting accounting fact

Did you know?

Which KPIs for specific industries will improve your profit?

Construction	Real Estate	Childcare	Medical
\$ value of contracts signed per month	# of new sales agreements signed	Occupancy percentage per day/week/month	Consolidated monthly profit across trading and service entity per month
# new sales enquiries per month	Commission income vs. commission expense	% of salaries and wages to revenue	Patient waiting time (minutes)
% projects completed under budget per month	Market share % of local market	% of rent expense to revenue	Number of lost productive hours
Gross Profit per month	# of properties sold per month	# of parent complaints per month	Number of billable hours per month
Net profit per month	Average days on market	# of reportable incidents per month	

Source: 'What KPI will improve your profit?', Ben Nix, Pitcher Partners, 22 September 2017



KPIs

A summary of the main financial ratios is given in Table 2.5.

Table 2.5 Summary of main financial ratios – sole traders

Ratio	Formula	Measures	Benchmark
Profitability			
Gross profit ratio	$\frac{\text{Gross profit}}{\text{Net sales}} \times 100$	Gross profit per dollar of net sales	Industry average
Net profit ratio	$\frac{\text{Net profit}}{\text{Net service revenue or net sales}} \times 100$	Net profit per dollar of service/net sales	Industry average
Return on owner's equity	$\frac{\text{Net profit}}{\text{Average owner's equity}} \times 100$	Return on investment provided by owners	Current interest rates
Return on total assets	$\frac{\text{Net profit} + \text{Interest expense}}{\text{Average total assets}} \times 100$	Return on all assets whether provided by owners or external parties	Industry average
Liquidity			
Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	Liquidity or ability to meet current debts with current assets	Greater than 2:1
Quick asset ratio	$\frac{\text{Cash} + \text{Near cash assets} + \text{Receivables}}{\text{Current liabilities}}$	Ability to meet immediate debts using only most liquid assets	Greater than 1:1
Turnover of inventories*	$\frac{\text{Cost of goods sold}}{\text{Average inventories}}$	How quickly inventory is sold, and thus indicates liquidity of inventories	Industry average
Turnover of accounts receivable*	$\frac{\text{Net credit sales}}{\text{Average accounts receivable}}$	Effectiveness of collections and whether accounts receivable are too high	Industry average
Stability			
Equity ratio	$\frac{\text{Owner's equity}}{\text{Total assets}} \times 100$	Percentage of assets provided by owners	Greater than 50%
Debt ratio	$\frac{\text{Total liabilities}}{\text{Total assets}} \times 100$	Percentage of assets financed/provided by external parties, and extent of gearing	Less than 50%
Times interest earned	$\frac{\text{Net profit} + \text{interest expense}}{\text{Interest expense}}$	Available profits to meet interest expense	3 to 4 times

The calculations in these ratios are used for comparative and trend analysis, to help make comparisons and predictions.

*If turnover is required in days, the turnover rate as calculated above must be divided into 365 or the number of days in the period that is relevant.

Interesting accounting fact

Did you know?

What is the difference between benchmark indicators & key performance indicators (KPIs)?

Benchmark indicators and key performance indicators are two measurements that help companies improve performance. You can set benchmarks and key performance indicators for individuals, departments, projects or the company as a whole, and use them to measure everything from manufacturing production to employee performance. Though similar in some ways, benchmark indicators and key performance indicators are not the same thing.

...

Benchmarks are goals to aim for. Other names for benchmarks include best practices and exemplary practices.

...

Key Performance Indicators

Key performance indicators are specific measurements used to gauge performance. They're a way to precisely measure performance. For example, in manufacturing, a key performance indicator might be the production of a specific amount of product within a particular time. In sales, the number of new accounts might be a key performance indicator. Like benchmark indicators, performance indicators can be goals, but they're more like steps on the way to the larger goal. You also can think of key performance indicators as a way to measure your progress toward the benchmark goal and to gauge how close you are to reaching that goal.

Source: 'What is the difference between benchmark indicators & key performance indicators?', Cynthia Myers, Chron.com



Benchmarks Vs KPIs

Illustrative example of financial report analysis

The following comparative Statements of Profit or Loss and Statements of Financial Position with horizontal analysis illustrate how the process of analysis and interpretation can be carried out for a sole trader. The process would be similar for a partnership.

J Harley runs an electrical appliance store, trading as Harley Electrical. Harley manages the business, and takes part in all activities of the store. On 1 July 2019, the building was increased in size and the number of staff was increased from two to three salespeople. Most sales are for cash. However, to increase sales, 60-day interest-free accounts are opened for some customers.

Harley Electrical
Statement of Profit or Loss for year ended 30 June

	2020		2019			
	\$	\$	\$	\$	\$ Difference	% Difference
Cash Sales	500 000		380 000		120 000	31.6%
Credit Sales	<u>220 000</u>		<u>180 000</u>		<u>40 000</u>	<u>22.2%</u>
Total Sales		720 000		560 000	160 000	28.6%
<i>Less Cost of Sales</i>						
Cost of Goods Sold		<u>580 000</u>		<u>465 000</u>	<u>115 000</u>	<u>24.7%</u>
Gross Profit		140 000		95 000	45 000	47.4%
<i>Less Other Expenses</i>						
<i>Selling Expenses</i>						
Advertising	8 000		4 000		4 000	100.0%
Sales Wages	72 000		56 000		16 000	28.6%
Depreciation on Delivery Vehicle	<u>4 000</u>		<u>4 000</u>		<u>0</u>	<u>0.0%</u>
<i>Total Selling Expenses</i>		84 000		64 000	20 000	31.3%
<i>Administrative Expenses</i>						
Depreciation on Furniture and Fittings	5 000		3 000		2 000	66.7%
Depreciation on Buildings	8 000		4 000		4 000	100.0%
Insurance	<u>3 000</u>		<u>2 000</u>		<u>1 000</u>	<u>50.0%</u>
<i>Total Administrative Expenses</i>		16 000		9 000	7 000	77.8%
<i>Finance Expenses</i>						
Bad and Doubtful Debts	6 000		3 000		3 000	100.0%
Interest on Mortgage	<u>15 000</u>		<u>10 000</u>		<u>5 000</u>	<u>50.0%</u>
<i>Total Finance Expenses</i>		21 000		13 000	8 000	61.5%
<i>Total Expenses</i>		<u>121 000</u>		<u>86 000</u>	<u>35 000</u>	<u>40.7%</u>
Net profit		<u>\$19 000</u>		<u>\$9 000</u>	<u>10 000</u>	<u>111.1%</u>

Harley Electrical
Statement of Financial Position as at 30 June

	2020		2019		
	\$	\$	\$	\$	%
Assets					
Current Assets					
Cash at Bank	0	8 000	(8 000)	(100.0%)	
Accounts Receivable (Net)	36 000	40 000	(4 000)	(10.0%)	
Inventories	90 000	100 000	(10 000)	(10.0%)	
Prepaid Expenses	<u>4 000</u>	<u>3 000</u>	<u>1 000</u>	<u>33.3%</u>	
Total Current Assets	<u>130 000</u>	<u>151 000</u>	(21 000)	(13.9%)	
Non-Current Assets					
<i>Other Financial Assets</i>					
Shares in AS Co Ltd	<u>0</u>	<u>50 000</u>	<u>(50 000)</u>	<u>(100.0%)</u>	
Total Other Financial Assets	0	50 000	(50 000)	(100.0%)	
<i>Property, Plant and Equipment</i>					
Fixtures and Fittings	40 000	30 000	10 000	33.3%	
Motor Vehicles	30 000	34 000	(4 000)	(11.8%)	
Building	200 000	100 000	100 000	100.0%	
Land	<u>100 000</u>	<u>70 000</u>	<u>30 000</u>	<u>42.9%</u>	
Total Property, Plant and Equipment	370 000	234 000	136 000	58.1%	
<i>Intangible Assets</i>					
Franchise	<u>20 000</u>	<u>0</u>	<u>20 000</u>		
Total Intangible Assets	<u>20 000</u>	<u>0</u>	<u>20 000</u>		
Total Non-Current Assets	<u>390 000</u>	<u>284 000</u>	<u>106 000</u>	<u>37.3%</u>	
Total Assets	<u>520 000</u>	<u>435 000</u>	<u>85 000</u>	<u>19.5%</u>	
Liabilities					
Current Liabilities					
Bank Overdraft	30 000	0	30 000		
Accounts Payable	41 900	19 100	22 800	119.4%	
GST Clearing (Payable)	2 100	900	1 200	133.3%	
Accrued Expenses	<u>2 000</u>	<u>3 000</u>	<u>(1 000)</u>	<u>(33.3%)</u>	
Total Current Liabilities	76 000	23 000	53 000	230.4%	

Non-Current Liabilities				
Mortgage	<u>120 000</u>	<u>100 000</u>	<u>20 000</u>	<u>20.0%</u>
Total Non-Current Liabilities	<u>120 000</u>	<u>100 000</u>	<u>20 000</u>	<u>20.0%</u>
Total Liabilities	<u>196 000</u>	<u>123 000</u>	<u>73 000</u>	<u>59.3%</u>
Net Assets	<u>\$324 000</u>	<u>\$312 000</u>	<u>12 000</u>	<u>3.8%</u>
Owner's Equity				
Capital	312 000	322 000	(10 000)	(3.1%)
Add Net Profit	<u>19 000</u>	<u>9 000</u>	<u>10 000</u>	<u>111.1%</u>
	331 000	331 000		
Less Drawings	<u>7 000</u>	<u>19 000</u>	<u>(12 000)</u>	<u>(63.2%)</u>
Total Owner's Equity	<u>\$324 000</u>	<u>\$312 000</u>	<u>12 000</u>	<u>3.8%</u>

The number of full-time equivalent (FTE) people for 2020 was one owner working full time and three staff (two working full time and three working the equivalent of one full-time person). For 2019, there were three FTE persons. From the previous records of Harley Electrical it is also found that at 1 July 2018 total assets were \$400 000, accounts receivable were \$44 000 and inventories were \$110 000. The trademark was purchased on 28 June 2020 and no amortisation is applicable.

We can use these financial statements to carry out an analysis and interpret the results. Industry averages and various ratios are given and so further comparison with these is possible. For electrical appliances – retail, the following benchmarks apply:

Benchmark – Retail Electrical	
Indicator	Typical
Gross Profit	24%
Occupancy	3%
Wages and Salaries	12%
Total Expenses	23%
Net Profit	4%
Stock Turnover	4 times
Sales per FTE Person	\$290 000

First, all of the suggested measures or financial ratios are calculated for each year. (These are listed in Table 2.6.) Look back to the previous pages to see how these were calculated.

Table 2.6 Financial ratios – Harley Electrical

Measure	30 June 2020 %	30 June 2019 %	Benchmark
Gross profit ratio	19.44	16.96	Industry average 24%
Net profit ratio	2.64	1.61	Industry average 4%
Return on owner's equity	5.97	2.84	Current interest rate 6%
Return on total assets	7.12	4.55	Industry average 8%
Ratios of expenses to sales:			
Cost of goods sold	80.56	83.04	Industry average 76%
Selling expenses	11.67	11.43	
Administrative expenses	2.22	1.61	
Finance expenses	2.92	2.32	
Total selling, administrative and finance expenses	16.81	15.36	Industry average 20%
Ratios of expense groups to total operating expenses:			
Cost of goods sold	82.74	84.39	
Selling expenses	11.98	11.62	
Administrative expenses	2.28	1.63	
Finance expenses	3.00	2.36	
Current ratio	1.71 : 1	6.57 : 1	Greater than 2:1
Quick asset ratio	0.47 : 1	2.09 : 1	Greater than 1:1
Rate of turnover of inventories	6.11 times (59.78 days)	4.43 times (82.42 days)	Industry average 4 times
Rate of turnover of accounts receivable	5.79 times (63.05 days)	4.29 times (85.17 days)	Industry average 30 days
Equity ratio	62.31	71.72	Greater than 50%
Debt ratio	37.69	28.28	Less than 50%
Times interest earned	2.27	1.90	At least 3 to 4 times
Sales per FTE person	\$180 000	\$186 667	Industry average \$290 000

As discussed on page 10 of *Units 1 & 2*, the objectives of accounting are to:

- provide information for decision making
- assist in discharging accountability
- help evaluate performance.

The financial statements help in all three areas as they provide the financial data to help make decisions. Loss of assets can be revealed and therefore assist in discharging accountability. Also, by doing various types of analysis on the financial statements, the reader can evaluate the financial performance of the business. This can then be compared to various benchmarks. Do not lose sight of the fact that producing the financial statements is not an end in itself. Accounting exists to aid decision making.

The following approach may help you in interpreting the financial statements.

1 Collect the data and information

This step comprises collecting as much information as you can that will assist in this process. Various calculations will have to be made. Sources include:

- Statement of Profit or Loss
- Statement of Financial Position
- Statement of Cash Flows (if available)
- horizontal analysis
- vertical analysis (if available)
- ratio analysis
- trend analysis
- appropriate benchmarks to make comparisons.

2 Organise and interpret the data and information

Because there is a lot of financial data, you might like to prepare a table or a spreadsheet and summarise the important pieces of information. This means looking at all the items mentioned above and picking out the pieces of information that are important. The key figures are:

- major revenue items
- gross profit
- major expenses such as cost of goods sold, wages and salaries, interest and depreciation
- net profit
- current assets such as cash, accounts receivables and inventories
- current liabilities such as accounts payables and GST
- non-current assets
- non-current liabilities
- capital and drawings
- ratios.

You should be looking at both favourable and unfavourable movements in these items. There might be a significant difference from one year to the other for certain items, some ratios might be less than the norm, and some ratios might not meet industry benchmarks. These are going to be your findings and the key items in your evaluation of performance. You will bring these key findings to the attention of the owner.

3 Make recommendations for decisions based on justifiable evidence

Having found these key issues, how will the owner overcome the problems and in what timeframe? This is where you will make suggestions and the owner will have to decide on appropriate actions. For example, it might be to reduce staff, to have an advertising campaign, to ring accounts receivable to improve timely payments from them, or to obtain more finance.

4 Assess decisions made

After the owner has made certain decisions, subsequent financial reports will be able to assess the worth of those decisions. Hopefully, the future financial statements will show an improvement in the financial performance and position of the business.

Language and communication



Reports

Purpose

Reports are formal means of business communication. They should present facts and/or ideas as accurately, clearly and concisely as possible. This may involve incorporation of graphs, diagrams and illustrations to help the users obtain the most benefit from the information presented.

Features of a good report are appropriate headings, timeliness, accuracy, simplicity, consistency and clear presentation. Accounting reports should comply with accounting standards and the law.

Reports may be prepared for internal users (managers or supervisors) or external users (shareholders, creditors or government departments).

Reports may be short or long.

Presentation: Short reports

Heading (title)	Subject of the report.
Introduction	Statement of what is being reported upon. This may include an explanation of how data was collected.
Main text – Body	Detailed and logical presentation of facts. Subheadings used where appropriate.
Conclusion	Informs the reader of the decision arrived at after consideration of the information outlined in the main text.
Recommendations	Where required, a list of recommendations should be given.
Signature and title	The person preparing the report signs. The position in the firm is also given.

Presentation: Long reports

Front	Cover; title page (title of report, author's name, date of report); table of contents; summary of report.
Content	Same format as a short report, but could be more detailed and is more likely to include sectional numbering of paragraphs.
Back	Appendix, bibliography/references.

Providing the statements were prepared consistently from period to period, a written report can be prepared to assist interpretation of these results. An appropriate report that analyses and interprets the comparative statements could show:

- **title** and **date** of the report
- **introduction** – sets out the scope and purpose of the report, and conditions under which it was prepared
- the **main text** – in this case it would be sensible to have headed subsections for profitability, liquidity and stability. (In each of these areas, comparisons would be made with past years and with industry averages, noting any evident trends. In the profitability area, it may be wise to compare returns with returns from alternative investments, such as bonds, where there is virtually no risk. In the written report, it would be acceptable to round figures such as numbers of days to more meaningful whole figures.)
- **conclusion** – summarises the main points and comments on overall management effectiveness
- **recommendations** – recommendations for action
- **signature** and position of the preparer.

REPORT TO J HARLEY

31 July 2020

Re Analysis and interpretation of the Statements of Profit or Loss and Statements of Financial Position of Harley Electrical

I have examined the financial statements for the two-year period 1 July 2018 to 30 June 2020. This report deals with profitability, liquidity and stability as measured by various financial ratios. Where possible, comparisons have been made with the latest available industry averages.

PROFITABILITY

Expansion plans for the business are obviously on target and are beginning to show results. Profitability of the business is certainly improving, although returns must still be considered too low.

The gross profit ratio has improved from 16.96 to 19.44 per cent of sales. Taken in conjunction with the large increase in sales, this is quite pleasing. However, it is still significantly below the industry average of 24 per cent. Overall, there has been an improvement in the net profit ratio from 1.61 to 2.64 per cent. This is still a little below the industry average of 4 per cent. Another indicator that is sometimes used is sales per full-time equivalent person. This has fallen from \$186 667 per person to \$180 000. It is also significantly below the industry average of \$290 000 per person.

The return on owner's equity, although increasing significantly, is still disappointing. Efforts must continue to increase this from its present level of 5.97 per cent. This compares poorly with what could be earned in alternative investments outside the enterprise, with little or no risk. Similarly, the return on assets of 7.12 per cent is below the industry average of 8 per cent.

Overall, management objectives in this area are being achieved. However, there is still great room for improvement. Efforts must continue to increase sales, to increase the gross margin on sales, and to become more cost-efficient in all areas. Prices may have to increase to achieve a more favourable return.

LIQUIDITY

This is a worrying aspect of recent results. While not yet posing major problems, the trend of ratios in this area casts some doubt on the continued liquidity of the business. Some ratios have fallen sharply.

The current ratio has decreased from the (admittedly too high) level of 6.57 : 1 to a more reasonable 1.71 : 1. The quick asset ratio follows the same trend from 2.09 : 1 to 0.47 : 1. This would normally be regarded as being still within an acceptable range. However, the trends, taken in conjunction with the rapidly deteriorating cash position, are quite disturbing. Quick assets are only 47 per cent of quick liabilities. This could mean that the business may not be able to pay immediate debts without some rearrangement of its financial affairs.

This situation seems to have been brought about by the use of short-term funds (bank overdraft) to purchase long-term (non-current) assets. Such a practice is not desirable. Long-term assets should generally be bought with long-term funds from either an internal or external source.

The trends in both the turnover of inventories and turnover of accounts receivable indicate an improvement in both areas. Inventory turnover at 6.11 times per year (60 days) is above the industry average of 4 times per year. This has improved from last year's 82 days.

The collection period for accounts receivable is now 5.79 times per year, or 63 days. As the business operates 60-day accounts, this is appropriate and a vast improvement over the previous year's collection period of 85 days.

This total operating cycle of 123 days (60 + 63 days) to convert inventories purchased back into cash is still rather long, but appropriate to this industry.

STABILITY

The equity ratio indicates a change in the balance of internal and external funding. The decline from 71.72 per cent of total funds to 62.31 per cent indicates more reliance on external (debt) funding. Rather than securing more long-term debts, too much reliance has been placed on current funds, with a resulting decline in the cash position. If this is the end of the building expansion program, and if an increased return can be achieved on these external funds, the position will hopefully improve. The times interest earned ratio of 2.27 indicates that there is not enough profit being generated to cover the interest that has to be paid.

CONCLUSIONS

On the limited sample of these two years, it appears that the business is moving in the right direction. Management has done reasonably well, with improvements in most areas. However, it still has some very challenging tasks ahead if its expansion plans are to succeed.

RECOMMENDATIONS

- Overall, earnings are still too low. The gross margin on sales and sales per employee must be further improved.
- To improve the gross margin on sales, price increases may be necessary. Alternative suppliers should also be investigated to see if the prices of goods being purchased can be decreased in some way.
- To improve the sales volume, more money spent on advertising could be beneficial as the \$4000 increase in advertising has definitely resulted in an increase in sales for the year.
- To improve the sales per employee, if the volume of sales and margin on sales cannot be increased by the measures above, consider reducing the number of employees. However, this should be a last resort as the firm is trying to grow and customer service is very important.
- The overdraft of \$30 000 cannot be used any further for purchasing non-current assets. This overdraft has had a substantial effect on the financial stability ratios. Either the owner or external sources must be prepared to provide more funds on a long-term basis to avoid the use of short-term funds for these types of purchases. If such funds are not available, one possibility would be for the business to sell its land and building, and lease it back on a 'lease-back' arrangement. This would mean that the business would still retain the use of the assets, while improving its long-term financial stability.
- Determine if the 60-day interest-free accounts are necessary. Credit sales increased by \$40 000, but is this enough to warrant it being maintained?

Adam Johnson, CPA

Interesting accounting fact

Did you know?

Why accounting is so important

In order to run a successful business, and know what and when to take corrective actions, accounting information is required. Accounting provides the needed information for making business decisions.

Watch the YouTube video by following the weblink.



Why accounting
is important –
video

Limitations of analysis and interpretation

It is possible to calculate many other ratios, and to make many more comments, even from the figures given here. However, this illustrative example should provide a good basic knowledge of how to carry out the process of analysis and interpretation.

The process should be carried out for all types of businesses – sole traders, partnerships and companies – and for all types of business activities. Both internal and external users of business information can use the process described. It should greatly aid them in their decision making. It must be stressed, however, that the process has many limitations.

Comparison is only possible if financial statements are prepared on a consistent basis. This is relatively easy to achieve within the one business, but it can be difficult to achieve complete consistency from one business to another. The requirements of the law, professional associations, stock exchanges and so on, go some way towards achieving this. However, because of differences in size, products and accounting methods, fully meaningful comparisons may not be possible.

As in all analysis and interpretation, one must be aware of any limitations and take these into account when making decisions.

- We have already seen that the financial reports of businesses have limitations, **such as the degree of judgement and estimation** contained in many figures. These, of course, also affect the usefulness of the ratios and percentages that can be calculated from such reports. Because of this judgement and estimation, there is also the possibility that figures can be manipulated to show a particular view of the organisation.
- Much of the analysis that is carried out is for the **purpose of forecasting future performance**. It is done using historical data and information, and future expectations. However, the general state of the economy or the business environment within which the business operates may change. Business personnel may change or management may pursue different policies. In any of these cases, **past history may not be a good predictor of the future**. The report is based on past events up to a particular point in time. It is generally for the one year that has passed and is therefore based on past transactions. There is no guarantee as to what will happen in the future. An event could happen the very next day after the reporting period that could seriously affect the position of the organisation and this would not appear until one year later if yearly reports are prepared.
- Related to this, data at the end of the accounting period may not be **representative** of the position during the year. We have tried to overcome this problem by suggesting that average figures for the year may be more appropriate. However, not all analysts would agree with this solution. They point out that, although more appropriate in some cases, this approach lacks consistency as most of the ratios are calculated using end-of-period figures.
- We have also referred to other difficulties and limitations previously. For example, contingent liabilities and other qualifications that may be noted in the reports.

Despite these limitations, the process of analysis and interpretation is one of the most important and useful functions of accounting.

2.49

Use the following information extracted from the books of Zhang Industries.

- a Prepare a classified Statement of Financial Position showing horizontal analysis.
- b Calculate the:
 - i current ratio
 - ii quick asset ratio
 - iii turnover of inventories
 - iv turnover of accounts receivable
 - v equity ratio
 - vi return on owner's equity
 - vii return on total assets.
- c Indicate what general areas are being tested by each of these measures.
- d Prepare a report for Ms R Zhang to comment in an interpretative manner on what is revealed by these measures. The current interest rate is 6.5 per cent.

	30 June 2020	30 June 2019
	\$	\$
Assets		
Cash at Bank	20 000	55 000
Inventories	90 000	80 000
Accounts Receivable	40 000	45 000
Plant and Equipment	280 000	250 000
Motor Vehicles	120 000	110 000
Goodwill	50 000	50 000
	<u>\$600 000</u>	<u>\$590 000</u>
Liabilities and Owner's Equity		
Accounts Payable	72 000	63 000
Capital	528 000	527 000
	<u>\$600 000</u>	<u>\$590 000</u>

Additional information

- Sales (cash) 30 June 2020, \$40 000; 30 June 2019, \$35 000.
- Sales (credit) 30 June 2020, \$400 000; 30 June 2019, \$300 000.
- Cost of Goods Sold 30 June 2020, \$220 000; 30 June 2019, \$150 000.
- Net profit 30 June 2020, \$25 000; 30 June 2019, \$20 000.
- Inventories at 1 July 2018 were \$70 000.
- Capital at 1 July 2018 was \$426 000.
- Accounts Receivable (net) at 1 July 2018 were \$49 000.
- Total assets at 1 July 2018 were \$550 000.
- Drawings have been kept to a minimum over the two-year period.

2.50

Using the following comparative Statements of Profit or Loss, Statements of Financial Position and industry averages, prepare the statements showing horizontal analysis, calculate all appropriate ratios and prepare a written report to management on the results.

Gaivler Parts Statement of Profit or Loss for year ended				
	30 June 2020		30 June 2019	
	\$	\$	\$	\$
Sales				
Cash	60 000		50 000	
Credit	<u>300 000</u>	360 000	<u>210 000</u>	260 000
Less Cost of Sales				
Cost of Goods Sold		<u>215 000</u>		<u>155 000</u>
Gross profit		145 000		105 000
Less Other Expenses				
<i>Selling Expenses</i>				
Advertising	7 000		5 000	
Delivery Expenses	19 000		14 000	
Depreciation on Delivery Vehicles	<u>12 000</u>	38 000	<u>10 000</u>	29 000
<i>Administrative Expenses</i>				
Insurance	9 000		8 000	
Depreciation on Buildings	8 000		8 000	
Office Expenses	<u>33 000</u>	50 000	<u>24 000</u>	40 000
<i>Finance Expenses</i>				
Bad Debts	8 000		6 000	
Interest on Mortgage	<u>10 000</u>	<u>18 000</u>	<u>7 000</u>	<u>13 000</u>
Net profit		<u><u>\$39 000</u></u>		<u><u>\$23 000</u></u>

Gaivler Parts
Statement of Financial Position as at

	30 June 2020		30 June 2019	
	\$	\$	\$	\$
Current Assets				
Accounts Receivable	65 000		55 000	
Inventories	100 000		80 000	
Prepaid Expenses	<u>10 000</u>	175 000	<u>5 000</u>	140 000
Non-Current Assets				
Delivery Vehicles	60 000		50 000	
Land	100 000		50 000	
Buildings	<u>100 000</u>	<u>260 000</u>	<u>50 000</u>	<u>150 000</u>
Total assets		435 000		290 000
Current Liabilities				
Bank Overdraft	36 000		20 000	
Accounts Payable	100 000		80 000	
GST Payable	6 000		5 000	
Accrued Expenses	<u>14 000</u>	156 000	<u>15 000</u>	120 000
Non-Current Liabilities				
Mortgage		<u>80 000</u>		<u>40 000</u>
Total liabilities		<u>236 000</u>		<u>160 000</u>
Net assets		<u>\$199 000</u>		<u>\$130 000</u>
Owner's Equity				
Capital – S Gaivler		<u>199 000</u>		<u>130 000</u>
Total owner's equity		<u>\$199 000</u>		<u>\$130 000</u>

Additional information

From the previous records of Gaivler Parts it was found that:

- Capital at 1 July 2018 was \$100 000.
- An additional \$7000 was introduced as capital in the period 1 July 2018 to 30 June 2019, and an additional \$30 000 was introduced as capital during the period 1 July 2019 to 30 June 2020.
- Total assets were \$250 000 at 1 July 2018.
- Accounts Receivable (net) were \$50 000 and inventories were \$70 000 at 1 July 2018.

The following industry averages were available from industry publications:

	2020	2019
Gross profit ratio	44%	45%
Net profit ratio	9%	8%
Return on owner's equity	11%	12%
Return on total assets	10%	10%
Current ratio	0.98 : 1	1.02 : 1
Quick asset ratio	0.58 : 1	0.55 : 1
Equity ratio	40%	43%
Debt ratio	60%	57%
Turnover of inventories	4 times	4 times
Turnover of accounts receivable	6 times	6 times

2.51

Rearrange the following account balances for Briggs Store for the 2019–20 financial year in the form of a Statement of Profit or Loss and a Statement of Financial Position. Calculate all significant analysis ratios.

	\$	\$
Capital – J Briggs		36 500
Cash at Bank	4 000	
Inventories	11 500	
Cost of Goods Sold	80 000	
Sales		120 000
Accounts Receivable	20 000	
Accounts Payable		25 500
Plant and Machinery	35 000	
Investments	15 000	
Administrative Expenses	8 500	
Selling Expenses	5 000	
Finance Expenses	3 000	
	<u>\$182 000</u>	<u>\$182 000</u>

2.52

On the basis of the following balances extracted from the books of W Richard & Co at 30 June 2019 and 2020, prepare comparative Statements of Profit or Loss for the two years with horizontal analysis; and write a report that analyses and interprets the business's results for management. Use as many ratios as possible, and include at least one graph prepared on a computer to help clarify the situation.

	2020 \$	2019 \$
Advertising	8 000	4 000
Depreciation on Motor Vehicles	11 000	11 000
Insurance	8 000	7 000
Interest Expense	80 000	57 000
Inventories	40 000	50 000
Office Salaries	120 000	103 000
Cost of Goods Sold	296 000	208 000
Sales	700 000	600 000
Salaries – Sales	150 000	100 000
<i>Additional information</i>		
Inventories at 1 July 2018 were \$30 000.		

2.53

- Rearrange the following Statement of Financial Position items in a form suitable for analysis.
- Prepare horizontal analysis for major classifications using 2018 as the base year.
- Calculate appropriate ratios to determine the financial situation of the enterprise.
- Comment briefly on the ratios and trends revealed by them.

Patterson Kitchenware
Statements of Financial Position as at 30 June

	2020	2019	2018
	\$	\$	\$
Loan on Mortgage	60 000	80 000	100 000
Accounts Receivable	95 000	85 000	90 000
Accounts Payable	68 000	71 000	67 000
GST Clearing (payable)	2 000	4 000	3 000
Land and Buildings (net)	340 000	350 000	300 000
Plant and Equipment (net)	310 000	300 000	250 000
Cash at Bank	50 000	—	—
Bank Overdraft	—	80 000	40 000
Inventories	120 000	80 000	100 000
Bonds	50 000	50 000	50 000
Accrued Expenses	5 000	4 000	5 000
Accrued Revenue	15 000	10 000	10 000

2.54

Rearrange the following account balances for Patel Trading for the year ending 30 June 2020 in the form of a classified Statement of Profit or Loss and a Statement of Financial Position. Calculate and analyse ratios and comment on the results. The business operates 21-day accounts for customers and the industry turnover of inventories is approximately 8 times.

	\$	\$
Capital – P Patel		492 000
Cash at Bank	180 000	
Inventories	105 000	
Cost of Goods Sold	890 000	
Sales (all credit)		1 300 000
Accounts Receivable (net)	155 000	
Accounts Payable		137 000
GST Payable		8 000
Furniture and Fittings	200 000	
Goodwill	100 000	
Administrative Expenses	180 000	
Selling Expenses	70 000	
Finance Expenses	57 000	
	<u>\$1 937 000</u>	<u>\$1 937 000</u>

Real-world application



Impact of computers

Modern accountants are fortunate to have computers to assist them in their task of preparing, analysing and interpreting accounting reports.

- **Accounting packages** allow the recording and reporting processes to be done quickly and efficiently. This allows the accountant, owners and management more time to analyse and interpret the results. Some accounting packages also help in analysis and interpretation by calculating a number of common ratios.
- **Spreadsheet programs** can be used to build models to enable timely and efficient calculation of ratios used in the analysis process. Spreadsheets also enable users to ask 'what if' questions. This allows them to see the likely outcomes of the 'what if' on the ratios before any action is taken.
- **Word-processing and publishing programs** enable the clear and attractive presentation of reports.
- **Graphics packages** enable the accountant to present material with even more visual impact. Pictures and symbols can be included in reports. But more importantly, graphs (bar charts, pie charts and so on) can more easily be drawn to show trends, relationships and comparisons in more meaningful ways. Some of these features are available in spreadsheets.

Just like an accountant, you should use these wherever possible when answering the exercises and questions in this text. They will make your work easier and more efficient, and enhance the quality of your presentations.

Spreadsheet applications

2.55 Ratio analysis

Your employer wants you to build a model where the basic elements of a typical Statement of Profit or Loss and Statement of Financial Position can be entered and the model will produce the reports with the accompanying calculation of typical ratios. The model for the illustrative example that starts on page 185 should appear as follows:

	A	B	C	D	E	F	G	H
47	INPUT/ASSUMPTIONS							
48	Years		2020		2019		2018	
49								
50	Name of Firm		Harley Electrical					
51								
52	Revenues							
53	Cash Sales		500,000		380,000			
54	Credit Sales		220,000		180,000			
55	Other Revenue		0		0			
56								
57	Expenses							
58	Cost of Goods Sold		580,000		465,000			
59	Total Selling Expenses		84,000		64,000			
60	Total Administrative Expenses		16,000		9,000			
61	Total Finance Expenses		21,000		13,000			
62	Total Interest Expense		15,000		10,000			
63	Total Depreciation and Amortisation		15,000		10,000			
64								
65	Current Assets							
66	Cash at Bank		0		8,000			
67	Accounts Receivable (Net)		36,000		40,000		44,000	
68	Inventories		90,000		100,000		110,000	
69	Accrued Revenues		0		0			
70	Prepaid Expenses		4,000		3,000			
71								
72	Non-Curent Assets							
73	Property Plant and Equipment							
74	Fixtures and Fittings		40,000		30,000			
75	Less Accum. Depreciation		0		0			
76	Equipment		0		0			
77	Less Accum. Depreciation		0		0			
78	Motor Vehicles		30,000		34,000			
79	Less Accum. Depreciation		0		0			
80	Building		200,000		100,000			
81	Less Accum. Depreciation		0		0			
82	Land		100,000		70,000			
83	Other		0		0			
84								
85	Intangible Assets							
86	Franchise		20,000		0			
87								
88	Other Financial Assets							
89	Shares in AS Co Ltd		0		50,000			
90								
91	Total Assets						400,000	
92								

	A	B	C	D	E	F	G	H
93	Current Liabilities							
94	Bank Overdraft		30,000		0			
95	Accounts Payable		41,900		19,100			
96	GST Clearing (Payable)		2,100		900			
97	Accrued Expenses		2,000		3,000			
98	Unearned Revenue		0		0			
99	Other		0		0			
100								
101	Non-Current Liabilities							
102	Mortgage		120,000		100,000			
103	Other		0		0			
104								
105	Owner's Equity							
106	Capital (Opening)		312,000		322,000			
107	Additional Capital		0		0			
108	Drawings		7,000		19,000			
109								
110	Number full time equiv (FTE) persons		4		3			
111								
112								
113								
114								
115	REPORT							
116								
117	Harley Electrical							
118	Statement of Profit or Loss							
119	for year ended 30 June							
120								
121			2020		2019			
122			\$	\$	\$	\$	\$ Difference	% Difference
123	Cash Sales		500,000		380,000		120,000	31.6%
124	Credit Sales		220,000		180,000		40,000	22.2%
125	Total Sales			720,000		560,000	160,000	28.6%
126								
127	Less Cost of Sales							
128	Cost of Goods Sold			580,000		465,000	115,000	24.7%
129	Gross Profit			140,000		95,000	45,000	47.4%
130	add Other Revenue			0		0	0	
131				140,000		95,000	45,000	47.4%
132	Less Other Expenses							
133	Selling Expenses		84,000		64,000		20,000	31.3%
134	Administrative Expenses		16,000		9,000		7,000	77.8%
135	Finance Expenses		21,000		13,000		8,000	61.5%
136	Total Expenses			121,000		86,000	35,000	40.7%
137	Net Profit			19,000		9,000	10,000	111.1%
138								
139	Proof Total Sales Difference			0				
140	Proof Gross Profit Difference			0				
141	Proof Total Expenses Difference			0				
142	Proof Net Profit Difference			0				
143								
144								

	A	B	C	D	E	F	G	H
145	Harley Electrical							
146	Statement of Financial Position							
147	as at 30 June							
148								
149			2020		2019			
150			\$	\$	\$	\$	\$ Difference	% Difference
151	Assets							
152	Current Assets							
153	Cash at Bank		0		8,000		-8,000	-100.0%
154	Accounts Receivable (Net)		36,000		40,000		-4,000	-10.0%
155	Inventories		90,000		100,000		-10,000	-10.0%
156	Accrued Revenues		0		0		0	
157	Prepaid Expenses		4,000		3,000		1,000	33.3%
158	Total Current Assets			130,000		151,000	-21,000	-13.9%
159								
160	Non-Current Assets							
161	Other Financial Assets							
162	Shares in AS Co Ltd		0		50,000		-50,000	-100.0%
163	Total Other Financial Assets			0		50,000	-50,000	-100.0%
164								
165	Property, Plant and Equipment							
166	Fixtures and Fittings		40,000		30,000		10,000	33.3%
167	Less Accum. Depreciation		0		0		0	
168	Equipment		0		0		0	
169	Less Accum. Depreciation		0		0		0	
170	Motor Vehicles		30,000		34,000		-4,000	-11.8%
171	Less Accum. Depreciation		0		0		0	
172	Building		200,000		100,000		100,000	100.0%
173	Less Accum. Depreciation		0		0		0	
174	Land		100,000		70,000		30,000	42.9%
175	Other		0		0		0	
176	Total Property, Plant and Equipment			370,000		234,000	136,000	58.1%
177								
178	Intangible Assets							
179	Franchise		20,000		0		20,000	
180	Total Intangible Assets			20,000		0	20,000	
181	Total Non-Current Assets			390,000		284,000	106,000	37.3%
182	Total Assets			520,000		435,000	85,000	19.5%
183								
184	Liabilities							
185	Current Liabilities							
186	Bank Overdraft		30,000		0		30,000	
187	Accounts Payable		41,900		19,100		22,800	119.4%
188	GST Clearing (Payable)		2,100		900		1,200	133.3%
189	Accrued Expenses		2,000		3,000		-1,000	-33.3%
190	Unearned Revenue		0		0		0	
191	Other		0		0		0	
192	Total Current Liabilities			76,000		23,000	53,000	230.4%

	A	B	C	D	E	F	G	H
194	Non-Current Liabilities							
195	Mortgage		120,000		100,000		20,000	20.0%
196	Other		0		0		0	
197	Total Non-Current Liabilities			120,000		100,000	20,000	20.0%
198	Total Liabilities			196,000		123,000	73,000	59.3%
199	Net Assets			324,000		312,000	12,000	3.8%
200								
201	Owner's Equity							
202	Capital			312,000		322,000	-10,000	-3.1%
203	Additional Capital			0		0	0	
204	Net Profit			19,000		9,000	10,000	111.1%
205				331,000		331,000		
206	Less Drawings			7,000		19,000	-12,000	-63.2%
207	Total Owner's Equity			324,000		312,000	12,000	3.8%
208								
209	Proof A = L + OE			0		0		
210	Proof Net Profit			0		0		
211	Proof Capital Opening = Capital Ending			0				
212	Proof Current Asset Difference			0				
213	Proof Non-Current Asset Difference			0				
214	Proof Total Assets Difference			0				
215	Proof Current Liabilities Difference			0				
216	Proof Non-Current Liabilities Difference			0				
217	Proof Total Liabilities Difference			0				
218	Proof Net Assets Difference			0				
219	Proof Owner's Equity Difference			0				
220								
221								
222	RATIOS							
223								
224	Profitability		2020		2019			
225								
226	Gross Profit		19.44 %		16.96 %			
227	Net Profit		2.64 %		1.61 %			
228	Return on Owner's Equity		5.97 %		2.84 %			
229	Return on Total Assets		7.12 %		4.55 %			
230								
231	Liquidity							
232	Current		1.71 TO 1		6.57 TO 1			
233	Quick		0.47 TO 1		2.09 TO 1			
234	Turnover of Inventories		6.11 TIMES		4.43 TIMES			
235			59.78 DAYS		82.42 DAYS			
236	Turnover of Accounts Receivable		5.79 TIMES		4.29 TIMES			
237			63.05 DAYS		85.17 DAYS			
238								
239	Stability							
240	Equity		62.31 %		71.72 %			
241	Debt		37.69 %		28.28 %			
242	Time Interest Earned		2.27 Times		1.90 Times			
243								
244	Sales per FTE person		180,000		186,667			
245								

	A	B	C	D	E	F	G	H
115	REPORT							
116								
117	=C50							
118	Statement of Profit or Loss							
119	for year ended 30 June							
120								
121			=C48		=E48			
122			\$		\$		\$ \$ Difference	% Difference
123	Cash Sales		=C53		=E53		=C123-E123	=IF(E123>0,G123/E123,"")
124	Credit Sales		=C54		=E54		=C124-E124	=IF(E124>0,G124/E124,"")
125	Total Sales		=SUM(C123:C124)		=SUM(E123:E124)		=D125-F125	=IF(F125>0,G125/F125,"")
126								
127	Less Cost of Sales							
128	Cost of Goods Sold		=C58		=E58		=D128-F128	=IF(F128>0,G128/F128,"")
129	Gross Profit		=D125-D128		=F125-F128		=D129-F129	=IF(F129>0,G129/F129,"")
130	add Other Revenue		=C83		=E55		=D130-F130	=IF(F130>0,G130/F130,"")
131			=SUM(D129:D130)		=SUM(F129:F130)		=D131-F131	=IF(F131>0,G131/F131,"")
132	Less Other Expenses							
133	Selling Expenses		=C59		=E59		=C133-E133	=IF(E133>0,G133/E133,"")
134	Administrative Expenses		=C60		=E60		=C134-E134	=IF(E134>0,G134/E134,"")
135	Finance Expenses		=C61		=E61		=C135-E135	=IF(E135>0,G135/E135,"")
136	Total Expenses		=SUM(C133:C135)		=SUM(E133:E135)		=D136-F136	=IF(F136>0,G136/F136,"")
137	Net Profit		=D131-D136		=F131-F136		=D137-F137	=IF(F137>0,G137/F137,"")
138								
139	Proof Total Sales Difference		=G125-SUM(G123:G124)					
140	Proof Gross Profit Difference		=G129-(G125-G128)					
141	Proof Total Expenses Difference		=G136-G133-G134-G135					
142	Proof Net Profit Difference		=G137-G131+G136					
143								

You are required to:

- build the model for the preparation of the financial reports and calculation of the relevant ratios. Make sure all the items in the Input/Assumptions area are unlocked and have a different colour. Turn on global protection. Save the model as Ratio Analysis 1
- print the model in normal mode and with formulas
- change the model to a template and save it as Ratio Analysis
- use the template to prepare solutions to Questions 2.51, 2.52, 2.53 and 2.54.

2.56 'What if' analysis

Adam Harris runs a jewellery shop called Harris Jewellers, which sells gems and jewellery, watches, silverware and crockery in a city that has a lot of competition from other jewellers. He employs two people in sales. Harris and one other person run the office. In order to compete, he offers customers the option of buying the goods for cash or paying 25 per cent of the price of the goods immediately (and being able to take the goods out of the store), with the other 75 per cent being due within 30 days on interest-free terms. He rarely charges interest on any overdue accounts as he says it is not worth the effort of chasing the extra money.

Harris wants to be able to analyse and interpret his accounting results, which are prepared on a computerised accounting package. However, the financial reports generated from the accounting package do not calculate any ratios. He would also like to be able to see the effect on the Statement of Profit or Loss and Statement of Financial Position of certain 'what if' decisions.

He therefore approaches you to build the following spreadsheet model, which includes the results for the year ended 30 June 2020. He wants to be able to see the results for the year by entering the original data in the original column and interpreting the available percentages and ratios.

As well, he wants to look at 'what if' situations. By entering data in the original column, the same data should be automatically entered into the 'what if' column. The 'what if' column can then be changed in the light of possible decisions. The result can be compared with the original column, which remains unchanged. In this way, Adam Harris will be able to (1) see the interrelationships that exist and (2) the effects of the 'what if' decision on the business.

You are required to:

- a Prepare the model, bearing in mind the relationships that exist between elements of the reports. At this point, the data entered into the original column is the same as that in the 'what if' column. Save the model under the name of Ratio Analysis WhatIf.

For ease of entry, the data will be entered into C53, C54 and so on. Because of the formulas in E53 and E54, the figures will all appear in the 'what if' column as well. Cells E53 and E54 are unlocked so that, if they have to change because of a 'what if', the data can be entered into these cells.

	A	B	C	D	E	F
47	REPORT					
48	Harris Jewellers					
49	Statement of Profit or Loss					
50	for year ended 30 June 2020					
51			Original		What If	
52			\$ %		\$ %	
53	Cash Sales		230000	59.0	230000	59.0
54	Credit Sales		160000	41.0	160000	41.0
55	Total Sales		390000	100.0	390000	100.0
56						
57	Cost of Goods Sold		208000	53.3	208000	53.3
58	GROSS PROFIT		182000	46.7	182000	46.7
59	Selling Expenses		45000	11.5	45000	11.5
60	Administrative Expenses		66000	16.9	66000	16.9
61	Total Finance Expenses		12000	3.1	12000	3.1
62	Including Interest	10500				
63	NET PROFIT		59000	15.1	59000	15.1
64						
65						
66	Harris Jewellers					
67	Statement of Financial Position					
68	as at 30 June 2020					
69			Original		What If	
70			\$ %		\$ %	
71	ASSETS					
72	Current Assets					
73	Cash at Bank		7000	2.1	7000	2.1
74	Accounts Receivable (Net)		20000	6.1	20000	6.1
75	Inventories		60000	18.2	60000	18.2
76	Accrued Revenues		2000	0.6	2000	0.6
77	Prepaid Expenses		0	0.0	0	0.0
78	Total Current Assets		89000	27.0	89000	27.0
79						
80	Non-Current Assets					
81	Property, Plant and Equipment					
82	Fixtures and Fittings		36000	10.9	36000	10.9
83	Less Accum. Depreciation		-4000	-1.2	-4000	-1.2
84	Motor Vehicles		27000	8.2	27000	8.2
85	Less Accum. Depreciation		-6000	-1.8	-6000	-1.8
86	Building		105000	31.8	105000	31.8
87	Less Accum. Depreciation		-17000	-5.2	-17000	-5.2
88	Land		80000	24.2	80000	24.2
89	Other		0	0.0	0	0.0
90	Total Property, Plant and Equipment		221000	67.0	221000	67.0
91						
92	Total Other Assets		20000	6.1	20000	6.1
93	TOTAL ASSETS		330000	100.0	330000	100.0
94						

	A	B	C	D	E	F
95	LIABILITIES					
96	Current Liabilities					
97	Bank Overdraft		0	0.0	0	0.0
98	Accounts Payable		39000	11.8	39000	11.8
99	GST Clearing (Payable)		2000	0.6	2000	0.6
100	Accrued Expenses		3000	0.9	3000	0.9
101	Unearned Revenue		0	0.0	0	0.0
102	Other		0	0.0	0	0.0
103	Total Current Liabilities		44000	13.3	44000	13.3
104						
105	Non-Current Liabilities					
106	Mortgage		105000	31.8	105000	31.8
107	Other		0	0.0	0	0.0
108	Total Non-Current Liabilities		105000	31.8	105000	31.8
109	TOTAL LIABILITIES		149000	45.2	149000	45.2
110						
111	NET ASSETS		181000	54.8	181000	54.8
112						
113	OWNER'S EQUITY					
114	Capital		122000	37.0	122000	37.0
115	Net Profit		59000	17.9	59000	17.9
116	TOTAL OWNER'S EQUITY		181000	54.8	181000	54.8
117						
118	Proof A = L + OE		0		0	
119	Proof Net Profit		0		0	
120						
121						
122	RATIOS					
123						
124	Profitability		Original		What If	
125	Gross Profit		46.67 %		46.67 %	
126	Net Profit		15.13 %		15.13 %	
127	Return on Owner's Equity		38.94 %		38.94 %	
128	Return on Total Assets		21.06 %		21.06 %	
129						
130	Liquidity					
131	Current		2.02 TO 1		2.02 TO 1	
132	Quick		0.66 TO 1		0.66 TO 1	
133	Turnover of Inventories		3.47 TIMES		3.47 TIMES	
134	Turnover of Accounts Receivable		45.63 DAYS		45.63 DAYS	
135						
136	Stability					
137	Equity		54.85 %		54.85 %	
138	Debt		45.15 %		45.15 %	
139	Times Interest Earned		6.62 Times		6.62 Times	

	A	B	C	D	E	F
47	REPORT					
48	Harris Jewellers					
49	Statement of Profit or Loss					
50	for year ended 30 June 2020					
51			Original		What If	
52			\$	%	\$	%
53	Cash Sales	230000	=C53/\$C\$55*100	=C53	=E53/\$E\$55*100	
54	Credit Sales	160000	=C54/\$C\$55*100	=C54	=E54/\$E\$55*100	
55	Total Sales	=SUM(C53:C54)	=C55/\$C\$55*100	=SUM(E53:E54)	=E55/\$E\$55*100	
56						
57	Cost of Goods Sold	208000	=C57/\$C\$55*100	=C57	=E57/\$E\$55*100	
58	GROSS PROFIT	=C55-C57	=C58/\$C\$55*100	=E55-E57	=E58/\$E\$55*100	
59	Selling Expenses	45000	=C59/\$C\$55*100	=C59	=E59/\$E\$55*100	
60	Administrative Expenses	66000	=C60/\$C\$55*100	=C60	=E60/\$E\$55*100	
61	Total Finance Expenses	12000	=C61/\$C\$55*100	=C61	=E61/\$E\$55*100	
62	Including Interest	10500				
63	NET PROFIT	=C58-SUM(C59:C61)	=C63/\$C\$55*100	=E58-SUM(E59:E61)	=E63/\$E\$55*100	

	A	B	C	D	E	F
122	RATIOS					
123						
124	Profitability					
125	Gross Profit	=C58/C55*100	%	=E58/E55*100	%	
126	Net Profit	=C63/C55*100	%	=E63/E55*100	%	
127	Return on Owner's Equity	=C63/((C114+C116)/2)*100	%	=E63/((E114+E116)/2)*100	%	
128	Return on Total Assets	=(C63+B62)/C93*100	%	=(E63+B62)/C93*100	%	
129						
130	Liquidity					
131	Current	=C78/C103	TO 1	=E78/E103	TO 1	
132	Quick	=(C73+C74+C76)/C103	TO 1	=(E73+E74+E76)/E103	TO 1	
133	Turnover of Inventories	=C57/C75	TIMES	=E57/E75	TIMES	
134	Turnover of Accounts Receivable	=365/(C54/C74)	DAYS	=365/(E54/E74)	DAYS	
135						
136	Stability					
137	Equity	=C116/C93*100	%	=E116/E93*100	%	
138	Debt	=C109/C93*100	%	=E109/E93*100	%	
139	Times Interest Earned	=(C63+B62)/B62	Times	=(E63+B62)/B62	Times	

- b Print out:
- the model in the normal mode
 - the model showing all formulas.
- c With particular reference to the firm's ratios and available industry benchmark below:

Benchmark – Jeweller	
Indicator	Typical
Gross Profit	58%
Occupancy	9%
Wages and Salaries	26%
Total Expenses	48%
Net Profit	9.5%
Stock Turnover	2.6 times
Sales per FTE Person	\$155 000

- comment whether the firm's trading for the year was good or bad, and why
- describe what other ratios/indicators could be calculated to help Harris interpret how well his business is doing.

- d For each of the following independent situations:
- enter the appropriate figures in the 'what if' column
 - obtain a printout of the changes that occurred as a result of the situation
 - with particular reference to the firm's figures and ratios and industry indicators for jewellers in part c above, examine whether the 'what if' decision is a good or bad decision, and why.
- Make sure you retrieve the model Ratio Analysis WhatIf before you start each new situation. This will set everything back to the original starting position.
- i In anticipation of an increased selling season, Harris decides to buy an extra \$15 000 of inventories on credit. These inventories are still on hand.
 - ii In order to increase cash sales, a commission of 5 per cent on the extra sales is to be paid to salespeople. Cash sales are expected to increase by \$50 000 and inventories to decrease by \$35 000.
 - iii Over the next month, Harris plans to make a concerted effort to make accounts receivable pay their debts faster. As a result, accounts receivable decrease by \$5000.
 - iv Harris plans to have a sale. The amount of inventories is expected to decrease by \$18 000 and cash sales increase by \$25 000. Advertising costs would be \$1500.
 - v Harris decides to spend most of his time selling. He employs another office person for \$18 000 and sacks a sales person on \$25 000.
 - vi Harris would like to see by how much cash sales would have to increase (and therefore increase his profit margin) to obtain a return on owner's equity of 40 per cent, assuming all costs remain the same.

Real-world application



Business and the Internet

Most organisations have home pages on the World Wide Web. These organisations include such information as their vision or objectives, facts and figures about their organisation (including in many cases, annual reports and financial statements), and information about coming events and initiatives.

This is a very efficient way to communicate information to members, shareholders and other interested parties. Some organisations also receive orders, feedback and payment from consumers via this medium.

Working in small groups, carry out the following two activities:

- 1 Access the Internet to find information on a large national company. Using this information, write a report of about one page that might be given to a potential investor, giving a brief description of the company, its results for recent years, and its potential to provide good returns on any future investment. You may also need to access the stock exchange site to obtain the current share price and dividend yield.
- 2 Explore any three other sites, and explain why each would be a useful site for a business or an accountant in a business to access. Some useful addresses include:
 - ANZ Bank
 - CPA Australia
 - Australian Stock Exchange
 - BHP
 - Coles
 - Commonwealth Bank
 - Currency Converter
 - IBM
 - Chartered Accountants Australia and New Zealand
 - Microsoft
 - Mortgage Calculator
 - Qantas
 - Westpac Banking Corporation
 - World Bank

You will find many more sites as you explore the Internet.



Useful websites

REVIEW AND REFLECT

This chapter examined the accounting concepts, principles and qualitative characteristics on which the determination of profit and the financial position of a business are based. All balance day adjustments were explained and fully classified Statements of Profit or Loss and Statements of Financial Position were prepared. Attention was also directed to the limitations of these reports.

The chapter also concentrated on how users may get maximum benefit from the information in accounting reports by using ratios and percentages to analyse and interpret them. This information is then used to prepare written reports and letters of advice.

2.57 Chapter summary

Complete the following tasks and questions, and you will have constructed a brief summary of the work on financial reports covered in this chapter.

- a What are the main classifications of revenues?
- b What are the main classifications of expenses?
- c How are assets and liabilities classified?
- d What is the general journal entry to adjust for an accrued expense?
- e What effect does the general journal entry for accrued revenues have on the ledger?
- f What is the general journal entry to adjust for a prepaid expense?
- g What effect does the general journal entry for unearned revenues have on the ledger?
- h Why are two entries necessary for the adjustment of doubtful debts?
- i What is the aim of adjusting the books for depreciation?
- j Explain the qualitative characteristics of financial information.
- k What are the limitations of the Statement of Profit or Loss?
- l What are the limitations of the Statement of Financial Position?
- m Which ratios provide measures of profitability?
- n Which ratios provide measures of liquidity?
- o The equity, debt and times interest earned ratios provide a measure of what?
- p How do you calculate each of the following financial ratios?
 - i gross profit
 - ii net profit
 - iii return on owner's equity
 - iv return on total assets
 - v current
 - vi quick asset
 - vii turnover of inventories
 - viii turnover of accounts receivable
 - ix equity
 - x debt
 - xi times interest earned

2.58 Application case

From the following information about Wurrarama Groceries for the year ended 30 June 2020, prepare a fully classified Statement of Profit or Loss and a Statement of Financial Position in narrative form showing working capital.

Sales		Patents	
	\$100 000		\$3 000
Sales Returns		Office Furniture	
\$1 000			\$8 000
Cost of Goods Sold		B Call	
\$27 000			\$1 750
Cash on Hand		Cash at Bank	
\$100			\$2 750
J Jones		Goodwill	
\$750			\$15 000
Shares in ABC Co		GST Credits Received	
\$2 000			\$250
Equipment		Buildings	
\$2 000			\$13 000
Land		Commission Revenue	
\$40 000			\$750
Inventories		Credit/Debit Card Fees	
\$9 000			\$150
GST Collected		Hutton Wholesalers	
	\$1 000		\$150
Rent Revenue		Office Salaries	
	\$1 850		\$1 000
A Lingard		Delivery Van	
\$110			\$10 000
Drawings		Loan	
\$1 000			\$10 000
Interest Expense		Insurance	
\$1 600			\$250
Delivery Van Expenses		Capital – S Wurrarama	
\$750			\$28 360
Advertising		Wrapping Expenses	
\$2 500			\$250
Miller Ltd		Gain on Sale of Non-Current Assets	
	\$1 000		\$100

2.59 Application case

T James is considering the purchase of an electronic games shop located in a busy western suburb. There is little competition in the area.

The present owner works one full shift, and employs two employees on a full-time basis. A good range of games is in stock to suit most tastes. Supply arrangements for games seem satisfactory.

The books of the business, which appear well kept, reveal the following details.

Ezy Games Statement of Profit or Loss for year ended				
	30 June 2020		30 June 2019	
	\$	\$	\$	\$
Sales		250 000		240 000
<i>Less Cost of Sales</i>		<u>85 000</u>		<u>80 000</u>
Gross profit		165 000		160 000
<i>Add Miscellaneous Revenues</i> (profits on confectionery, etc.)		<u>1 000</u>		<u>1 000</u>
		166 000		161 000
<i>Less Other Expenses</i>				
Advertising	9 000		8 000	
Wages	43 000		42 000	
Shop Rental	38 000		37 000	
Depreciation of Fixtures and Fittings	20 000		20 000	
Administration	6 000		5 000	
Insurance	10 000		10 000	
Interest on Loan	<u>14 000</u>	<u>140 000</u>	<u>15 000</u>	<u>137 000</u>
Net profit		<u><u>\$26 000</u></u>		<u><u>\$24 000</u></u>

You are able to ascertain that the industry average for the gross profit ratio is 67 per cent, net profit ratio is 9 per cent and sales per FTE are \$145 000.

Ezy Games Statement of Financial Position as at				
	30 June 2020		30 June 2019	
	\$	\$	\$	\$
Assets				
Current Assets				
Cash on Hand	1 000		1 000	
Cash at Bank	64 000		49 000	
Inventories	<u>265 000</u>	330 000	<u>270 000</u>	320 000
Non-Current Assets				
Property, Plant and Equipment				
Fixtures and Fittings	250 000		250 000	
Less Accumulated Depreciation	<u>70 000</u>	<u>180 000</u>	<u>50 000</u>	<u>200 000</u>
Total assets		<u>510 000</u>		<u>520 000</u>
Liabilities				
Current Liabilities				
Accounts Payable	81 000		80 000	
Accrued Expenses	<u>12 000</u>	93 000	<u>10 000</u>	90 000
Non-Current Liabilities				
Loan from ACE Finance		<u>170 000</u>		<u>180 000</u>
Total liabilities		<u>263 000</u>		<u>270 000</u>
Net assets		<u>\$247 000</u>		<u>\$250 000</u>
Owner's Equity				
Capital	250 000		247 000	
Add Net profit	<u>26 000</u>		<u>24 000</u>	
	276 000		271 000	
Less Drawings	<u>29 000</u>	<u>247 000</u>	<u>21 000</u>	<u>250 000</u>
Total owner's equity		<u>\$247 000</u>		<u>\$250 000</u>

T James has approached you in your capacity as a business consultant, to advise her on the purchase of the business. The price being asked is \$300 000. She also asks if you have any suggestions on how to improve the operation of the business.

Analyse the facts and figures presented above and write a report for James, clearly setting out your analysis and recommendations.

2.60 Analysis and interpretation case

Using the following comparative Statements of Profit or Loss, Statements of Financial Position, industry averages and other information such as horizontal analysis on major items, calculate all appropriate ratios and prepare a written report to management on the results.

Logan Entertainment Industries Statement of Profit or Loss for year ended				
	30 June 2020		30 June 2019	
	\$	\$	\$	\$
Sales				
Cash	120 000		100 000	
Credit	<u>600 000</u>	720 000	<u>420 000</u>	520 000
Less Cost of Sales				
Cost of Goods Sold		<u>440 000</u>		<u>320 000</u>
Gross profit		280 000		200 000
Less Other Expenses				
<i>Selling Expenses</i>				
Advertising	14 000		10 000	
Delivery Expenses	38 000		28 000	
Depreciation on Delivery Vehicles	<u>24 000</u>	76 000	<u>20 000</u>	58 000
<i>Administrative Expenses</i>				
Insurance	18 000		16 000	
Depreciation on Buildings	16 000		16 000	
Office Expenses	<u>66 000</u>	100 000	<u>48 000</u>	80 000
<i>Finance Expenses</i>				
Bad Debts	16 000		12 000	
Interest on Mortgage	<u>20 000</u>	<u>36 000</u>	<u>14 000</u>	<u>26 000</u>
Net profit		<u><u>\$68 000</u></u>		<u><u>\$36 000</u></u>

Logan Entertainment Industries
Statement of Financial Position as at

	30 June 2020		30 June 2019	
	\$	\$	\$	\$
Current Assets				
Accounts Receivable	130 000		110 000	
Inventories	200 000		160 000	
Prepaid Insurance	<u>20 000</u>	350 000	<u>10 000</u>	280 000
Non-Current Assets				
Delivery Vehicles	120 000		100 000	
Land	200 000		100 000	
Buildings	<u>200 000</u>	<u>520 000</u>	<u>100 000</u>	<u>300 000</u>
Total assets		<u>870 000</u>		<u>580 000</u>
Current Liabilities				
Bank Overdraft	72 000		40 000	
Accounts Payable	214 000		180 000	
Accrued Office Expenses	<u>28 000</u>	314 000	<u>30 000</u>	250 000
Non-Current Liabilities				
Mortgage		<u>160 000</u>		<u>80 000</u>
Total liabilities		<u>474 000</u>		<u>330 000</u>
Net assets		<u>\$396 000</u>		<u>\$250 000</u>
Owner's Equity				
Capital		<u>396 000</u>		<u>250 000</u>
Total owner's equity		<u>\$396 000</u>		<u>\$250 000</u>

Additional information at 30 June 2018

- accounts receivable \$100 000
- inventories \$140 000
- total assets \$550 000
- capital \$214 000

Additional capital during the financial year 2020 is \$78 000.

The following industry averages were available from industry publications.

	2020	2019
Gross profit ratio	45%	43%
Net profit ratio	9%	8%
Return on owner's equity	20%	19%
Return on total assets	13%	12%
Current ratio	1.3 : 1	1.2 : 1
Quick asset ratio	0.7 : 1	0.6 : 1
Equity ratio	53%	49%
Debt ratio	47%	51%
Turnover of inventories	4 times	4 times
Turnover of accounts receivable	52 days	60 days



JB Hi-Fi annual
report

2.61 Financial reporting case – JB Hi-Fi Limited

Follow the weblink to the 2018 annual report for JB Hi-Fi Limited. Answer the following questions relating to JB Hi-Fi Limited.

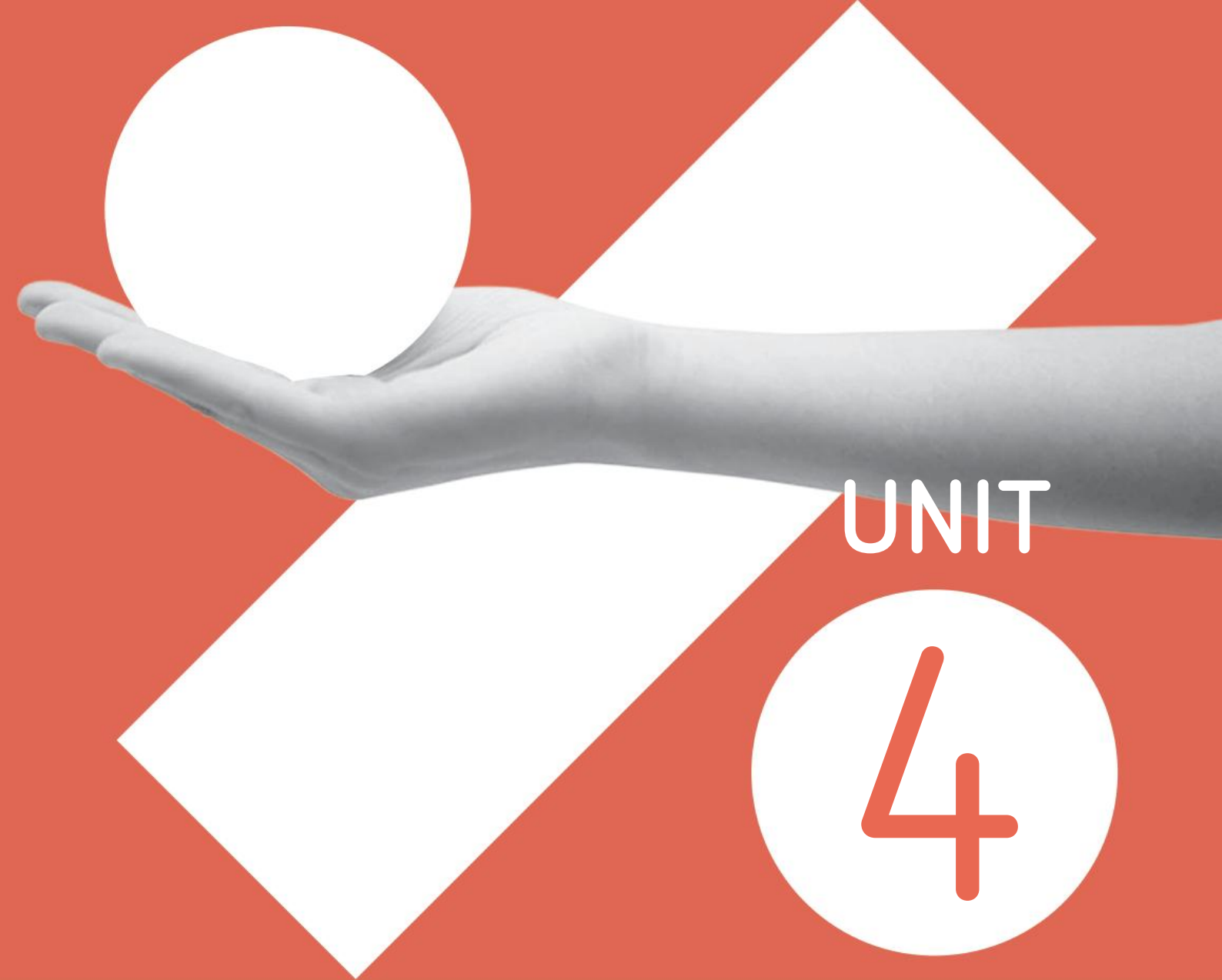
- a** In Note 1 in the 2018 Financial Report to Shareholders, what is the basis of preparation for the reports? What accounting assumptions and qualitative characteristics are mentioned?
- b** In Note 5, what is the total amount of finance expenses for 2018?
- c** Which note sets out the ageing of trade receivables?
- d** How are inventories valued? Which note states this?
- e** What is the amount of current and non-current prepayments for 2018?
- f** In 2018, what is the amount of current assets, non-current assets, current liabilities, non-current liabilities and total equity?
- g** What is the total value of revenue for 2018? What is the cost of sales for 2018?
- h** What are the total sales and marketing expenses, administrative expense and finance expenses for 2018?



Extra questions
and activities

Extra questions and activities

Refer to NelsonNet for extra questions on Chapter 2. These questions include multiple choice, true/false, and a selection of other questions and activities.

A hand holding a white circle against a red background with white geometric shapes.

UNIT

4

ACCOUNTING – THE BIG PICTURE

Introduction

This unit brings a real-world perspective to the study of accounting. There are four essential accounting ingredients required to run a business – the three financial statements (backward looking) and a cash budget (forward looking). With the aid of computer systems, these financial statements can be prepared weekly, fortnightly or monthly. The minimum is yearly reporting at the end of the financial year.

The unit commences with Chapter 3 discussing management of the most liquid of assets – cash. Applying the general internal control principles, **internal controls over the handling of cash** will be examined including the petty cash system. A major control mechanism for cash is the **bank reconciliation** process. The bank statement is an independent check of all cash transactions conducted by the business so it can verify that transactions have taken place. With the ever-increasing impact of electronic banking, the bank statement becomes a major source document for cash transactions. The **cash budget** will then be discussed. This is where the business must look forward and try to predict what will happen in the future. Meeting cash commitments such as paying wages, suppliers and on-time loan repayments is very important for the reputation of the business. The cash budget will help in the planning of future cash requirements to meet these obligations.

Technology plays an important part in accounting. **Spreadsheets** are ideally suited to preparing a cash budget so this will be outlined. Finally, the MYOB **accounting package** will be used to show the whole recording process for all the various transactions found in a typical business.

The final two chapters bring together all your accounting learning and apply it to the real world. You have been steadily building your accounting knowledge about recording, reporting and controlling. This learning has been built around the objectives of accounting discussed in Chapter 1 of *Units 1 & 2*. The objectives comprised: **to provide information for decision making, to assist in discharging accountability and to help evaluate performance**. Chapter 4 will revise the **complete accounting process** from source documents to the preparation of the financial statements for a sole trader GST business. The real world of accounting does not just record transactions as they occur. Accounting problems will also have to be solved independent of the recording process. Typical problems will be provided to use and improve your **problem-solving skills**.

Chapter 5 then looks at the real world and the published **financial statements of public companies**. This links back to what was discussed in Chapter 1 of *Units 1 & 2*. You will be required to **analyse and interpret** their external financial statements (Statement of Financial Position/Balance Sheet, Statement of Profit or Loss/Income Statement, and Statement of Cash Flows). Up to this point in your study of accounting, all of the financial statements have been internal reports so all the details are available to the owner/manager. These published reports are external reports so the basic numbers will be the same, but the information made available will be different, especially in the form of Notes to the statements. **Ratios** will be calculated to aid your **evaluation of the performance** of these companies. This evaluation will ultimately enable you to ask vital questions about performance and to make decisions about these companies.

3

CASH MANAGEMENT

LEARNING OBJECTIVES

When you are competent in the work covered by this chapter you should be able to:

- describe the internal controls used in the receipt and payment of cash
- describe the petty cash system
- explain the bank reconciliation procedure
- prepare a bank reconciliation
- explain the purpose of a cash budget
- prepare a cash budget involving credit and GST transactions
- analyse a cash budget using 'what if' analysis
- explain the differences between cash flows and revenue/expense flows and the implications of these differences for maintaining the viability of a business
- prepare a spreadsheet for a cash budget with input and report areas incorporating 'what if' analysis
- use an accounting package to record transactions for the whole accounting process, record balance day adjustments, prepare a bank reconciliation, generate reports, roll over to a new financial year and record reversing entries.

Cash management

Internal controls over cash

- Importance of cash
- General internal controls over cash
- Applying internal controls to cash receipts
- Applying internal controls to cash payments
- Petty cash

Bank reconciliation

- Bank reconciliation procedure

Budgeting

- Cash budgets
- Preparation of a cash budget
- Cash budgets – a survival tool

Spreadsheet application

MYOB AccountRight accounting package for complete accounting process

- Cash transactions and the bank reconciliation using an accounting package
- The whole accounting process using MYOB AccountRight

Review and reflect

Internal controls over cash

As discussed in Chapter 1, the internal control of a business enterprise involves those internal methods and measures that ensure efficient management of the enterprise and achievement of planned objectives. This involves accounting controls, which comprise the methods and procedures designed to safeguard the assets of the business and to check the accuracy and reliability of its accounting data; and administrative controls, which comprise the methods and procedures designed to promote operational efficiency and to encourage adherence to prescribed managerial policies.

Internal administrative controls are achieved through:

- personnel control – appropriate staff selection, performance reports
- quality control – production inspection, statistical analyses
- supervisory control – supervision and delegation of work
- other controls – risk management procedures.

Internal accounting controls are built around the following seven principles:

- 1 reliable, competent personnel – to ensure accurate work
- 2 verification – to check by some independent means
- 3 authorisation – to validate a course of action
- 4 fixing responsibility – to enable authorisation and know who is responsible for what
- 5 separation of duties – to prevent theft and fraud
- 6 adequate and accurate documents and records – to ensure that assets are correctly recorded and controlled using appropriate procedures
- 7 physical controls and security – to ensure that assets are physically safeguarded

Importance of cash

Cash is such an important asset for the following reasons:

- Most business transactions eventually lead to the business receiving cash (cash receipts) or paying cash (cash payments).
- Because cash in the form of money is easily stolen, adequate controls must be implemented to ensure that people with dishonest intentions are detected.

Effective management of cash includes:

- ensuring appropriate controls are implemented
- preparing cash budgets
- investing excess cash to maximise revenue.

Interesting accounting fact

Did you know?

About cash

Cash is the most common form of payment in Australia. Usually, cash payments are less than \$50 and cash is almost exclusively used in transactions of less than \$10.

The popularity of cash is evident in the number of ATM withdrawals and 'cash-out' transactions, which total an average of over 2 million withdrawals each day.

Coin in Australia is produced by the Royal Australian Mint in 5c, 10c, 20c, 50c, \$1 and \$2 denominations. The Reserve Bank of Australia has sole responsibility for issuing notes, which are printed by a wholly owned subsidiary of the Bank. The Reserve Bank issues notes in \$5, \$10, \$20,

\$50 and \$100 denominations. Since 1996, all notes in circulation in Australia are made from flexible polymer plastic, which enhances durability and makes counterfeiting much more difficult.

Financial institutions have long had responsibility for supplying cash to the community. While some financial institutions obtain their cash requirements 'commercially', usually from armoured carrier companies, five Australian banks own and manage their own cash reserves and make them available to everyone else. Together, and working closely with the Reserve Bank and the Royal Australian Mint, these banks largely supply Australians with the notes and coins they need to carry out daily economic activity.

APCA's Australian Cash Distribution and Exchange System (ACDES) provides a safe and efficient set of rules for the exchange and distribution of bulk cash between the five banks that supply cash.

Source: 'Cash', www.auspaynet.com.au/network/cash. Copyright © 2018 Australian Payments Network Limited. All rights reserved.



Cash

General internal controls over cash

A good system of internal control over cash should have the following features:

- All cash received should be **evidenced by a document or other proof**. This makes it more difficult for employees to steal money. A document or other proof allows the business to check that the actual cash on hand corresponds to the amount that should be on hand.
- All cash received should be **banked intact at the end of each business day**. 'Intact' means that payments should not be made out of the day's receipts. Banking daily ensures that large amounts of money will therefore not be left on the premises overnight.
- All cash payments should be made by **cheque or electronic funds transfer (EFT)**, except when amounts are small enough to be paid through a petty cash fund.
- All cash should be kept in a **safe place**. Change kept on hand for the next working day should be under lock and key, preferably in a safe.
- At regular intervals, the business's records must be checked against, or reconciled with, an **independent record** called a bank statement (see section on bank reconciliation, page 230). This is particularly important where there are many EFTs of cash. If this occurs, the receipt of daily bank statements or Internet access to bank statements is very important. Bank statements are vital, not only to ensure the reconciliation of the final balance, but also to record the many transactions that are now occurring electronically.
- Employees who receive or handle cash should not be involved with the recording of these transactions in the accounting records. This **separation of duties** is designed to prevent a person from taking money and disguising the theft by adjusting the business's records.
- Employees are less likely to commit fraud if they know that they can be moved without prior notice. This **rotation of duties** may allow the next person doing the job to discover any unusual entries. Employees should also be made to **take annual holidays** so that other people do their job in their absence. Again, errors or unusual entries can be discovered in this way.

If these procedures are followed, it is virtually impossible for one person alone to commit fraud. It would be of no use for a person simply to change the accounting records without having access to the cash. Similarly, if an employee steals cash without changing the records, the fraud will almost certainly be detected. Fraud cannot be eliminated completely, but a good internal control system ensures that it would take at least two people to commit fraud. The chance of fraud happening is therefore diminished.

Real-world application



Four fast-moving payment trends

Alexandra Cain

The evolution of the payments space is already transforming the way money moves around the world. Understanding these four fast-shifting trends can help CFOs make up-to-date decisions.

The payments evolution is in a state of constant change, with new forms of payment emerging at a rapid rate. Nick Alexander, Vice President of American Express Payment Consulting JAPA, told attendees at the recent American Express Inside Edge conference that of the 579 fintechs now registered in Australia, 128 of them are focused on payments or new payment techniques.

Mobile driving change

Mobile has been the obvious driver of change, he says, and many businesses are getting involved.

'Chip manufacturers are creating contactless chips, embedding secure elements for phones. Then you've got the network operators getting involved and you've got the handset manufacturers,' Alexander says.

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According to Alexander, mobile phone payment solutions are growing at three times the pace of online. This has spawned simpler checkout processes. The old-style, multi-step process of entering your name, address and delivery details and perhaps even a customer account number, now becoming virtually obsolete.

'Just putting in a user ID, or simply just putting your thumbprint on the phone, has been a big change,' Alexander says. He identifies four areas where the payment system arena is moving at an exponential pace: QR code payments, transit payments, faster payments and advances in payment security.

QR codes make payment simple

Using QR ('Quick Response') codes, customers can make a bill payment in seconds by scanning the code on their paper or electronic bill using their mobile or tablet device. Alexander says making it easier for customers to pay means they are more likely to pay on time, improving business cash flow.

The QR code is a two-dimensional barcode that can store about 4000 digits of alphanumeric information. There are now two different specifications: one for merchants, the other for credit or other payment cardholders.

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Transit payments

Public transport system payments are also changing. There have long been what Alexander terms 'closed loop' transit payments, which come in the form of a ticket or card holding a credit balance that can be topped up, but that can only be used within a particular transit authority. Examples of this are the Opal Card in Sydney, the Octopus Card in Hong Kong and the Oyster Card in London.

'What we're now seeing is the advent of contactless payments and a migration from closed loop to open loop,' Alexander says. 'This is about using your general purpose credit card or your mobile phone to just tap and go, to get on and off the transit system.'

Alexander says that although it sounds easy, the challenge is to make the transaction occur quickly because passengers don't have time to be caught up in verification processes when they are travelling.

Faster payments

There's increasing demand for payments to be processed faster so that payments occur in just 15 seconds rather than the several hours or sometimes even days it now takes.

The advent of a Pay ID – a cornerstone of Australia's billion-dollar New Payment Platform – can allow details such as bank accounts, ABN numbers and other identifying information to be quickly processed.

'If I have a Pay ID that connects my bank to those credentials it will simplify payments. That provides better data, and is available whether I'm paying a friend or I'm doing my payroll,' Alexander says. Alexander adds this can be an enormous benefit in B2B (business to business) payments and can also be used by card members to pay off a credit card in seconds, if they overreach credit limits.

Payment security

Finally, Alexander points to big changes happening in payment security. He cites the example of Certify, a software platform that takes all the different pieces of information that come with a payment and runs those across many databases.

'It looks at who I am, my card number and expiry date, all of the traditional information. But it also asks: what is the IP address that I'm using? What's the location that I'm making the payment from? Then it runs all this against lots of negative databases to determine legitimacy,' Alexander says. Not only can this be helpful to combat identify fraud, it could help businesses be a little less risk averse when new business comes their way, he says.

Another piece of tech, InAuth, looks at 2000 attributes that exist and are available on mobile phones. It uses those attributes to help determine the legitimacy of the transaction.

For instance, most fraudsters keep mobile phones plugged in on a desk, so they're all sitting fully charged, Alexander says. 'With InAuth you can check using the gyro, the position of the phone.'

InAuth can also check a person's social media footprint by checking how many friends and photos are on the phone. 'So if there are no photos and no friends on Facebook, the phone's lying flat and the phone's fully charged, it's a much higher propensity for this to be an illegitimate charge than a legitimate one.'

Alexander also says biometrics are becoming much more secure ways to authenticate payments than PINs and passwords. 'Artificial intelligence is also going to play a much bigger role in payments. I'll soon be able to say "Hey Google, can you order me a large Hawaiian from Domino's?" and it arrives. That's a reality we will see in the very near future.'

Source: Alexandra Cain, *Acuity*, 4 April 2018



Payment trends

Applying internal controls to cash receipts

It has already been stated that for every receipt of cash, a record must be kept to substantiate the receipt of money by the business.

Two important control factors over cash sales are:

- calculating the actual amount of cash (including coins, notes, cheques and credit/debit card vouchers) received each day
- carrying out some checks to ensure that what was received is the amount that should have been received.

In most businesses, there are three main sources of cash:

- 1 **cash sales**
- 2 **cash sales – bank credit/debit cards**
- 3 **cash received from accounts receivable and all other sources.**

1 Cash sales

The most important thing is to ensure that the correct amount of money received has been recorded. The most common form of internal control over cash sales is the **cash register**. It should be positioned so that the customer can see the amounts being entered and the total amount that has to be paid.

At the end of each day, the total amount of cash that should have been received is recorded in an independent record, which is the cash register summary. For control purposes, it is a simple matter to compare the total sales with the amount of cash in the till, minus any change that was given at the start of the day's trading. If it was the firm's policy to make cash refunds from the cash register for sales returns, then these would also have to be deducted. If these two amounts do not correspond, the manager is alerted and a decision is made on what will be done.

It is important that the operator cannot adjust the amounts on the cash register summary. For this reason, higher level access to the computer is generally kept by a supervisor. If an error is made, the supervisor is called over to adjust it.

The cash is then banked at the end of each day.

The use of numbered tickets for admission to films, museums and so on is another way of ensuring control. Control is achieved by comparing the number of tickets sold with the total cash received.

2 Cash sales – bank credit/debit cards

In Chapter 8 of *Units 1 & 2*, the use of bank credit/debit cards was discussed in relation to how businesses could offer credit without having to set up a credit department. In this section, we will look at how businesses will receive their money when cash sales are made and the customer wishes to use a credit card or debit card. When such facilities (Visa, MasterCard, other similar cards) are offered by banks, this means that the business/merchant receives cash for these transactions almost immediately because the amounts are guaranteed by the banks. The vast majority of credit/debit cards using Visa and MasterCard are offered by banks. Some businesses will brand their own credit cards even though they are backed by banks; for example, Woolworths has a branded credit card that is issued by Macquarie Bank.

Customers are given a credit card that allows them to purchase goods or services up to a set limit. The firm is then charged a fee for the use of the institution's facilities.

When a credit card is read at a merchant's facility, the following will occur:

- The amount of the transaction is entered.
- An electronic check is made to see if the card number is on a 'hot file'. This 'hot file' is a list of cards that have been reported stolen or lost.
- An electronic check is made to see if the card is still current (i.e. not past the expiry date) and to determine if the credit limit has been reached.
- Authorisation will then occur by the customer entering a Personal Identification Number (PIN); or if the amount is under a certain limit, then payWave (Visa) or PayPass (MasterCard) can be used by tapping the card and going (tap and go).
- A copy of the credit card voucher is given to the customer.

A debit card is used to directly transfer money. The debit card can therefore be used by customers to pay amounts without carrying cash. A debit card holder authorises the bank to transfer money from the cardholder's account at the bank to the account of the merchant/business selling the good or service. This system is called electronic funds transfer at point of sale (EFTPOS). The controls to be implemented over this type of sale are similar to those for credit cards. The amount of the transaction is entered, the customer's card is read, the customer enters the PIN, payWave or PayPass, and the computer decides if the transaction can be processed after checking the hot file, expiry date and balance of the account.

Essentially, both the credit card sales and the debit card sales will appear as one daily total amount in the bank statement. This electronic deposit to the bank of, say, \$9500 will be recorded in the normal way:

		Dr	Cr
Cash at Bank		\$9 500	
Sales			\$9 500

Each month, the business is charged a fee for operating these cards. The merchant fee for these cards is generally based on a plan depending upon the dollar amount of transactions per month and then an extra percentage if sales are greater than that transaction limit. For example, a typical plan might be \$125 per month and this covers transactions up to \$10 000 for the month. Any amounts over that \$10 000 limit will be charged an extra 1.5 per cent. These fees would appear on the bank statement each month. If there were \$25 in normal bank charges for keeping the transaction account and \$125 in credit/debit card fees, they would be recorded as follows:

		Dr	Cr
Bank Charges		\$150	
Cash at Bank			\$150

If desired, separate accounts could be kept for each of these fees.

There are other cards available for customers to use such as American Express and Diners Club. These issuers are private organisations offering credit cards, and the processing of these transactions is beyond the scope of this text.

3 Cash received from accounts receivable and all other sources

For all other money received, a numbered receipt should be completed, with the original given to the customer and a copy kept for recording purposes.

If money is received by mail, extra care must be taken. At least two people should be present when the mail is opened, and a record must be kept of all money received, preferably in a **mail inwards register**. If only one person opens the mail and takes money, that person could say the letter was not received or was lost in the post. The people opening the mail should not have access to the recording process or the handling of normal cash receipts. When all the money is collected, it should be taken to the cashier and the appropriate receipts issued.

The above assumes that money in the form of cash or cheques is actually presented to the business to pay a debt. However, the modern trend is to electronically send this money straight into the business's bank account through EFT deposits. Regular receipts such as rent received and customers paying their account by EFT are examples of this. The business is made aware of these receipts when the bank statement is received. This was explained in Chapter 3 of *Units 1 & 2*, and will be revisited later in this chapter when the bank reconciliation is discussed.

3.1

'Cash is such an important item that adequate controls must be implemented to safeguard this asset.'

- Why is cash such an important item?
- What controls can be used to safeguard this asset?

3.2

Different businesses receive cash in different ways. Some of the documents used in conjunction with the receipt of money are:

- receipts
- cash register summary
- credit card vouchers
- tickets
- bank statement.

- a Suggest appropriate businesses that would use each of the above.
- b How would these documents help the business control the receipt of cash?

3.3

- a Why is it important to bank the day's receipts intact?
- b Why is it that fraud cannot be completely eliminated even if adequate controls are implemented?
- c Explain the treatment of bank credit/debit cards for the collection of cash sales.

Applying internal controls to cash payments

The main internal control over cash payments is that all payments should be made by cheques or EFT (with the exception of small items of expenditure that will be paid through a petty cash fund). A typical payment system should have the following features:

- **Evidence** is necessary to ensure that only legitimate expenditures will be made. Evidence in the form of checked and validated orders, tax invoices and/or statements of account should be produced before a payment is made.
- All cheques or EFT payments should be **properly authorised**. For added precaution, two signatures are often required on a cheque and two people electronically authorise any EFT payments.
- A **regular bank reconciliation statement** should be prepared by a person who did not prepare or authorise the payments, and who was not involved with the keeping of accounts payable records.
- All **cheques** should be pre-numbered in serial order and crossed 'Not negotiable'. Any cancelled cheques should be kept for audit purposes. Unused cheques should be kept in a safe place.

Another method of controlling payments by employees is the use of a **corporate credit card**. This enables employees to make legitimate payments without carrying cash. When the credit card statement is received, it will be verified with receipts supplied by the employee and paid in the usual manner.

3.4

One of the controls over cash payments is that a cheque should be crossed 'Not negotiable'. Research the other types of cheque crossings that can be used.

3.5

Ms Russell works for a small retail store and is very proud of her efficient accounting system. The firm also employs a general office clerk and a receptionist. Every day, Ms Russell opens all the mail and collects cheques, money orders and so on from the envelopes, and puts them in a special file to write out receipts when she has time. She also receives cash from customers. Customers can also pay by direct deposit to the firm's bank account.

When she has time, Ms Russell takes all cash and cheques to the bank. At the end of each day, she enters all amounts received directly into customers' accounts.

When small amounts have to be paid (such as stamps), Ms Russell cashes a customer's cheque and keeps the extra money locked in the safe for future small expenses.

Mr Andrews, her employer, is frequently out of the office. Before he goes, he leaves enough signed blank cheques to make payments throughout the day.

The firm receives a bank statement at the end of each month and Ms Russell carefully files this in case any problems arise.

Write a letter to Mr Andrews on his office procedures, advising of the following:

- a any deficiencies of the system
- b recommendations that could be made to improve the system.

Interesting accounting fact

Did you know?

Australia's CSIRO (Commonwealth Scientific and Industrial Research Organisation) invented plastic notes

The research began in 1968 following a request from the Reserve Bank of Australia for a scientific solution to combat forgeries of the new decimal currency. Our solution was to have a see-through panel and hologram embedded in the note and to use plastic.

Source: 'Our top 10 inventions', section 2 paragraph 2, CSIRO



Plastic
notes

Petty cash

The purpose of the petty cash fund is to facilitate the payment and recording of items that are individually too small for a cheque to be drawn or an EFT payment to be made.

The recording of petty cash is generally controlled by a junior clerk, who is known as the **petty cashier**. Whenever employees require petty cash, a document called a **petty cash voucher** must be completed and authorised. The voucher must be accompanied by evidence of expenditure – such as a cash register docket or receipt – and provides evidence for the **petty cash book** entries.

The imprest system

The normal method used for controlling and recording petty cash is called the **imprest system**. This system involves three distinct steps:

Step 1 Establish the petty cash fund.

Step 2 Record petty cash expenditures in the petty cash book.

Step 3 Balance the petty cash book and draw a reimbursement cheque or withdrawal to bring the amount of petty cash back to the imprest amount.

Step 1 is only carried out when a fund is being set up or the imprest amount is changed. Steps 2 and 3 are carried out continually.

Illustrative example 1

Step 1 Establish the petty cash fund for the imprest amount.

An initial advance amount in cash is given to the petty cashier to start the fund. This is called the **imprest amount**.

- An entry must be made in the journal to record the petty cash advance cheque or withdrawal for the imprest amount. For example, if the imprest of \$100 cash was set up on 1 July, the journal entry would be:

			Dr	Cr
July 1	Petty Cash Cash at Bank (Petty cash advance, withdrawal no 257)		\$100	\$100

The Petty Cash account is an asset account. No further entries will be made in this account unless it is necessary to increase the imprest amount.

- An entry must be made in the petty cash book dated 1 July, as illustrated below.

Step 2 Record petty cash expenditures from the properly authorised petty cash vouchers (with attached receipts).

- Entries must be made in the petty cash book, as illustrated below. These payments will be for a maximum amount of, say, \$20.

Petty Cash Book									
				Analysis of expenditure					
Receipts	Date	Voucher No	Particulars	Payments	Travel Expenses	Advertising	Stationery	Sundries	GST Credits Received
\$				\$	\$	\$	\$	\$	\$
100.00	July 1	1	Petty cash advance, withdrawal no 257						
	2	1	2 Red cabs (taxi fare)	15.40	14.00				1.40
	2	2	Advertising	5.50		5.00			0.50
	3	3	Cake and biscuits	11.00				10.00	1.00
	3	4	Red cabs (taxi fare)	16.50	15.00				1.50
	5	5	Stationery suppliers	12.10			11.00		1.10
	5	6	Advertising	5.50		5.00			0.50
	5	7	Pens and pencils	2.20			2.00		0.20
				68.20	\$29.00	\$10.00	\$13.00	\$10.00	\$6.20
		3	Balance c/d	31.80					
\$100.00				\$100.00					
31.80			Balance b/d						
68.20			Withdrawal no 290						

Step 3 Balance the petty cash book and draw a reimbursement cheque or withdrawal to bring the petty cash back to the imprest amount.

- This step is illustrated in the petty cash book, as shown below.

To start each new period, the cash in the petty cash box must be made up to the original imprest amount. This reimbursement cheque is cashed or a cash withdrawal is made and the appropriate amount entered in the Receipts column of the petty cash book.

The totals of the various expenditure analysis columns are itemised. Each of the analysis columns corresponds to a ledger account title. When the cheque is issued or the withdrawal made, the expenses and amounts are shown as per the petty cash book analysis columns. The totals of the columns form the basis of the general journal entry as follow:

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
July 5	Travel Expenses		29.00	
	Advertising		10.00	
	Stationery		13.00	
	Sundry Expenses		10.00	
	GST Credits Received		6.20	
	Cash at Bank			68.20
	(Petty cash reimbursement, withdrawal no 290)			

These amounts are then posted to the accounts in the ledger.

Note that the petty cash book is a subsidiary record in which the detailed supplementary information is kept. Only the advance and the reimbursement cheques or withdrawals are recorded in the journal and posted to the ledger accounts. Obviously, appropriate controls would have to be implemented around these reimbursement cheques or withdrawals. Another control could occur at any time – ensuring that the total of the vouchers plus the total money in the petty cash till equals the imprest amount.

3.6

Adam West has been writing out cheques for all payments of cash. It has been decided that this is an inefficient procedure for small payments and an imprest system of petty cash is to be implemented. You have been asked to draft a memo on behalf of J Paxton, the accountant, to explain to all staff how the new system will operate and what procedures staff will be required to follow if petty cash is to be used for payments up to \$20.

3.7

- a Explain the specific internal controls that are evident in the imprest system of petty cash.
- b D Jones has just opened a gallery called the Makum Gallery, and has realised that a petty cash fund is required to pay for all the regular small expenses that occur from day to day. During the week, the following occurred:

2020		
Jan	7	Issued cheque 9724 for \$100 to establish the fund. Paid for advertising \$8.80, voucher 1.
	8	Paid for taxi fare \$19.80, voucher 2. Paid for cleaning \$9.90, voucher 3.
	9	Paid for cake \$5.50, voucher 4. Paid for advertising \$6.05, voucher 5.
	10	Paid for cleaning \$4.95, voucher 6. Paid for cleaning \$6.60, voucher 7.
	11	Paid taxi fare \$17.60, voucher 8.

Using the imprest system, prepare the gallery's petty cash book with column headings for advertising, cleaning, travel expenses, and sundries. Reimbursement cheque no 9761 was issued on 11 January.

Show also the entries that are made in the journal and post to the ledger.

3.8

You are responsible for keeping the petty cash book of the firm Hi-Fi Sounds. At the end of March, the balanced petty cash book appears as follows:

Hi-Fi Sounds										
Petty Cash Book										
Receipts	Date	Voucher No	Particulars	Payments	Advertising	Analysis of expenditure				GST Credits Received
						Office Cleaning	Cartage Outwards	Sundries		
\$				\$	\$	\$	\$	\$		\$
				46.75	\$18.60	\$10.40	\$7.90	\$5.60		\$4.25
	Mar 31		Balance c/d	28.25						
\$75.00				\$75.00						
28.25			Balance b/d							
46.75			Reimbursement withdrawal no 4589							

During April, you made the following petty cash payments:

Petty Cash Voucher No 57 1 April 2020 Particulars: Office cleaning \$6.05	Petty Cash Voucher No 58 3 April 2020 Particulars: Paper \$9.90
Petty Cash Voucher No 59 10 April 2020 Particulars: Advertising \$4.95	Petty Cash Voucher No 60 12 April 2020 Particulars: Taxi fares \$18.70
Petty Cash Voucher No 61 12 April 2020 Particulars: Office cleaning \$3.85	Petty Cash Voucher No 62 16 April 2020 Particulars: Cartage outwards \$8.25
Petty Cash Voucher No 63 20 April 2020 Particulars: Advertising \$4.95	Petty Cash Voucher No 64 26 April 2020 Particulars: Cartage outwards \$11.00
Petty Cash Voucher No 65 29 April 2020 Particulars: Pencil \$1.10	

- Prepare the petty cash book using the above vouchers.
- Balance the petty cash book and make the petty cash book ready for May's vouchers.

Bank reconciliation

One important control over cash is that a bank reconciliation should be carried out at regular intervals.

The purpose of the bank reconciliation is to show that agreement exists between the business's cash records and the bank's records.

The bank reconciliation highlights any discrepancies between the two sets of records. It is an important control because the bank is an independent organisation and has no direct link with the running of the

business. The bank's records should show exactly the same items as the business's records. If the records of the business show a deposit of \$500, then the bank should also show this \$500. Transactions therefore can be checked and errors found and corrected.

Whenever cash is received by the business, an entry is made in the computer system. At the end of each day a deposit slip is completed and the day's total receipts are banked. To the business, the deposit represents an increase in Cash at Bank (an asset), so a debit entry is made in this account.

However, from the bank's point of view, the money that the business deposits can be withdrawn at any time. The bank owes the business the amount of these deposits and, as amounts owed are liabilities, a credit entry is made in the bank's books. Thus, whenever money is **deposited** by the business, a **debit** entry in the business's records corresponds to a **credit** entry in the bank's records.

Whenever money is taken out of the bank, the withdrawal is a decrease in the Cash at Bank account and therefore a credit entry is made. To the bank, the withdrawal represents a decrease in the amount owed to the business and therefore a debit entry is made. Thus, whenever money is **withdrawn** from the bank by way of a cheque or electronic payment, a **credit** entry in the business's records corresponds to a **debit** entry in the bank's records.

Banks record all customer transactions in a ledger account, generally using the triple-column method (Debit, Credit, Balance). As has been established, all the deposits made by the business would be credited and all the withdrawals would be debited.

An example of a bank statement is shown in Figure 3.1.

At regular intervals (generally monthly), the bank sends a copy of its ledger account to each customer. This is called a bank statement. It sets out the opening balance, all the transactions for the period and the

Statement of Account (extract)				
BSB 261 490		RQ Bank		
Account No 3256 1834		Manson QLD 4923		
		Blacklock Traders 374 Thomas Street Manson QLD 4923		
Page no 36		Name of account Blacklock Traders		
Date	Particulars	Debit	Credit	Balance
2020		\$	\$	\$
May 01	Balance			162.20 Cr
May 03	Deposit		170.00	332.20 Cr
May 03	Deposit L Gray		350.00	682.20 Cr
May 03	Withdrawal Online R Smith 284561	110.00		572.20 Cr
May 06	Withdrawal Online Hi Ltd 291367	270.00		302.20 Cr
May 09	Deposit		310.00	612.20 Cr
May 10	Deposit Frangos Pty Ltd		140.00	752.20 Cr
May 18	Withdrawal Online Truvil & Co 341498	219.24		532.96 Cr
May 20	Deposit		614.30	1 147.26 Cr
May 20	Deposit Credit/Debit cards		2470.90	3 618.16 Cr
May 23	Cheque No 663892	25.00		3 593.16 Cr
May 31	Bank Fee	12.00		3 581.16 Cr
May 31	Merchant Fee	35.00		3 546.16 Cr

Figure 3.1 A bank statement

closing balance of the account. However, at any time, the business's account can be accessed electronically so the information is always available.

Comparing the business's records with the bank's records would appear to be quite straightforward. However, consider the following situations:

- Suppose the business sent a cheque to R Majors and that person is still carrying the cheque around in their pocket. The business will have a record in its Cash account, but the bank will have no record of the cheque because it has not yet been cashed or banked. (Such a cheque is called an **unpresented cheque**.)
- It may happen that at 4 p.m. on Thursday the business deposits \$200 and the next day it receives the bank statement without the deposit shown. This deposit has not yet been processed by the bank, yet the business shows a deposit of \$200 in the Cash account. (This is called a **deposit not yet credited**.)
- What happens if the bank has charged the business a \$20.00 fee for operating the account, or is charged a merchant fee of \$167.30 for operating Visa? The business finds out about these fees only when it receives the bank statement. The bank has recorded the transaction but the business has not.
- Deposits may be made directly into the bank account. They could consist of interest on bonds or fixed deposits, or deposits received from people who owe the business money and make an EFT. The bank has recorded these transactions but the business has not.

Nobody has made a mistake in these four situations. It is simply the case that the bank or the business knows about a transaction but the other party does not.

The aim of the bank reconciliation is to prove that if both parties knew of all the transactions that had taken place and had recorded them, then the balance of both sets of records would be the same. If after this procedure they are not the same, then an error must have been made.

The following summarises the source documents and entries in the accounts and the bank statement.

Source document	Evidence provided (always from our business's perspective)	Entry in Cash at Bank account	Entry in bank statement
Receipt (copy) Cash register docket (individual sales) Cash register summary (total sales for day) Bank deposit slip (evidences cash and cheques deposited at the bank) Bank statement (electronic funds transfer [EFT] receipts – credit/debit card bank deposits, EFT deposits from accounts receivable, interest received)	Receipt of money	Dr	Cr
Electronic funds transfer [EFT] – bank payments Cheque (butt) Bank statement (merchant fees, bank charges, interest paid, prearranged periodic EFT payments and transfers by bank, dishonoured cheques)	Payment of money	Cr	Dr

From the above discussion, you can see why businesses are rapidly changing to totally electronic movement of cash. In electronic systems, payments by one party are transferred immediately and there is no such thing as an unpresented cheque or a dishonoured cheque (where the business accepts a cheque for payment of a debt, but when deposited at the bank, it is dishonoured and so it is worthless). This is

why the number of cheques issued in Australia has diminished from 397 million in 2007 to 81.1 million in 2017.¹ Because cheques are still acceptable in Australia, we will discuss them in the next section, but remember that the electronic payment system is predominantly used.

Interesting accounting fact

Did you know?

PayID is part of the New Payments Platform (NPP)

PayID is the name of the New Payments Platform addressing service. It's a function of the platform that allows consumers to link financial accounts to easy-to-remember pieces of information such as phone numbers and email addresses.

Users will be able to provide their PayID to people or organisations they wish to receive payments from. It's about simplifying the payments process by using information that is easier to remember than traditional BSB and account numbers.

Consumers and businesses can create a PayID with their participating financial institution. At the same time, organisations developing a service or product supported by the platform may wish to use the PayID functionality as part of their service offering.

Source: PayID, NPP Australia



PayID
New Payments
Platform

On page 73 of *Units 1 & 2*, you were shown how individuals and businesses made electronic payments using BSB and account numbers. With the New Payments Platform (NPP), electronic payments can be made using a PayID. As well, Osko enables very fast (near real-time) payments into accounts as part of the NPP. Customers will also pay us using PayPal. As shown above, all these EFT receipts and payments will appear on the bank statement and are handled the same regardless of how they were electronically made.

Also, be aware that most businesses use accounting packages, and the bank reconciliation procedure discussed will be influenced by what generally occurs in these packages. There are four important points to note:

- 1 When money is received during the day, such as money in cash registers or cheques received in payment of debts, it is not deposited immediately in the Cash at Bank account. All these individual receipts of money are totalled and one amount is deposited at the end of the day. In an accounting package, these individual amounts are debited in real time to an Undeposited Funds account. Then, when the money is deposited at the bank at the end of the day with a bank deposit slip, a transfer is made from the Undeposited Funds account to the Cash at Bank account. This total amount will appear in the credit column of the bank statement at the end of each day.
- 2 The money for credit/debit card receipts will automatically come through the bank as a separate amount each day. As a result, these receipts in our records are generally recorded separately from the other daily deposits.
- 3 In the bank reconciliation procedure in an accounting package, the receipts of money that appear on the debit side of the Cash at Bank account will simply be listed so a comparison with the bank statement can be made. For our conceptual purposes, this will be shown as an extract from the Cash at Bank account or a Cash Receipts Listing that can be printed from the accounting package.
- 4 In the bank reconciliation procedure in an accounting package, the payments of money that appear on the credit side of the Cash at Bank account will simply be listed so a comparison with the bank

¹ Source: <www.canstar.com.au> using Reserve Bank of Australia data.

statement can be made. For our conceptual purposes, this will be shown as an extract from the Cash at Bank account or a Cash Payments Listing that can be printed from the accounting package.

Finally, in the next section, we will show you the procedure to be undertaken. However, we cannot list every workday's deposits and all payments for a real business. The bank statements would be too large. We will show a sample of all the various transactions you could encounter in a real business and that way you will understand the process without the huge quantity of transactions involved.

Bank reconciliation procedure

The bank reconciliation procedure involves both the completion of the business's records and the updating of the bank statement.

The bank reconciliation procedure has five steps:

Completion of the business's records

- 1 Compare the Credit column of the bank statement with the Debt column of the Cash at Bank account (and last month's bank reconciliation statement). Tick those figures that correspond.
- 2 Compare the Debit column of the bank statement with the Credit column of the Cash at Bank account (and last month's bank reconciliation statement). Tick those figures that correspond.
- 3 Insert those figures not ticked in the bank statement into the general journal. These figures represent transactions that the bank has recorded and the business has not. To show the source of this entry, 'BS' is entered in the Ref column.
- 4 Post the journal to the ledger. The main account we are interested in here is the Cash at Bank account.

At this stage, the business's records should be complete.

Updating the bank statement

- 5 Prepare a bank reconciliation statement.

When preparing the bank reconciliation statement, the only items that have not been dealt with are those not ticked in the Cash at Bank account. These are items that the business knows about but the bank does not.

The problem with these items is that the business cannot adjust the bank's records (as the business did to its records in step 3). The next best thing is to adjust the final balance in the bank statement. To do this, items that are not ticked in the business's Cash at Bank account are used to show what the balance would have been if the bank had recorded all these transactions.

This adjustment is shown in a bank reconciliation statement and can take two forms, depending on the nature of the final balance:

- If the final balance of the bank statement is *credit*, it indicates that the bank owes the business money.

Bank Reconciliation Statement as at ...	
	\$
Credit balance as per bank statement	XXX
Add Outstanding deposits	<u>XXX</u>
	XXX
Less Outstanding payments	XXX
Debit balance as per Cash at Bank account	<u><u>\$XXX</u></u>

The 'Outstanding deposits' are the items not ticked in the Debit side of the Cash at Bank account. If these deposits were recorded in the bank's books, it would increase the amount of money the bank owes the business, so these deposits are added.

The 'Outstanding payments' are the items not ticked in the Credit side of the Cash at Bank account and represent payments that have not yet been presented to the bank. If these were to pass through the bank, they would decrease the amount owed, so they are subtracted.

The 'Debit balance as per Cash at Bank account' shows that the adjusted bank statement balance is the same as the business's Cash at Bank account balance. This proves that both sets of records would agree if both parties are aware of all transactions.

- If the final balance of the bank statement is *debit* (overdraft), it indicates that the business owes the bank money.

Bank Reconciliation Statement as at ...	
	\$
Debit balance as per bank statement	XXX
Add Outstanding payments	<u>XXX</u>
	XXX
Less Outstanding deposits	XXX
Credit balance as per Cash at Bank account	<u><u>\$XXX</u></u>

The 'Outstanding payments' are added because this is the withdrawal of more funds and therefore will increase the amount owed to the bank.

The 'Outstanding deposits' are subtracted because these deposits will decrease the amount of money owed to the bank.

The final 'Credit balance as per Cash at Bank account' corresponds to the business's ledger account and means the business owes money to the bank.

Illustrative example 2

The following bank statement for the business Williams Cycles has just arrived from the bank. Compare the cash records with the bank statement and prepare a bank reconciliation statement. Money received in cash and cheques for sales is recorded as a separate amount from credit/debit card sales, even though it is all posted to one sales account.

Williams Cycles Bank Statement				
Date	Particulars	Debit \$	Credit \$	Balance \$
2020				
Aug 01	Balance			2 672.46 Cr
Aug 01	Deposit		496.13	3 168.59 Cr
Aug 02	Withdrawal Online Anders 457234	210.00		2 958.59 Cr
Aug 02	Withdrawal Online Manrakin 459127	410.00		2 548.59 Cr
Aug 02	Deposit		608.40	3 156.99 Cr
Aug 02	Deposit Credit/Debit Cards		3 465.23	6 622.22 Cr
Aug 04	Cheque No 486	139.90		6 482.32 Cr
Aug 10	Withdrawal Online Grentich 461298	576.50		5 905.82 Cr
Aug 13	Deposit		92.00	5 997.82 Cr
Aug 13	Deposit Credit/Debit Cards		2 189.45	8 187.27 Cr
Aug 16	Withdrawal Online Anders 472198	210.00		7 977.27 Cr
Aug 20	Deposit		722.00	8 699.27 Cr
Aug 22	Deposit Krantz and Partners		790.00	9 489.27 Cr
Aug 29	Cheque No 487	586.30		8 902.97 Cr
Aug 30	Interest on Bonds		216.00	9 118.97 Cr
Aug 31	Bank Fee	15.00		9 103.97 Cr
Aug 31	Merchant Fee	70.68		9 033.29 Cr

Williams Cycles Bank Reconciliation Statement as at 31 July 2020			
		\$	\$
Credit balance as per bank statement			2 672.46
Add Outstanding deposits			<u>496.13</u>
			3 168.59
Less Outstanding payments			
	472	56.00	
	486	<u>139.90</u>	<u>195.90</u>
Debit balance as per Cash at Bank account			<u>\$2 972.69</u>

Williams Cycles Listing of Cash Transactions

Date	Doc ID	Details	Deposits	Payments
02/08/2020	CRS	Sales	608.40	
02/08/2020	CRS	Sales (Cards)	3 465.23	
02/08/2020	457234	Wages		210.00
02/08/2020	459127	Rent		410.00
10/08/2020	461298	Inventory		576.50
13/08/2020	CRS	Sales	92.00	
13/08/2020	CRS	Sales (Cards)	2 189.45	
16/08/2020	472198	Wages		210.00
19/08/2020	275	Commission Revenue	722.00	
25/08/2020	487	Wyand Electric		586.30
30/08/2020	CRS	Sales	624.50	
30/08/2020	488	Advertising		373.85

Ledger of Williams Cycles (Extract)

Date	Particulars	Ref	Debit \$	Credit \$	Balance \$
Cash at Bank					No 3103
30/08/2020	Advertising	GJ364		373.85	8 307.62 Dr

This is the final line of the Cash at Bank account before the bank reconciliation is prepared.

Procedure

Step 1 Compare the Credit column of the bank statement with the Deposits column of the Listing of Cash Transactions and last month's bank reconciliation statement. (Use a pencil to carry out this step and tick the corresponding items.)

Items not ticked in the bank statement:

Aug 22	Krantz and Partners	\$790.00
Aug 30	Interest on bonds	\$216.00

Items not ticked in the Deposits column of the Listing:

Aug 30	\$624.50

Step 2 Compare the Debit column of the bank statement with the Payments column of the Listing of Cash Transactions and last month's bank reconciliation statement. (Use a pencil to carry out this step and tick the corresponding items.)

Items not ticked in the bank statement:

Aug 31	Bank Fee	\$15.00
Aug 31	Merchant Fee	\$70.68

Items not ticked in the Payments column of the Listing:

Aug 30	488 Advertising	\$373.85

Items not ticked in last month's bank reconciliation statement:

Cheque no 472	\$56.00

Make sure that you check not only the amounts, but also the payment numbers and cheque numbers. For example, there are two payments made out for \$210 (numbers 457234 and 472198). It is important to tick the correct one at each stage.

Step 3 Prepare general journal entries for the amounts in the bank statement, but not in the Listing of Cash Transactions.

Williams Cycles General Journal				
Page 365				
Date	Particulars	Ref	Dr \$	Cr \$
2020				
Aug 31	Cash at Bank Krantz and Partners (Cash received BS Aug 22)	3103 3104.7	790.00	790.00
31	Cash at Bank Interest Revenue (Interest received BS Aug 30)	3103 1105	216.00	216.00
31	Bank Charges Cash at Bank (Bank fees BS Aug 31)	2502 3103	15.00	15.00
31	Credit/Debit Card Fees Cash at Bank (Merchant fees BS Aug 31)	2503 3103	70.68	70.68

As each item is entered from the bank statement into the general journal, tick on the bank statement that this transaction has now been recorded.

Step 4 Post the general journal entries to the ledger. The Cash at Bank account is the main account and will appear as follows:

Ledger of Williams Cycles					
Date	Particulars	Ref	Debit \$	Credit \$	Balance \$
Cash at Bank					No 3103
30/08/2020	Advertising	GJ364		373.85	8 307.62 Dr
31/08/2020	Krantz and Partners (BS 22 Aug)	GJ365	790.00		9 097.62 Dr
31/08/2020	Interest Revenue (BS 30 Aug)	GJ365	216.00		9 313.62 Dr
31/08/2020	Bank Charges (BS 31 Aug)	GJ365		15.00	9 298.62 Dr
31/08/2020	Credit/Debit Card Fees (BS 31 Aug)	GJ365		70.68	9 227.94 Dr

Step 5 Prepare the bank reconciliation statement. This is prepared from items not ticked in the Listing of Cash Transactions (and last month's bank reconciliation statement).

Williams Cycles Bank Reconciliation Statement as at 31 August 2020			
		\$	\$
Credit balance as per bank statement			9 033.29
Add Outstanding deposits			<u>624.50</u>
			9 657.79
Less Outstanding payments			
	472	56.00	
	488	<u>373.85</u>	<u>429.85</u>
Debit balance as per Cash at Bank account			<u>\$9 227.94</u>

We cannot adjust the bank's records so we take the final balance in the bank statement and adjust for any outstanding items: the final figure should agree with the balance of the Cash at Bank account.

In this instance, the final figure agrees with the Cash at Bank account balance of \$9227.94.

Bank charges and fees

Bank fees are the normal fees that are associated with operating a current/cheque/payment account. Fees such as merchant fees are associated with credit cards and debit cards. These merchant fees are posted to account number 2503, Credit/Debit Card Fees and treated as a finance expense.

Dishonoured cheques

A dishonoured cheque is simply a cheque that the business accepts in settlement of a debt, but there was not enough money in the customer's account to cover the amount. The cheque will therefore not be honoured by the bank on presentation. As a result, the customer has not really paid the debt and an entry must be made to show this.

When the business first accepted the cheque, an entry was made in the general journal debiting the Cash at Bank account and crediting the Account Receivable account of the customer. Now that the debt has not been paid, an entry must be made in the general journal to reverse this.

The first the business knows about a dishonoured cheque is that it will appear in the Debit column of the bank statement. If this occurs, the general journal entry would be debit to the Account Receivable

account of the customer and credit to Cash at Bank. This restores the debt and decreases the cash that the business has received. The amount in the bank statement would then be reconciled with the amount in the Cash at Bank account.

3.9

- What is the purpose of a bank reconciliation?
- Explain why the bank reconciliation is such an important part of internal control.
- Explain the nature of a dishonoured cheque, how a business generally finds out about it and how it will be recorded.

3.10

From the following information:

- complete Toft's Foods general journal
- post to the Cash at Bank account using a triple column ledger format
- prepare a bank reconciliation statement as at 30 June 2020.

The Cash at Bank account shows a debit balance in Toft's records of \$1840 at 30 June 2020 after the cash transactions for the month.

Toft's Foods Listing of Cash Transactions				
Date	Doc ID	Details	Deposits	Payments
01/06/2020	CRS	Sales	400.00	
09/06/2020	CRS	Sales	1 200.00	
11/06/2020	CRS	Sales	300.00	
14/06/2020	312956	Wages		600.00
18/06/2020	472198	Ven de Hoft Ltd		900.00
23/06/2020	CRS	Sales	150.00	
27/06/2020	671231	Electricity		300.00
29/06/2020	CRS	Sales	390.00	
30/06/2020	782378	Inventory		800.00

Toft's Foods Bank Statement				
Date	Particulars	Debit \$	Credit \$	Balance \$
2020				
June 1	Balance			2 000.00 Cr
2	Deposit		400.00	2 400.00 Cr
9	Deposit		1 200.00	3 600.00 Cr
11	Deposit		300.00	3 900.00 Cr
14	Withdrawal Online Veng 312956	600.00		3 300.00 Cr
16	Deposit Marsdon Mechanics		100.00	3 400.00 Cr
18	Withdrawal Online Ven de Hoft 472198	900.00		2 500.00 Cr
23	Deposit		150.00	2 650.00 Cr
27	Withdrawal Online Energy Ltd 671231	300.00		2 350.00 Cr
30	Bank fee	12.00		2 338.00 Cr

3.11

- a Cavalier Lights has just received a bank statement. Prepare the records at 30 November 2020.
 b Prepare a bank reconciliation statement at 30 November 2020.

Cavalier Lights Listing of Cash Transactions				
Date	Doc ID	Details	Deposits	Payments
2020				
Nov 02	189	A Fuesler	243.80	
13	CRS	Sales	164.00	
13	CRS	Sales (Cards)	3 267.90	
13	299867	Wages		690.50
16	387609	Inventory		350.00
20	CRS	Sales	347.10	
20	CRS	Sales (Cards)	2 371.90	
30	765201	Commission Expense		40.00

Cavalier Lights Bank Statement				
Date	Particulars	Debit \$	Credit \$	Balance \$
01 Nov 20	Balance			3 500.00 Cr
02 Nov 20	Deposit		243.80	3 743.80 Cr
13 Nov 20	Deposit		164.00	3 907.80 Cr
13 Nov 20	Deposit Credit/Debit Cards		3 267.90	7 175.70 Cr
13 Nov 20	Withdrawal Online Quang 299867	690.50		6 485.20 Cr
16 Nov 20	Withdrawal Online Mellick Ltd 387609	350.00		6 135.20 Cr
20 Nov 20	Deposit		347.10	6 482.30 Cr
20 Nov 20	Deposit Credit/Debit Cards		2 371.90	8 854.20 Cr
25 Nov 20	Deposit Monto & Co		340.76	9 194.96 Cr
25 Nov 20	Interest on Fixed Deposit		45.67	9 240.63 Cr
30 Nov 20	Bank Fee	15.00		9 225.63 Cr
30 Nov 20	Merchant Fee	84.60		9 141.03 Cr

Ledger of Cavalier Lights					
Date	Particulars	Ref	Debit \$	Credit \$	Balance \$
Cash at Bank					No 3103
30/11/2020	Commission Expense			40.00	8 814.20 Dr

3.12

Prepare general journal entries, the Cash at Bank account and a bank reconciliation statement as at 30 April 2020 for Wallers Hill News using the following information.

Wallers Hill News Cash Deposits			
Date	Doc ID	Details	Deposits
06/04/2020	CRS	Sales	60.40
06/04/2020	CRS	Sales (Cards)	1 429.55
20/04/2020	CRS	Sales	360.05
20/04/2020	CRS	Sales (Cards)	976.70
30/04/2020	569	Commission	93.30

Wallers Hill News Cash Withdrawals			
Date	Doc ID	Details	Withdrawals
01/04/2020	792	Inventory	202.50
02/04/2020	793	Prutarius Services	1 843.00
02/04/2020	794	Inventory	506.30
14/04/2020	107922	Duwala Ltd	779.40
16/04/2020	156477	Braschs	784.50
24/04/2020	379211	Zhourn Partners	586.30

Ledger of Wallers Hill News					
Date	Particulars	Ref	Debit \$	Credit \$	Balance \$
	Cash at Bank				No 3103
30/04/2020	Commission Revenue			93.30	4 257.00 Cr

Wallers Hill News Bank Statement				
Date	Particulars	Debit	Credit	Balance
		\$	\$	\$
01/04/20	Balance			2 475.00 Dr
03/04/20	Deposit Frenderson Ltd		530.45	1 944.55 Dr
04/04/20	Cheque No 792	202.50		2 147.05 Dr
06/04/20	Deposit		60.40	2 086.65 Dr
06/04/20	Deposit Credit/Debit Cards		1 429.55	657.10 Dr
12/04/20	Cheque No 794	506.30		1 163.40 Dr
14/04/20	Withdrawal Online Astor Ltd 107922	779.40		1 942.80 Dr
16/04/20	Withdrawal Online Braschs 156477	784.50		2 727.30 Dr
20/04/20	Deposit		360.05	2 367.25 Dr
20/04/20	Deposit Credit/Debit Cards		976.70	1 390.55 Dr
21/04/20	Deposit Kara Clothes		549.60	840.95 Dr
24/04/20	Withdrawal Online Zhourn Partners 379211	586.30		1 427.25 Dr
30/04/20	Interest on Overdraft	16.95		1 444.20 Dr
30/04/20	Bank Charge	12.00		1 456.20 Dr
30/04/20	Merchant Charge	36.09		1 492.29 Dr

3.13

On the basis of the following information about the business of Monsour Accountants, prepare general journal entries, the Cash at Bank account and a bank reconciliation as at 30 November 2020.

Monsour Accountants Cash Deposits			
Date	Doc ID	Details	Deposits
02/09/2020	CRS	Sales	600.00
05/09/2020	862	Kaffon & Sons	457.35
21/09/2020	CRS	Sales	1 672.00
23/09/2020	CRS	Sales	451.75
30/09/2020	863	Marionn Ltd	1 786.45

Monsour Accountants Cash Withdrawals			
Date	Doc ID	Details	Withdrawals
02/09/2020	352178	Broschov Ltd	4 600.00
10/09/2020	562148	Kingzone	120.90
10/09/2020	783472	Zhour Ltd	2 634.00

Monsour Accountants Bank Statement				
Date	Particulars	Debit \$	Credit \$	Balance \$
01/09/20	Balance			4 000.00 Dr
02/09/20	Deposit		600.00	3 400.00 Dr
02/09/20	Withdrawal Online Broschov Ltd 352178	4 600.00		8 000.00 Dr
04/09/20	Deposit Kanton Pty Ltd		1 230.00	6 770.00 Dr
05/09/20	Deposit		457.35	6 312.65 Dr
10/09/20	Withdrawal Online Kingzone 562148	120.90		6 433.55 Dr
10/09/20	Withdrawal Online Zhou Ltd 783472	2 634.00		9 067.55 Dr
21/09/20	Deposit		1 672.00	7 395.55 Dr
23/09/20	Deposit		451.75	6 943.80 Dr
24/09/20	Deposit Boyzen Products		2 450.00	4 493.80 Dr
30/09/20	Interest on Overdraft	62.35		4 556.15 Dr
30/09/20	Bank Charge	10.00		4 566.15 Dr

Ledger of Monsour Accountants					
Date	Particulars	Ref	Debit \$	Credit \$	Balance \$
Cash at Bank					No 3103
30/09/2020	Marionn Ltd		1 786.45		6 387.35 Cr

3.14

On the basis of the following information about the Starwon Foundation, show the:

- a Cash at Bank account
- b relevant general journal entries
- c bank reconciliation statement at 31 October 2020.

Starwon Foundation Bank Reconciliation Statement as at 30 September 2020				
			\$	\$
Credit balance as per bank statement				7 894.00
Add Outstanding deposits				<u>626.00</u>
				8 520.00
Less Outstanding payments				
	721	56.00		
	723	<u>749.00</u>		<u>805.00</u>
Debit balance as per Cash at Bank account				<u>\$7 715.00</u>

Starwon Foundation
Listing of Cash Deposits

Date	Deposits
2020	
Oct 07	796.00
Oct 10	172.00
Oct 15	624.00
Oct 20	100.00
Oct 31	330.00

Starwon Foundation
Listing of Cash Withdrawals

Date	Payment ID	Withdrawals
2020		
Oct 01	126719	260.00
Oct 03	132746	186.00
Oct 07	231666	970.00
Oct 10	437140	432.00
Oct 15	521895	42.00
Oct 20	612731	56.00
Oct 21	619451	115.00
Oct 23	712510	21.00
Oct 25	832008	136.00
Oct 31	900153	12.00

Ledger of Starwon Foundation

Date	Particulars	Ref	Debit \$	Credit \$	Balance \$
Cash at Bank					No 3103
31/10/2020	Advertising	GJ31		12.00	7 507.00 Dr

Starwon Foundation
Bank Statement

Date	Particulars	Debit \$	Credit \$	Balance \$
2020				
Oct 01	Balance			7 894.00 Cr
Oct 01	Withdrawal Online 126719	260.00		7 634.00 Cr
Oct 02	Deposit		626.00	8 260.00 Cr
Oct 03	Cheque 723	749.00		7 511.00 Cr
Oct 03	Withdrawal Online 132746	186.00		7 325.00 Cr
Oct 07	Withdrawal Online 231666	970.00		6 355.00 Cr
Oct 07	Deposit		796.00	7 151.00 Cr
Oct 10	Deposit		172.00	7 323.00 Cr
Oct 10	Withdrawal Online 437140	432.00		6 891.00 Cr
Oct 14	Deposit L Chan		100.00	6 991.00 Cr
Oct 15	Withdrawal Online 521895	42.00		6 949.00 Cr
Oct 15	Deposit		624.00	7 573.00 Cr
Oct 20	Deposit		100.00	7 673.00 Cr
Oct 21	Withdrawal Online 612731	56.00		7 617.00 Cr
Oct 21	Withdrawal Online 619451	115.00		7 502.00 Cr
Oct 22	Deposit Flagstone Pty Ltd		2 300.00	9 802.00 Cr
Oct 23	Withdrawal Online 712510	21.00		9 781.00 Cr
Oct 25	Withdrawal Online 832008	136.00		9 645.00 Cr
Oct 31	Bank Fee	15.00		9 630.00 Cr

3.15

- a From the following information, prepare the general journal, the Cash at Bank account and the bank reconciliation statement as at 31 July 2020.
- b What do you think happened to cheque number 577?

Western Dream Products Bank Reconciliation Statement as at 30 June 2020			
		\$	\$
Credit balance as per bank statement			4 659
Add Outstanding deposits			<u>364</u>
			5 023
Less Outstanding payments			
	491	45	
	560	191	
	569	<u>65</u>	<u>301</u>
Debit balance as per Cash at Bank account			<u><u>\$4 722</u></u>

Western Dream Products Listing of Cash Transactions			
Date	Doc ID	Deposits	Payments
01/07/2020	571		475
04/07/2020	CRS	810	
04/07/2020	CRS	211	
05/07/2020	572		420
10/07/2020	CRS	430	
10/07/2020	CRS	140	
14/07/2020	573		1 020
14/07/2020	574		500
14/07/2020	390	820	
14/07/2020	CRS	330	
21/07/2020	575		600
24/07/2020	576		150
30/07/2020	578		16
31/07/2020	CRS	1 000	

Ledger of Western Dream Products					
Date	Particulars	Ref	Debit \$	Credit \$	Balance \$
	Cash at Bank				No 3103
31/07/2020	Sales	GJ401	1 000		5 282 Dr

**Western Dream Products
Bank Statement**

Date	Particulars	Debit	Credit	Balance
2020		\$	\$	\$
July 01	Balance			4 659 Cr
July 01	Deposit		364	5 023 Cr
July 04	Cheque No 569	65		4 958 Cr
July 04	Deposit		810	5 768 Cr
July 04	Deposit Credit/Debit Cards		211	5 979 Cr
July 10	Deposit		430	6 409 Cr
July 10	Deposit Credit/Debit Cards		140	6 549 Cr
July 10	Cheque No 571	475		6 074 Cr
July 10	Cheque No 572	420		5 654 Cr
July 14	Deposit Rent Balkingh		1 980	7 634 Cr
July 14	Deposit		820	8 454 Cr
July 14	Deposit Credit/Debit Cards		330	8 784 Cr
July 19	Cheque No 574	500		8 284 Cr
July 20	Deposit		1 000	9 284 Cr
July 28	Cheque No 576	150		9 134 Cr
July 30	Interest on Bonds		320	9 454 Cr
July 31	Bank Fee	15		9 439 Cr
July 31	Merchant Fee	14		9 425 Cr

3.16

A Marvin's bank statement as at 30 April 2020 showed a credit balance of \$1832.24. After comparisons were made, you find the following:

- Deposit not yet credited, \$264.18.
- P Wilson had paid rent for \$500 direct to the business's account.
- Bank fee, \$15.
- Unpresented payments, no 154254, \$26; no 159783, \$134.

Additional information

Cash Deposits

Apr 30 Entries to date \$7760.42

Cash Withdrawals

Apr 30 Entries to date \$7625.00

Cash at Bank

Apr 1 Balance \$1316.00 Dr

Prepare the bank reconciliation statement and Cash at Bank account as at 30 April 2020.

3.17

Brewster Biscuits balanced its bank account as at 1 August 2020 and it showed a credit balance of \$9620.50.

After a comparison with the bank records (which showed a debit balance of \$7190.18 at 31 August), the following differences were revealed:

- Outstanding deposits, \$120.
- Interest on overdraft, \$64.
- Unpresented payments no 572319, \$889.
- Bank fee, \$10.
- Interest on bonds, \$216.

Additional information

Cash Deposits

Aug 31 Entries to date \$22 062.47

Cash Payments

Aug 31 Entries to date \$20 543.15

Prepare the bank reconciliation statement and Cash at Bank account at 31 August 2020.

Real-world application



Cash payments predicted to disappear within a decade as tap and go takes over

Alexis Carey

CASH could become a distant memory as soon as 2026, according to startling new predictions from experts.

According to data from the Reserve Bank of Australia (RBA)'s ongoing Consumer Payment Methods survey, the percentage of cash payments in the country plummeted from 69 per cent in 2007 to just 37 per cent in 2016.

A projection of that data by comparison site finder.com.au has revealed that if the current trend continues, physical cash could vanish in Australia as soon as 2026.

It's even earlier than the predicted expiry date of ATMs, with an analysis of RBA statistics by finder.com.au showing they could disappear from our streets by 2036.

Finder's money expert Bessie Hassan said it seemed new technology was behind the death of cash.

'Many people simply tap-and-go with their debit or credit card nowadays. With the introduction of Apple Pay and Google Pay, even that's a bit old-school for some,' Ms Hassan said.

'These new payment methods have led to less people carrying cash with them.

'In the past Aussies would come armed to group dinners with a wad of cash so they could pay for their portion of the bill.

'Nowadays it can all be done electronically thanks to mobile and online banking and new technologies such as PayID through the New Payments Platform (NPP), meaning Aussies don't even need to bring their wallet with them when dining out with loved ones, just their mobile phone.

'There are also mobile apps such as HeyYou which allow you to order and pay for your morning coffee through your mobile phone.'

...

It's a sentiment echoed by Aussie coffee baron Salvatore Malatesta, the owner of Melbourne's St Ali Coffee Roasters, Bondi's Sensory Lab and a host of other businesses.

‘Ten to 15 years ago I would have said 90 per cent of customers used cash, but since then there’s been a slow decline and now only around 10 per cent of transactions are cash,’ Mr Malatesta said.

‘It’s a massive change that’s happened for a number of reasons, the number one being just the convenience — because [non-cash payments] are efficient and quick.

‘I know I’m often guilty of leaving my wallet at home, so using your phone to pay is just bloody handy.’

He said cash payments are also more inconvenient for sellers.

‘Moving cash around is really expensive, and it’s a risky thing for the operator. The cashless space is quite handy and it’s a great leveller,’ he said.

‘I wish we were completely cashless to be honest.’

Mr Malatesta said it was his belief the government supported to move towards a cashless society.

‘I’m confident that it’s not speculation but strategy to eliminate cash altogether from a revenue perspective,’ he said.

‘It just happens to coincide nicely with the way humans are now interacting with technology, and I suspect we’ll be entirely cashless soon.

‘I’m not brave enough to put a prediction on when “soon” is, but I think we’ll be down to single digits within three to four years and it’ll be gone entirely within a decade.

‘There’s no place for cash — it’s messy and clumsy and it doesn’t work anymore.’

Jack Dorsey, the billionaire co-founder of social media platform Twitter and payment technology company Square, is one of the world’s cashless payment leaders.

Mr Dorsey was in Melbourne this week to announce the expansion of Square in Australia, including the launch of its first engineering hub outside of North America. He told news.com.au cash was becoming less and less popular with shoppers and sellers alike.

But he stopped short of predicting the death of cash altogether.

‘I don’t think it will disappear entirely in future. Our philosophy is to help sellers accept any payment, whether it’s cash, bitcoin or tap, so they can focus on the sale and the customer,’ he said.

‘When it comes to what customers want, the trend is a lot more towards tap and go and digital — there’s a desire for more speed and convenience.’

Mr Dorsey said Australia was especially ‘tech-forward’ and that Aussies had been early adopters of non-cash payments.

‘Anyone can make a prediction and be wrong ... but more and more people are using digital devices to pay, whether it’s with their phones or watches, and I do believe we’ll certainly see less cash and cheques, although I don’t think they’ll ever go away completely,’ he said.

Source: ‘Cash payments predicted to disappear within a decade as tap and go takes over,’ Alexis Carey, *Courier Mail*, 24 May 2018. The use of this work has been licensed by Copyright Agency except as permitted by the Copyright Act, you must not re-use this work without the permission of the copyright owner or Copyright Agency.



Cash payments could disappear

Budgeting

So far, we have only been concerned with transactions that have occurred in the past. The emphasis has always been on the recording, reporting and interpreting of **past events**. However, accounting has a much wider function than this. Through the use of **budgets**, accounting tries to predict **future events** for the business.

A budget is an estimation of planned events expressed in quantitative terms.

The budget is a very important management tool and helps to control the business by:

Planning Through planning, budgets are prepared and targets are set for the overall business. It enables the business to work towards a definite goal and allows management to look ahead and be ready for changing conditions.

If there are different departments in the business, the budget helps to coordinate their activities towards achieving common goals.

Supervision In light of the budget, decisions will be made to ensure that the targets will be achieved and that policies laid down will be followed.

Evaluation Actual figures are compared with budgeted figures to see how closely performance matches estimated performance. Generally, incentives are given to those employees whose results are better than the budget. If the results are worse, employees are expected to explain why. For this reason, budgets are looked on with suspicion by some employees.

For maximum benefit, the budget should always be prepared in consultation with those employees who have to work to it. No benefit is gained by preparing a budget with unattainable targets and then expecting the employees to reach those targets. Acceptance of the budget by those it affects is therefore very important.

Management generally prepares a variety of budgets, each with a differing time span. Some are short term, covering a period of one month to one year. They could be sales budgets, production budgets, budgeted operating results, and cash budgets. Others are long term, covering periods of up to 10 or more years. For example, a capital expenditure budget sets out all the property, plant and equipment needs for expected expansion over the next 10 years.

This section concentrates on the preparation of the cash budget. However, it should be realised that it is only one of many other budgets that management uses as a guide to planning, control and decision making.

Cash budgets

A cash budget is a forecast of estimated cash receipts, estimated cash payments and the resultant cash position for a certain period of time.

As stated previously, the cash budget is a short-term budget for which the time period varies between one month and one year.

Basically, a cash budget is prepared for the following reasons:

- The budget will enable management to see when its **commitments are due** and to ensure that money is available at that time. It is most important that a business be able to meet its commitments when they fall due. If debts are not paid on time, the business will gain a poor reputation and will not be able to obtain credit.
- The budget will reveal periods when the business has **excess funds**. Funds should not be left lying idle in the bank. Most businesses have their money in current accounts that do not earn interest. By knowing in advance how much the debts of the business are likely to be, any excess money can be invested to earn interest. Investments can be in the form of deposits with the short-term money market, fixed deposits, short-term government securities and investment accounts with banks.
- The cash budget can reveal weaknesses in the business's **debt collection policy**. If it is found that the average collection period for an accounts receivable to pay is three months and the normal terms of credit are 30 days, steps will have to be taken to improve this. For example, the credit policy might be reviewed in order to tighten terms and conditions, or a greater discount might be offered if accounts are paid within 30 days.

- **Adjustments for seasonal fluctuations** can be made. Seasonal fluctuations in sales mean that in some businesses a large amount of money is received in one part of the year and very little in another part of the year. For example:
 - tourism in the Snowy Mountains where most activity occurs in winter
 - sugarcane farmers who harvest and sell their cane for six months and receive little for the next six months
 (In the above two examples, it is most important that the money received will last until the next season and that any excess is properly invested.)
 - department stores that have greater sales around Christmas.
 (Here, adequate inventories must be made available in order for them to be sold. Therefore, cash is required long before Christmas to invest in inventories for sale.)
- The budget reveals those periods when **shortages of funds may occur**. Some firms rely on borrowed funds (such as bank overdrafts) to finance their activities. Because businesses must pay interest on these loans, it is important to keep this expense as low as possible. The budget enables management to see what amount the overdraft or loan will have to be. They can then seek the best source of these funds and minimise the interest to be paid. Indeed, most financial institutions will insist that a cash budget accompanies any application for a loan or overdraft, so they can see that the business will be able to meet their requirements for repayment.
- Budgets are an important **form of control** over the business, and cash budgets can assist with such control. As stated previously, the setting of targets is important so that employees can work within these constraints. For example, if a manager knows that the budget for photocopying is \$600 for the next two months, this becomes a target to work towards. Extra care might therefore be taken to ensure that only \$600 is spent. The manager might have to issue a directive that no photocopying over 10 pages can be done without authorisation. In this way, waste or unnecessary expenditures are reduced.

When the actual figures are available, a comparison with the budget is made and the results are evaluated. Investigations into the difference between actual and budgeted figures should reveal why these differences occurred and what steps should be taken to correct them; otherwise, the budget may have to be adjusted.

Remember, a cash budget is more a forecast than a target in itself. The cash budget is forecasting what is going to happen to the cash in the near future.

Preparation of a cash budget

Figures for a cash budget are based on **past experiences** and **future expectations**. For example, most businesses know their good and bad months for sales, what the relationship is between the quantity of goods sold and the resultant purchases required, how quickly accounts receivable pay their debts, what their normal wages bill is, and the other normal operating expenses it takes to run a business. Once this sort of past information has been collected, consultations must be held with those affected by the budget. This information can then be adjusted for expected economic conditions and the business's estimation of its future prospects.

Always remember that the **cash budget** only takes into account estimated receipts and payments of cash. Non-cash items such as depreciation are not included.

Illustrative example 3

From the following estimated figures for the business of Adams Store, prepare a cash budget for June and July 2022.

	June \$	July \$
Payments		
Wages	600	600
Cash purchases	7 400	8 300
Rent	700	700
Receipts		
Cash sales	15 000	8 000
Interest		1 000

There is a debit bank balance at 1 June of \$6000.

Solution

Adams Store Cash Budget for June and July 2022		
	June \$	July \$
Estimated receipts		
Cash sales	15 000	8 000
Interest		1 000
Total estimated receipts	<u>15 000</u>	<u>9 000</u>
Estimated payments		
Wages	600	600
Cash purchases	7 400	8 300
Rent	700	700
Total estimated payments	<u>8 700</u>	<u>9 600</u>
Bank balance (start of month)	6 000 Dr	12 300 Dr
Excess receipts over payments	6 300	
Excess payments over receipts		600
Bank balance (end of month)	<u>\$12 300</u> Dr	<u>\$11 700</u> Dr

In the preparation of a cash budget, figures are generally rounded. Therefore, cents are not included and businesses dealing with large amounts may round to the nearest \$100, or even the nearest \$1000. This is an application of **materiality**.

Another influence on the preparation of the cash budget is the desire for accuracy. However, if uncertainty exists, it is better for the estimates to be on the conservative side (i.e. revenues underestimated and expenses overestimated).

Remember that as the budget is a **management tool**, it is not subject to the same constraints as those placed on financial accounting. For example, suppose the business was selling an asset for \$13 000 next month. It is quite acceptable to budget for the \$13 000 next month as the budget is only prepared for management purposes.

Interpretation

It is most important that, once the budget is prepared, adequate interpretation of the cash position is undertaken. Remember that the figures are budgeted figures and not actual figures. The interpretation must therefore be from a budget perspective of the future.

Prior to writing a report, the following procedures should be adopted:

Examine estimated receipts

- The rate at which accounts receivable are paying their debts is very important. If accounts receivable receipts are very slow, then appropriate action should be taken to try to improve this. The business may have to telephone slow-paying debtors or it might offer a discount to try to get them to pay faster.
- Look at any significant changes in the receipts from month to month to determine why these figures have been forecast. The assumptions upon which the figures were based may be incorrect.

Examine estimated payments

- As with receipts, look at any significant changes that are forecast from month to month and question why this has been planned.
- Significant payment items must be examined to ascertain if they are viable expenditures. Some expenditure may be able to be delayed. If the budget reveals a cash deficit, then some expenditure may have to be cut immediately. If large expenditure items are budgeted that lower the cash balance, then these might have to be financed by a loan and have smaller payments per month instead of one large payment in a single month.

Examine the excess of receipts or payments

There may be trends here that will allow the business to plan better in the future. For example, if the business is seasonal, then receipts will be greater than payments for, say, six months of the year and payments may be greater than receipts in the other six months of the year. The business would therefore have to ensure that there is enough cash to last the six months where there is a cash deficit. It may also try to diversify into some other form of business that would allow it to earn revenue in the off season.

Examine final balances

- If no changes can be made to any receipts or payments, then the final balances for each month are very important. If there is budgeted excess cash, then money must not be left in current accounts earning little or no interest. It should be invested to earn interest. If there is a budget deficit of cash, then provision will have to be made to obtain cash to meet the commitments of the business. This would generally take the form of overdrafts or loans.
 - a If an overdraft is obtained, then adjustments will have to be made to the cash budget for the interest and the final balance must not go over the overdraft limit.
 - b If a loan is obtained, then adjustments will have to be made to the cash budget for the repayments and the final balance must not be overdrawn.

Whichever of the above strategies is chosen, ample money must be kept in reserve in case of emergencies.
- The difference between the opening bank balance in the budget and the final bank balance at the end of the last month of the budget should be looked at. This will indicate if the business's cash position is budgeted to improve or diminish.

In writing the report, care should be taken to include comments if possible on all the relevant sections – estimated receipts, estimated payments, excess of receipts or payments and the final balances. You may even choose to use these as headings in your report. Ensure that your report includes clear recommendations for improvement to cash management.

Example

A report on the business to H Adams from her accountant, which uses the structure outlined on page 191, appears as follows:

Language and communication



27 May 2022

Heading	CASH BUDGET – ADAMS STORE
Introduction	Having examined the cash budget for the period June and July 2022, I would like to make the following points:
Main text	In the area of receipts, figures reveal that cash sales are estimated to drop from \$15 000 to \$8000, causing total estimated receipts to decrease from \$15 000 to \$9000 (40 per cent) in one month. Can you please examine these figures to see if they are correct? There are no receipts from accounts receivables so no comment can be made regarding this. Cash purchases are forecast to increase from \$7400 to \$8300 (12.2 per cent). These forecasts should be investigated in the light of sales decreasing. There is an excess of payments over receipts in July. This is due to cash sales almost being halved. The final balance indicates that the business should have ample supplies of cash. Provision should therefore be made to invest some of this money so that interest can be earned. Even an investment of \$8000 would leave some money for emergencies. The business started with \$6000 and is budgeted to end the period with \$11 700, a net increase of \$5700 (95 per cent). This is despite the fact that estimated receipts are forecast to decrease by 40 per cent.
Conclusions	If actual results match this budget, this would be a satisfactory result for the period. However, perhaps it could be improved by the investigations mentioned above.
Recommendations	I therefore recommend that you look at the cash budget again in light of the following suggestions: - Re-examine the figures showing the 40 per cent drop in sales. - Consider methods to increase sales, such as advertising or selling on credit, which are not presently used. - Invest a reasonable proportion of idle funds to earn further interest.
Signature and title	 Accountant

Information about the budget and recommendations for improvement can be provided in a formal written report, letter of advice or email, or perhaps as a verbal report. A written report is usually preferable.

3.18

- a Briefly explain the purpose of a cash budget.
- b How does a budget help to control the business?

3.19

The following are estimated figures for P Thompson's business called Enderbe's for the months of April and May. The business had a debit bank balance of \$6300 as at 1 April.

- a Prepare a cash budget for the months of April and May.
- b Write a report to P Thompson on the budget.

	April \$	May \$
Receipts		
Cash sales	10 000	18 000
Interest	800	
Payments		
Cash purchases	6 500	8 300
Wages	400	400
Land	10 000	
Rates and taxes		1 000

3.20

G Markovic provides the following information about her business, which is called Solis, for December and January. She had a debit bank balance of \$2000 at 1 December. Prepare a cash budget for these two months. Write a report to G Markovic on the available figures.

	December \$	January \$
Estimated receipts		
Cash sales	85 000	100 000
Sale of motor vehicle		12 500
Estimated payments		
Cash purchases	75 000	70 000
Wages	6 000	6 000
Other normal operating expenses	10 000	10 000

3.21

From the following information about the business called Manjup Medical Supplies, prepare a cash budget and make a report to P Christolus on the budget. The bank balance at 1 January is \$2000 (overdraft).

	January \$	February \$	March \$
Cash sales	85 000	65 000	70 000
Cash purchases	60 000	45 000	53 000
Depreciation	500	500	500
Rent received	2 000	2 000	2 000
Normal operating expenses	15 000	15 000	15 000
Building extensions		20 000	

Credit transactions

In Illustrative example 3 on page 252, all the sales and purchases of inventory were for cash. This, however, is not normally the situation. Inventories are also bought and sold on credit, and usually 30 days are given in which to pay accounts.

If there are credit transactions, some adjustment must be made to the cash budget.

Accounts receivable

There are a number of problems with accounts receivable:

- There is a time lag between the time of the transaction and the receipt of cash.
- Discounts may be allowed for prompt payment.
- Some accounts receivable may never pay their whole debt. These debts not received are called 'bad debts'.

To help overcome these problems, a supplementary statement is generally prepared and attached to the cash budget. It is called a **Statement of Estimated Receipts from Accounts Receivable** and sets out the months in which the various amounts of cash are expected to be received from credit sales. It is not essential to prepare this statement, but it does help to eliminate unnecessary information appearing in the budget itself.

Before this statement can be prepared, the business must decide, on the basis of past experience, what percentage of debts would normally be received in the month following sale. Also, if all the debts have not been received in that month, what percentage will be received in the second month and possibly the third month after sale? It must also decide what percentage of debts will be bad debts. These amounts will not be received in cash and will therefore have no effect on the statement.

Once this has been determined, the statement can be prepared and the appropriate figures for accounts receivable entered in the cash budget.

Accounts payable

Accounts payable generally pose less of a problem because the business would always strive to pay its debts within the specified time in order to keep its reputation and credit rating. It would also, if possible, try to take advantage of any discounts being offered.

Only occasionally would it be necessary to prepare a Statement of Estimated Payments to Accounts Payable in the same way as is done for accounts receivable.

Illustrative example 4

Barclay Windows, which is owned by J Barclay, sells goods for cash and on credit. Of the credit sales, 75 per cent are usually collected in the month following sales and are granted a 2 per cent discount. The remaining 25 per cent are collected in the second month and do not receive a discount.

The credit sales for November and December were \$100 000 and \$84 000, respectively. The estimated sales for the next three months are:

	Cash \$	Credit \$
January	32 000	80 000
February	50 000	112 000
March	45 000	100 000

Rent received is \$3500 per month.

All purchases are made on credit and are paid within 30 days from the last day of the month in which the purchase was made. This is to take advantage of a 3 per cent discount. The estimated purchases are:

	\$
January	84 000
February	102 000
March	90 000

Wages amount to \$10 000 per month and normal operating expenses amount to \$15 000 per month.

In addition, it is anticipated that rates of \$13 000 will be paid in January and land costing \$40 000 will be paid for in March.

The balances of the following accounts on 1 January are: Cash at Bank \$7000 Dr, Accounts Payable \$96 000 Cr.

Prepare a cash budget for the months of January, February and March 2022.

Solution

Barclay Windows				
Statement of Estimated Receipts from Accounts Receivable				
Credit sales in:	Total \$	Estimated cash to be received in:		
		January \$	February \$	March \$
November	100 000	25 000	–	–
December	84 000	61 740	21 000	–
January	80 000	–	58 800	20 000
February	112 000	–	–	82 320
March	100 000	–	–	–
		<u>\$86 740</u>	<u>\$79 800</u>	<u>\$102 320</u>

To work out these figures, if \$100 000 worth of credit sales were made in November, then 75 per cent (\$75 000) less discount would be received in December and 25 per cent (\$25 000) would be received in January. As the budget is not being prepared for December, only the \$25 000 for January will be shown. With the December credit sales of \$84 000, 75 per cent (\$63 000), less discount on this (2 per cent of \$63 000), results in \$61 740 being collected in January. The remaining 25 per cent (\$21 000) will be received in February. The rest of the figures are worked out in a similar manner and the final figures are then shown in the budget as Accounts Receivable.

Barclay Windows Cash Budget for January–March 2022			
	January \$	February \$	March \$
Estimated receipts			
Cash sales	32 000	50 000	45 000
Accounts receivable	86 740	79 800	102 320
Rent received	3 500	3 500	3 500
Total estimated receipts	<u>122 240</u>	<u>133 300</u>	<u>150 820</u>
Estimated payments			
Accounts payable	93 120	81 480	98 940
Wages	10 000	10 000	10 000
Operating expenses	15 000	15 000	15 000
Rates	13 000		
Land			40 000
Total estimated payments	<u>131 120</u>	<u>106 480</u>	<u>163 940</u>
Bank balance (start of month)	7 000 Dr	1 880 Od	24 940 Dr
Excess receipts over payments		26 820	
Excess payments over receipts	8 880		13 120
Bank balance (end of month)	<u>\$1 880 Od</u>	<u>\$24 940 Dr</u>	<u>\$11 820 Dr</u>

Note that the estimated accounts payable in January is based on December's accounts payable of \$96 000. Because the business paid the debt within 30 days, it received the 3 per cent discount. The February and March figures are calculated in a similar manner.

Also remember that a major form of control is implemented when the actual figures are compared with the budgeted figures. This comparison reveals any discrepancies or undesirable trends, which management can then correct before it is too late.

Finally, it should be obvious that the following information must be collected in order to prepare a cash budget:

- the cash balance at the beginning of the budget period
- a forecast of both cash and credit sales
- the rate at which accounts receivable normally pay their debts
- an estimate of likely receipts of cash other than from sales, such as rent received
- a forecast of both cash and credit purchases
- the rate at which accounts payable are paid – the business should always try to take advantage of discounts that are being offered
- an estimate of likely payments of cash other than purchases, such as cash purchases of assets, normal operating expenses, and GST (which will be dealt with in the next section).

Interpretation

A report using the structure outlined adapted to a letter of advice would appear as follows:

Language and communication



Heading	ACCOUNTANT'S LETTERHEAD
	13 December 2021
	Mr J Barclay Business name Address
	Dear Mr Barclay
	RE: CASH BUDGET
Introduction	I have examined your budget for January to March 2022 and would like to comment on the following items.
Main text	With regard to sales, January is traditionally a fairly slow month due to the spending spree by customers in December. It is therefore reasonable to expect that the forecast for cash sales would be lowest in January and rise in February and March. The rate at which accounts receivable pay their debts is reasonable, with 75 per cent being paid in the month following sale and 25 per cent in the second month after sale. The discount is obviously an incentive for people to pay. You might want to investigate if this 75 per cent could be improved further. The purchase of the land does not appear to place a strain on the cash position in March. Even though payments are greater than receipts, there is still a debit balance of cash at the end of the month. In January and March, there is a budgeted excess of payments over receipts. This is mainly due to the payment of rates in January and the purchase of land in March. This budget reveals that, in January, you must make an arrangement with the bank for an overdraft to cover the \$1880 needed. In February and March, at least \$10 000 could be invested, leaving adequate supplies of cash for emergencies. The opening balance of cash was \$7000 and, despite the forecast purchase of land in March, the final cash position is \$11 820, an increase of 68.9 per cent.
Conclusions	If these budgeted figures turn into reality, the business will have done very well.

Recommendations Despite the good result overall, some recommendations are still worthy of consideration:

- Examine your credit policy and debt collection procedures to see if customers are screened carefully enough, realistic credit limits have been set, and follow-up procedures for outstanding accounts are timely enough to prevent delays in receiving payment.
- Arrange for a short-term overdraft of approximately \$2000 to \$2500 for January.
- Investigate the best short-term investment possibilities for an amount of \$10 000 in February and March.

Signature

.....
Accountant

On page 271, there is an article on cash flow by Judy Hartcher, CPA. She makes a number of suggestions about improving cash management and making the best use of surplus funds. These may be of assistance to you in preparing recommendations for action in your reports. Among her list of potential areas for improvement are the following:

- Cash from sales – review procedures regularly, send bills out quickly, shorten the collection period and bank money promptly.
- Credit policy and debt collection – screen credit customers carefully, set realistic credit limits and follow up outstanding accounts quickly.
- Alternative credit – consider credit cards for business purchases (but they must be paid on time).
- Inventory control – buy smaller quantities if possible, or introduce just-in-time inventory strategies where the supplier holds stock until it is needed.
- Supplier relationships – talk to suppliers about joint promotions and marketing opportunities to share marketing and advertising costs.
- Cash surpluses – should be put to work by repaying debt, then investing any extra funds until they are required.

3.22

From the following information about the business of Tay Sports, prepare a Statement of Estimated Receipts from Accounts Receivable for the months of September, October and November.

Credit sales		\$
July		60 000
August		40 000
September		75 000
October		70 000
November		60 000

Sixty per cent of accounts receivable were received in the month following sale and the other 40 per cent were collected in the next month.

3.23

Penang Tiles, on the basis of past experience, has found that 70 per cent of accounts receivable pay their accounts in the month following sale, 20 per cent in the second month after sale and 10 per cent in the third month after sale. Prepare a Statement of Estimated Receipts from Accounts Receivable for the months October to December.

Credit sales		\$
July		30 000
August		45 000
September		20 000
October		60 000
November		65 000
December		80 000

3.24

Harper Hot Water estimates credit sales for the next three months – March to May – as follows:

Credit sales		\$
March		15 000
April		18 000
May		16 000

Credit sales were \$25 000 for December, \$20 000 for January and \$22 000 for February.

Accounts receivable usually settle their accounts as follows:

- 60 per cent in the month following sale; these are entitled to a 3 per cent discount
- 30 per cent in the second month following sale
- 10 per cent in the third month following sale.

Prepare a Statement of Estimated Receipts from Accounts Receivable for the three months ending May.

3.25

On the basis of the following information about Osmond Cabinets:

- prepare a Statement of Estimated Receipts from Accounts Receivable for the months October to December
- calculate the amounts of accounts payable for the same three months.

	Credit sales \$	Credit purchases \$
August	90 000	70 000
September	100 000	75 000
October	120 000	80 000
November	100 000	90 000
December	110 000	70 000

Accounts receivable usually settle their accounts as follows:

- 80 per cent in the month following sale; these are entitled to a 2 per cent discount
- 18 per cent in the second month following sale
- 2 per cent don't settle; these are considered to be bad debts.

Accounts payable are generally paid in the month following purchase, which entitles the business to a 1 per cent discount.

3.26

Prepare a monthly cash forecast for January and February for Farnshaw Beauty Products and write a report on the budget to be presented to T Farnshaw.

- The business sells for cash and on credit. Of the credit sales, 80 per cent are usually collected within one month of sale, the remaining 20 per cent being collected in the following month.
- Credit sales for November and December were \$80 000 and \$50 000, respectively.
- Estimated sales for January and February 2022 are:

January	Cash \$200 000	Credit \$40 000
February	Cash \$150 000	Credit \$70 000

- All purchases are made on credit, subject to a 5 per cent discount if paid within 30 days from the last day of the month in which they are made, and this is always taken advantage of. Estimated purchases for January and February are \$119 000 and \$126 000, respectively.
- Estimated general expenses for January and February are \$42 000 and \$44 600, respectively.
- It is anticipated that new machinery costing \$50 000 will be paid for in February.
- The balances of the following accounts on 1 January are:

Cash	\$50 000 Dr
Accounts payable	\$95 000 Cr

3.27

From the following information, prepare a cash budget for the four months September to December for North Coast Sales and write a report to be presented to the manager, L Tan.

- Accounts receivable, from experience, have paid their debts as follows:
 - 50 per cent in the first month after sale
 - 30 per cent in the second month after sale
 - 20 per cent in the third month after sale.

Those who pay within 30 days of the sale receive a 2 per cent discount.

- Credit purchases are paid in the month after purchase. A 3 per cent discount is received if this is done.
- Expenses are paid in the month they are incurred.
- Accounts receivable from previous months were:
 - June \$20 000
 - July \$15 000
 - August \$17 000.

- The following estimates have been made for the budget period:

Month	Cash sales	Credit sales	Credit purchases	Wages	Other expenses
	\$	\$	\$	\$	\$
September	15 000	22 000	14 000	1 500	900
October	14 500	16 000	10 000	1 200	700
November	14 000	12 000	11 000	2 000	1 500
December	15 000	18 000	4 500	1 800	1 200

- Accounts payable at the end of August were \$6000.
- The business plans to install a new refrigeration unit in November at a cost of \$112 000. In November, \$75 000 is to be paid, and the balance is to be paid in December. No discount is applicable.
- Interest received on investments amounted to \$10 000 and this will be received in September.
- Bank balance (Dr) on 31 August is \$8400.

Effect of the GST on cash budgets

If a business is registered for the GST, most revenue and expenses, and most purchases and sales of non-current assets, will include GST. You will remember from *Units 1 & 2* that some items such as wages, bank expenses and cash drawings do not attract GST. The majority of businesses registered for the GST will submit their Business Activity (BAS) and pay any amounts owing in the month following the recording of the GST collected or GST credits received. Such payments (or refunds) will have to be taken into account in the cash budget.

Although most of the amounts of receipts and payments in the cash budget are increased by the 10 per cent added for the GST, the concepts and methods of calculation for most items in the cash budget do not change from those illustrated previously. However, the payment of GST itself will generally require the preparation of an extra statement or schedule for estimated cash payments to the ATO for GST, and discounts allowed or received and bad debts would require adjustments to the GST to be paid (or refunded). The extra schedule for GST payable is shown in Illustrative example 5. The effect of bad debts and discounts on GST in a cash budget is outside the scope of this text.

Illustrative example 5

From the following information, prepare a monthly cash budget for January and February 2022 for Fahram Enterprises, which is registered for the GST:

- The business sells for cash and on credit. All sales are subject to GST. Of the credit sales, 80 per cent is usually collected in the first month after sale, with the remaining 20 per cent being collected in the second month after sale.
- Cash sales for November and December were \$220 000 and \$275 000, respectively.
- Credit sales for November and December were \$88 000 and \$55 000, respectively.
- Estimated sales for January and February 2022 are:

January	Cash \$220 000	Credit \$44 000
February	Cash \$165 000	Credit \$77 000

- Rent received on business premises from the beginning of December 2021 is \$2200 per month.
- All purchases are made on credit, subject to GST, and are paid in the month following purchase. Estimated purchases for January and February are \$110 000 and \$132 000, respectively.
- Estimated general expenses subject to GST for December, January and February are \$42 900, \$44 000 and \$48 400, respectively.
- Wages and salaries amount to \$5000 per month and the owner's drawings are \$4000 per month.
- It is anticipated that new machinery costing \$55 000, including GST, will be paid for in January. Depreciation charges on this machinery will commence in February.
- The BAS for GST is prepared monthly.
- The balances of the following accounts on 1 January are:

Cash	\$60 000 Overdraft
Accounts Payable	\$99 000

Solution

The first step is to prepare the Statement of Estimated Receipts from Accounts Receivable.

Fahram Enterprises Statement of Estimated Receipts from Accounts Receivable for two months ended February 2020			
Credit sales in:		January	February
	\$	\$	\$
November	88 000	17 600	
December	55 000	44 000	11 000
January	44 000		35 200
February	77 000		
		<u>\$61 600</u>	<u>\$46 200</u>

Remember that this statement only relates to credit sales. No cash from the February credit sales is received until March.

An extra statement or schedule for the GST is required. This shows amounts of GST collected to pay to the ATO and GST credits received, which will reduce the amount payable. This amount payable (or in some cases, receivable) will be paid in the month following the transactions involving the GST. Remember that GST is always one-eleventh of the gross amount of the transaction. The statement will appear as follows:

Fahram Enterprises Statement of Estimated GST Payments to ATO for two months ended February 2020				
		\$	January \$	February \$
GST collected				
Sales	December	330 000	30 000	
	January	264 000		24 000
	February	242 000		
Rent received			200	200 (Dec and Jan)
Total GST collected			<u>30 200</u>	<u>24 200</u>
GST credits received				
Purchases	December	99 000	9 000	
	January	110 000		10 000
	February	132 000		
General expenses			3 900	4 000 (Dec and Jan)
Machinery				5 000 (Jan)
Total GST credits received			<u>12 900</u>	<u>19 000</u>
Total GST payable to (receivable from) ATO			<u>\$17 300</u>	<u>\$5 200</u>

Note above how the GST is one-eleventh of the relevant transaction, and how its effect is delayed until payment is made a month after the transaction. As an example, see how the payment for the machinery in January results in a GST credit received in February. You can see the same effect with the rent and the general expenses. The months in which the transaction occurred are noted alongside the statement simply to make it easier for you to follow.

In this case, both months result in an amount payable to the ATO. In some months, the credits may be higher than the GST collected, and a refund would then be due, and could be shown either as an amount receivable or as a negative amount payable.

After these two statements are prepared, the cash budget itself can be prepared, using these and the other available figures.

Fahram Enterprises Cash Budget for two months ended February 2022		
	January \$	February \$
Estimated receipts		
Cash sales	220 000	165 000
Accounts receivable	61 600	46 200
Rent received	2 200	2 200
Total estimated receipts	<u>283 800</u>	<u>213 400</u>
Estimated payments		
Accounts payable	99 000	110 000
Wages and salaries	5 000	5 000
General expenses	44 000	48 400
Machinery	55 000	0
Drawings	4 000	4 000
GST payment to (received from) ATO	17 300	5 200
Total estimated payments	<u>224 300</u>	<u>172 600</u>
Bank balance (start of month)	60 000 Od	500 Od
Excess receipts over payments	59 500	40 800
Excess payments over receipts		
Bank balance (end of month)	<u>\$500 Od</u>	<u>\$40 300 Dr</u>

In this case, both months result in an excess of receipts over payments, almost eliminating the overdraft after the first month, and converting it to a debit balance of cash in the bank account by the end of February, a pleasing result.

3.28

At 1 October, Walters & Co began operations with a debit bank balance of \$12 000. On the basis of the following information about the business, prepare a cash budget for the quarter October to December, and a brief letter of advice commenting on the overdraft or loan requirements that will be necessary. The business is registered for the GST.

- Sales are made to one distributor only on 30-day terms. Payment should always be received within that period.
- Budget figures for the first three months of operations are estimated as follows:

Month	Sales \$	Purchases \$	Wages \$	Other expenses \$
October	24 200	15 400	2 000	3 300
November	33 000	22 000	2 200	3 740
December	35 200	24 000	2 200	3 740

- Purchases are made on credit, and are due and paid on the 30th day of the month after purchase.
- Assets totalling \$16 500 will be purchased for cash at the end of October.
- Other expenses include an allowance of \$200 per month for depreciation starting from November.
- The BAS for GST is prepared monthly.

3.29

Prepare a monthly cash forecast for November and December for B Armstrong, whose business, Armstrong Parts, is registered for the GST. Prepare a brief report to be presented to B Armstrong.

- The business sells merchandise for cash and on credit. Of the credit sales, 75 per cent is usually collected within the first month following sale, and the remaining 25 per cent is collected in the next month.
- The credit sales for September and October were \$88 000 and \$82 500, respectively.
- Cash sales for September and October were \$99 000 and \$110 000, respectively.
- The sales for November and December are estimated to be:

November	Cash \$110 000	Credit \$99 000
December	Cash \$143 000	Credit \$77 000

- All purchases of merchandise are made on credit, and are paid within 30 days from the last day of the month in which they are made. Estimated purchases for November and December are \$143 000 and \$165 000, respectively.
- General expenses for October were \$23 000, and estimates for November and December are \$27 400 and \$28 500, respectively. These figures include an allowance of \$1000 per month for depreciation. The remainder is subject to GST.
- In addition, it is anticipated that plant and equipment costing \$165 000 will be paid for in December.
- The balances of the following accounts on 1 November are: Cash (credit balance) \$20 000, and Accounts Payable \$132 000.
- The BAS for GST is prepared monthly.

3.30

On the basis of the following information relating to the business of Holander Hardware, which is registered for the GST, prepare a cash budget for the three months ended 31 December and write a letter of advice to P Holander.

- Credit sales for the four months to September were:

	\$
June	26 400
July	26 950
August	29 700
September	26 400

Experience has shown that accounts receivable usually pay as follows:

- 20 per cent in the month after sale
- 50 per cent in the second month after sale
- 30 per cent in the third month after sale.

- The following estimates have been made for the budget period:

Month	Cash sales \$	Credit sales \$	Cash purchases \$	Credit purchases \$	Selling & administrative expenses \$
October	23 650	29 700	24 200	24 090	25 850
November	23 980	30 800	24 750	23 540	26 070
December	24 200	31 900	25 300	23 980	26 180

The selling and administrative expenses include depreciation allowances of \$600 per month, and wages of \$6000 per month.

- September actual figures showed: cash sales \$23 100, cash purchases \$23 980, credit purchases \$23 760, selling and administrative expenses \$25 410.
- All expenses are paid in the month in which they occur. Accounts payable are paid in the month following purchase.
- At the end of September, the Cash at Bank balance was \$21 300 (Dr).
- The BAS for GST is prepared monthly.
- It is planned to purchase:
 - an additional cash register for cash costing \$2200 in October
 - a motor vehicle for cash in November. The cost of the new vehicle is \$33 000.

Real-world application



Why is cash budgeting important to the organization?

Billie Nordmeyer

The difference between a company that succeeds and one that fails is often cash management. Having too little cash means a business may have to pass on profitable ventures or take out loans to overcome liquidity issues. Too little cash may also mean a company may be unable to operate at normal levels or be forced to shut down completely. To avoid these issues, companies rely on a cash budget to plan and control cash receipts and payments.

Cash budget

The cash budget is management's approximation of cash on hand at the beginning of a budget period and the estimated cash inflows and outflows. The cash inflows may include those that result from cash sales, the sale of assets, the collection of accounts receivable, borrowing cash or stock issuance. The cash outflows may include disbursements for material purchases, debt repayment, asset acquisition, taxes, manufacturing costs and dividends. The cash budget highlights a company's probable income or deficit for a period, the latter of which the company must address by increasing sales or decreasing expenditures. The importance of the cash budget lies in its ability to identify a company's future financing needs, highlight the need for corrective actions and evaluate a company's performance.

Financing needs

By creating a cash budget, a company can anticipate when a cash deficit might exist and the extent of that shortfall. In turn, the budget indicates when a difference between budgeted and actual values might need to be made up by borrowing. Short-term financing might be required to acquire inventory, promote products or pay monthly expenses. By predicting cash requirements, a company can also evaluate future business opportunities in part based on an opportunity's probable financing needs and costs. For instance, financing costs will influence the profitability of a merger and product development. This process allows a company to select only those organizational goals that are financially feasible.

Corrective actions

A cash budget is a way to determine if a company has the cash necessary to meet upcoming obligations and to trigger corrective actions if a company's actual figures don't match the budget estimates. For example, a company experiencing cash-flow problems may need to borrow money in the short term for emergency equipment repairs, the payment of taxes or a monthly payroll. In addition, the company may need to borrow money in the long term for the introduction of a new product to the market or the replacement of equipment. The company might also need to respond to a sharp decline in market sales by adjusting spending or prices or negotiating more favorable terms with lenders.

Company performance

A cash budget is used to illustrate a company's financial position to internal and external stakeholders – individuals with an interest in the company – including investors, suppliers and company leadership. For example, increasing cash flow may indicate strong demand for the company's products and opportunities for company expansion, which are positive signals to current and potential investors. In contrast, if company expenses are significantly more than the company's cash inflow, the investment risk is high and may deter additional investment in the company. Declining cash flow may also make it more difficult for a company to obtain additional vendor credit or pay its existing debt, which might force the company into bankruptcy (liquidation).

Source: Billie Nordmeyer, AZ Central



Cash
budgeting

Cash budgets – a survival tool

The importance of a cash budget to the survival of a business must never be underestimated. It surprises people who do not understand accounting that a firm can be making a profit, but still collapse because of lack of cash at certain points in time.

The cash budget is used in conjunction with the three main financial reports that must be prepared and interpreted to maintain the continuing success of a business. Thus, a business needs to prepare at least four reports:

- a cash budget
- a Statement of Profit or Loss
- a Statement of Financial Position
- a Statement of Cash Flows.

These reports must be used in conjunction with one another so that all aspects of the business are commented upon – profit and earning capacity, financial position and stability, and liquidity and cash flows – both in the past and the future.

People question the fact that a business can make a large profit, but find it hard to survive because of a lack of cash. Alternatively, a business may have a lot of cash, but find it hard to make a profit. This confusion occurs because people fail to understand the difference between cash flows and revenue/expense flows. They also forget how important it is to plan for the future, as well as to look at past results. The Statements of Profit or Loss, Financial Position and Cash Flows reveal details of past transactions. The cash budget forecasts the future cash position at a certain point in time.

The differences between cash flows and revenue/expense flows are shown in the following examples.

- 1 Suppose our firm has \$50 000 in the bank to begin a business. We buy \$40 000 worth of inventories for cash and within the first month we sell \$20 000 worth of inventories on credit for \$35 000. Operating expenses for the month are \$5000. Our Statements of Profit or Loss and Financial Position would appear as follows:

Statement of Profit or Loss for month ended 30 June		
	\$	\$
Sales		35 000
Less Cost of Sales		<u>20 000</u>
Gross profit		15 000
Less Expenses		<u>5 000</u>
Net profit		<u><u>\$10 000</u></u>

Statement of Financial Position as at 30 June			
	\$		\$
Assets		Owner's Equity	
Cash at Bank	5 000	Capital	50 000
Accounts Receivable	35 000	Add Net profit	10 000
Inventories	<u>20 000</u>		
	<u><u>\$60 000</u></u>		<u><u>\$60 000</u></u>

At this point in time we have made a substantial \$10 000 profit for a month's trading (\$120 000 for a whole year), but we only have \$20 000 worth of inventories to sell for the next month. Because the normal terms of trade are 30 days for accounts receivable, the accounts receivable will not pay us for at least another month. Where are we going to find the cash to buy another \$20 000 worth of inventories? For the next month of operations, we need the \$5000 to pay for operating expenses, so there is no cash left. We either have to borrow the money or we can approach our suppliers to buy the inventories on credit. Credit may not be granted because the business has no credit or payment history.

This illustration shows you that although we have made a healthy profit, we have no cash left to continue our business. If all the goods were sold for cash, we would have adequate supplies of cash to buy the necessary inventories. Because we sell on credit, there is a time lag between when a sale is made (in accrual accounting this is when profit is recognised) and when the cash is actually received. It is this time lag that can enable a profit to be made in the accounting sense, but leave the business with no cash.

- 2 Because of accrual accounting, balance day adjustments ensure that profit is different from cash. For example, prepaid expenses are paid in this accounting period, but their effect is felt in the following

accounting period. Cash is required this period, but profit is affected next period. This difference occurs with all the balance day adjustments. In particular, you have already seen in this chapter that depreciation has no effect on cash but affects profit over the life of the asset.

These differences will be discussed further in Chapter 4 on page 336.

A business cannot therefore merely look at the profit figure if it is to survive. The timing of when cash is received and paid and the resultant cash balance is crucial. As a result, the preparation of a cash budget is very important.

3.31

Read the article below, and answer the questions following.

Cash flow – managing the lifeblood of small business

Judy Hartcher

Knowing how to maintain a healthy cash flow is essential to a successful business. It can help to decrease the required capital and it can increase your profitability by reducing interest expenses. It can also help you to generate income on surplus funds.

Why worry about cash flow management?

While failure to generate profits is critical to a business, it is not the only cause of business failure. The immediate continued operation of a business is at risk of insolvency if it does not have the cash to finance working capital needs. Measuring the movement of money in and out of your business allows you to monitor your position and set in place strategies to deal with shortages and surpluses.

Timing of cash inflows and outflows is the basis of cash flow management – that is, making sure there are sufficient funds to pay essential payments such as wages and salaries, suppliers' payments and taxes when they fall due.

Improving cash management

- Potential areas for improvement are: Cash from sales – review procedures regularly to ensure cash is flowing into the business as efficiently as possible; send bills out quickly, shorten the collection period and bank money promptly;
- Credit policy and debt collection – screen credit customers carefully, set realistic credit limits and follow up on outstanding accounts as soon as they fall due to reduce delays in receiving payments;
- Paying bills – use trade credit where it is available as this often amounts to a short-term interest-free loan and work out the value of discounts for prompt payment;
- Alternative credit – use credit cards for business purchases (as long as they are paid on time this can be an effective form of credit);
- Progress payments – if you are providing a service over a period of time, negotiate a payment schedule that gives progress payments during the job rather than a lump sum at the end;
- Buyers' terms – check out the terms and conditions of payment before taking on a big job – big business and government often have fixed payment terms that may not suit you (terms of 30 days could result in income not being received for 60 days from invoicing);
- Inventory control – buy smaller quantities if possible, or introduce just-in-time inventory strategies where the supplier holds stock until it is needed;
- Supplier relationships – talk to suppliers about new relationships that may be advantageous to both firms, such as joint promotions and marketing opportunities or new product promotions and reduce expenditure on advertising.

Getting the most out of your surplus

The other side of cash flow management deals with how you handle your surpluses. Cash surpluses should be put to work, by either investing the surplus or using it to repay debt. It is usually a good policy to repay debt before considering alternatives, as debt usually attracts a higher interest rate than investments. However, this decision should be considered in the context of future cash needs and business strategies.

Cash flow planning

A cash flow budget is a projection of your business's cash inflows and outflows over a certain period of time. Preparing a cash flow budget:

- Provides early warnings of potential cash shortages so that corrective actions can be taken on a timely basis;
- Helps identify whether additional funds will be needed;
- Assists in preparing requests to financiers for additional funding by demonstrating that the business can meet required repayments; and
- Identifies potential surpluses that can be invested to generate additional income, until they are required to meet outflows.

Your cash flow budget should predict your anticipated cash receipts and disbursements on a month-to-month basis. Often these projections will be based on past experiences.

Unlike business plans and operating budgets, which are a mix of forecasting and goal setting, cash projections are strictly forecasts. The purpose is to anticipate cash needs, not to set targets for performance. These should be conservative, as the impact of a cash crisis can be severe, and if a forecast becomes outdated, it should be revised immediately.

The impact of the GST

The GST can have an adverse or positive impact on cash flow, depending on the circumstances of your business. Regardless, every business should ensure its cash management strategies take account of tax obligations.

Businesses should plan to retain sufficient cash to pay the tax office when commitments fall due. You may need to put cash into a separate account to cover all your tax commitments. You should also be aware that failure to pay tax, including GST, on time may result in penalties.

Source: 'Cash flow – managing the lifeblood of small business' by Judy Hartcher, CPA Australia, 31 May 2001. Copyright © 2001 CPA Australia Ltd. Used by permission.

- a The first paragraph gives three reasons why a successful business manager will need to know how to maintain a healthy cash flow. List and briefly explain these.
- b Why should a business worry about cash flow management and timing?
- c List and briefly explain five potential areas for improvement in cash management.
- d In what two ways does Hartcher suggest surpluses should be used?
- e How does a cash budget assist with cash flow management?
- f Explain the impact of the GST on cash flows and cash budgeting.

3.32

Briefly explain why a cash budget is a vital survival tool if a business is to continue operations, meet all its commitments, and provide an acceptable amount of profit able to be withdrawn as income for the owner.

Spreadsheet application

3.33

The following is a cash budget including a Statement of Estimated Receipts from Accounts Receivable and a Statement of Estimated GST Payments to ATO.

	A	B	C	D	E	F
45	INPUT/ASSUMPTIONS					
46						
47	Name of Firm		ABC Enterprises			
48						
49	Period Ended		December 2022			
50						
51	Collection Rates					
52			% of Sale			
53						
54	First Month After Sale		5			
55	Second Month		80			
56	Third Month		15			
57						
58	Estimated Receipts					
59		June	July			
60	Credit Sales	89,100	99,000			
61						
62		August	September	October	November	December
63	Cash Sales	4,400	5,500	6,600	16,500	17,600
64	Credit Sales	143,000	187,000	242,000	253,000	0
65	Other Receipts (GST)	0	0	0	0	0
66	Other Receipts (No GST)		0	0	0	0
67						
68	Estimated Payments					
69	Cash Purchases	12,100	11,000	16,500	16,500	17,600
70	Credit Purchases	55,000	66,000	67,100	77,000	0
71	Wages and Salaries		39,000	39,000	39,000	39,000
72	Motor Vehicles	0	0	0	77,000	0
73	Lease on building	4,400	4,400	4,400	4,400	4,400
74	Other Expenses	8,800	9,900	9,900	9,900	9,900
75	Other Payments (GST)	0	0	0	0	0
76	Loan Repayment		1,000	1,000	1,000	1,000
77	Other Payments (No GST)		0	0	0	0
78						
79	Bank Balance					
80	Beginning of September (- for Overdraft)		5,000			
81						
82						
83						
84						

	A	B	C	D	E	F
85	REPORT					
86	ABC Enterprises					
87	Statement of Estimated Receipts from Accounts Receivable					
88	For Four Months Ended December 2022					
89						
90	Credit Sales in		September	October	November	December
91						
92	June	89,100	13,365			
93	July	99,000	79,200	14,850		
94	August	143,000	7,150	114,400	21,450	
95	September	187,000		9,350	149,600	28,050
96	October	242,000			12,100	193,600
97	November	253,000				12,650
98			99,715	138,600	183,150	234,300
99						
100						
101						
102	ABC Enterprises					
103	Statement of Estimated GST Payments to ATO					
104	For Four Months Ended December 2022					
105			September	October	November	December
106						
107	GST Collected					
108	Sales August	147,400	13,400			
109	September	192,500		17,500		
110	October	248,600			22,600	
111	November	269,500				24,500
112	Other Receipts (GST)		0	0	0	0
113	Total GST Collected		13,400	17,500	22,600	24,500
114						
115	GST Credits Received					
116	Purchases August	67,100	6,100			
117	September	77,000		7,000		
118	October	83,600			7,600	
119	November	93,500				8,500
120	Motor Vehicles		0	0	0	7,000
121	Lease on building		400	400	400	400
122	Other Expenses		800	900	900	900
123	Other Payments (GST)		0	0	0	0
124	Total GST Credits Received		7,300	8,300	8,900	16,800
125	Total GST Payable to ATO		6,100	9,200	13,700	7,700
126						
127						
128						

	A	B	C	D	E	F
129	ABC Enterprises					
130	Cash Budget					
131	For Four Months Ended	December 2022				
132						
133			September	October	November	December
134	Estimated Receipts					
135	Cash Sales		5,500	6,600	16,500	17,600
136	Accounts Receivable		99,715	138,600	183,150	234,300
137	Other Receipts (GST)		0	0	0	0
138	Other Receipts (No GST)		0	0	0	0
139	Total Estimated Receipts		105,215	145,200	199,650	251,900
140						
141	Estimated Payments					
142	Cash Purchases		11,000	16,500	16,500	17,600
143	Accounts Payable		55,000	66,000	67,100	77,000
144	Wages and Salaries		39,000	39,000	39,000	39,000
145	Motor Vehicles		0	0	77,000	0
146	Lease on building		4,400	4,400	4,400	4,400
147	Other Expenses		9,900	9,900	9,900	9,900
148	Other Payments (GST)		0	0	0	0
149	Loan Repayment		1,000	1,000	1,000	1,000
150	Other Payments (No GST)		0	0	0	0
151	GST Payment to ATO		6,100	9,200	13,700	7,700
152	Total Estimated Payments		126,400	146,000	228,600	156,600
153						
154	Cash Position					
155	Balance - Previous Month		5,000	-16,185	-16,985	-45,935
156	Net Cash Gain (Loss -)		-21,185	-800	-28,950	95,300
157	Balance - End Of Month		-16,185	-16,985	-45,935	49,365

A	B	C	D	E	F
85					
86	=C47				
87	Statement of Estimated Receipts from Accounts Receivable				
88	For Four Months Ended	=C49			
89					
90	Credit Sales in				
91					
92	June	=B60			
93	July	=C60			
94	August	=B64			
95	September	=C64			
96	October	=D64			
97	November	=E64			
98					
99					
100					
101					

A	B	C	D	E	F
102	=C47				
103	Statement of Estimated GST Payments to ATO				
104	For Four Months Ended	=C49			
105					
106					
107	GST Collected				
108	Sales August	=B64+B63			
109	September	=C64+C63			
110	October	=D64+D63			
111	November	=E64+E63			
112	A65				
113	Total GST Collected				
114					
115	GST Credits Received				
116	Purchases August	=B70+B69			
117	September	=C70+C69			
118	October	=D70+D69			
119	November	=E70+E69			
120	A72				
121	A73				
122	A74				
123	A75				
124	Total GST Credits Received				
125	Total GST Payable to ATO				
126					
127					
128					

- a Prepare the worksheet for the cash budget, bearing in mind the relationship that exists between the elements of the report. Note that in your input/assumptions area, you need to have separate places for additional items of receipts and payments, some of which will be affected by GST and some that will not (see rows 65–66 and 74–77). The user will choose the appropriate row and will fill in the name in column A, as well as the details of the figures. Save the worksheet under the name of Cash Budget.
- b Print the worksheet in the normal mode and comment on the results.
- c Print the worksheet, showing all formulas.
- d For each of the following, prepare a bar graph showing September to December figures for:
 - i credit sales
 - ii total receipts
 - iii credit purchases
 - iv total payments
 - v end of month cash balance.
- e Open the original worksheet called Cash Budget and print a separate report adjusted for all the following ‘what if’ adjustments.
 - i The credit department is hoping to improve the collection rates as follows:
 - 20 per cent in the month after sale
 - 75 per cent in the second month after sale
 - 5 per cent in the third month after sale.
 - ii The sales department plans to conduct a large advertising campaign to increase sales from those originally expected. Anticipated credit sales are:

September	\$220 000
October	\$286 000
November	\$297 000

- iii The advertising campaign will cost \$22 000 in September and \$11 000 in October.
- iv Anticipated cash purchases will increase by \$8800 in each of the months of September, October and November.
Save the worksheet and use an appropriate name. Prepare a report to management that outlines reasons why these are/are not good decisions. Use specific figures from the budget.
- f Open the original worksheet called Cash Budget and print a separate report adjusted for all the following ‘what if’ adjustments.
 - i Rather than continue paying for a lease, the business is considering purchasing part of a building. The building is anticipated to cost \$150 000 (plus GST) payable on 1 October, and lease payments will be zero from that date.
 - ii Because of the better location, the quantity of items sold in October, November and December is expected to increase cash sales by \$33 000 each month.
 - iii As a result of the increased quantity of goods anticipated to be sold, cash purchases are expected to increase by \$11 000 in each of the months of October, November and December.
 - iv Part of the building can be rented for \$7700 per month in November and December.
Save the worksheet and use an appropriate name. Prepare a report to management that outlines reasons why these are/are not good decisions. Use specific figures from the budget.
- g i Open the worksheet Cash Budget and adjust the worksheet so that all figures are zero. Then save the template under the name of Cash Budget Template.
- ii Use the template to prepare solutions to Questions 3.28, 3.29, 3.30 and 3.43. (Make sure you open the Cash Budget Template each time you start a new exercise and save it under a different name for each exercise.)

MYOB AccountRight accounting package for complete accounting process

On page 249 of *Units 1 & 2*, you were shown how to set up the accounts for a trading business with GST and to document transactions using various menu options. The menu options allow for faster data entry and initiate the required general journal entry for each transaction. You were also shown on page 339 of *Units 1 & 2* how to record balance day adjustments and how to display the Profit and Loss Statement (Statement of Profit or Loss) and the Balance Sheet (Statement of Financial Position). Accounting packages make this whole recording and reporting process very easy. This section revises how a trading business records transactions with GST using the various menu options and it also introduces the bank reconciliation process.

MYOB AccountRight is the accounting package that will be used in this illustration. However, packages such as Reckon and Zero are very similar. If you use one of these other packages, the processes are the same, but there will be different menu options.

Cash transactions and the bank reconciliation using an accounting package

Previously in this chapter, you were shown the various types of cash receipts and payments that typically occur in a business. Also discussed was the importance of the bank statement, which acts as an independent check in the bank reconciliation process to ensure that the transactions are correctly recorded. The bank statement also shows transactions that have been recorded by the bank, which must now be recorded in our records.

In the previous illustrations, it was assumed that the bank statement was received monthly and so any outstanding transactions were recorded at the end of the month. In reality, a business can log in to the bank account and see at any time if customers have paid electronically, or if there are any outstanding transactions, and to update records daily if they wish. Indeed, the bank statement can be electronically downloaded and used to make these updates in records a very simple task. Two new procedures will now be discussed.

Recording many cash transactions that make up the deposit at the end of the day

During the course of a normal day's transactions, cash will be received from a variety of sources. We will sell goods and services and people will pay with money. This will be recorded in the cash register and as a credit in the Sales account. Accounts receivable may send us a cheque through the mail or personally come and pay a bill with money or a cheque. In this instance, a receipt will be issued and it will be recorded as a credit to the individual accounts receivable. The important point is that all of these individual amounts have to be recorded to the credit side of the ledger. However, the amount that actually appears in the Cash at Bank account is the total amount for the day that is actually deposited. In the bank reconciliation process, you will see one amount in the bank statement for the day's deposit.

The use of an Undeposited Funds account overcomes this problem. Whenever money is received during the day, the debit entry is to the Undeposited Funds account instead of the Cash at Bank account. At the end of the day, the money and cheques are totalled, a deposit is processed and this deposit takes the money out of the Undeposited Funds account and transfers it to the Cash at Bank account ready for

the bank reconciliation. The Undeposited Funds account is a type of temporary asset clearing account. If deposits are made daily, then the balance of the Undeposited Funds account will be zero at the end of each day.

In the setting-up process, you must ensure these types of cash receipts transactions go to the Undeposited Funds account. To record a bank deposit, click on the Banking command centre and then Prepare Bank Deposit. As this process is outside the scope of this text, we will not show the relevant screens. However, you should be aware of how these types of cash receipts transactions are recorded.

Bank reconciliation

We will now use Illustrative example 2 from page 235 to show how the bank reconciliation is done using an accounting package. Figure 3.2 shows the beginning bank reconciliation screen. Similar to the 31 July Bank Reconciliation Statement on page 236, there are three items that are not ticked (reconciled) and so these items may appear in August's bank statement.

The screenshot shows the 'AR Reconcile Accounts' window. At the top, there is a 'Print' button and a 'Help for this window' button. The main area contains the following fields:

- Account:** 1-1110 Business Bank Account #1
- Closing Statement Balance:** \$2,672.46
- Last Reconciled Date:**
- Calculated Statement Balance:** \$2,672.46
- Bank Statement Date:** 31/07/2020
- Out of Balance:** \$0.00

Below these fields is a section titled 'Mark All Cleared Transactions' with a table of transactions:

	ID No.	Date	Memo	Deposits	Withdrawals
☐	472	12/07/2020			\$56.00
☐	486	21/07/2020			\$139.90
☐	CR000516	31/07/2020	Cash Cheques	\$496.13	

At the bottom of the window, there are buttons for 'Undo Reconciliation', 'Bank Entry', and 'Get Statement'. To the right, there is a 'Cleared:' section with two boxes, both showing '\$0.00'. At the very bottom right, there are 'Reconcile' and 'Cancel' buttons.

Figure 3.2 Bank reconciliation at 31 July 2020

Assume that the following transactions have been recorded.

Williams Cycles Listing of Cash Transactions				
Date	Doc ID	Details	Deposits	Payments
02/08/2020	CRS	Sales	608.40	
02/08/2020	CRS	Sales (Cards)	3 465.23	
02/08/2020	457234	Wages		210.00
02/08/2020	459127	Rent		410.00
10/08/2020	461298	Inventory		576.50
13/08/2020	CRS	Sales	92.00	
13/08/2020	CRS	Sales (Cards)	2 189.45	
16/08/2020	472198	Wages		210.00
19/08/2020	275	Commission Revenue	722.00	
25/08/2020	487	Wyand Electric		586.30
30/08/2020	CRS	Sales	624.50	
30/08/2020	488	Advertising		373.85

If you click on **Banking** command centre and then **Reconcile Accounts**, the screen shown in Figure 3.3 will appear after the date has been changed to 31 Aug 2020 and the Closing Statement Balance has been entered as \$9033.29 (from the bank statement on page 236). Figure 3.3 shows all the outstanding deposits and withdrawals that have already been recorded in the business's accounts, but have not yet been reconciled with the bank statement.

AR Reconcile Accounts

Print Help for this window

Account: 1-1110 Business Bank Account #1 Closing Statement Balance: \$9,033.29

Last Reconciled Date: Calculated Statement Balance: \$2,672.46

Bank Statement Date: 31/08/2020 Out of Balance: -\$6,360.83

Mark All Cleared Transactions

ID No.	Date	Memo	Deposits	Withdrawals
472	12/07/2020	Kahn		\$56.00
486	21/07/2020	Mahitita		\$139.90
CR000516	31/07/2020	Cash Cheques	\$496.13	
457234	2/08/2020	Anders		\$210.00
459127	2/08/2020	Manrakin		\$410.00
CR000517	2/08/2020	Cash Cheques	\$608.40	
CR000518	2/08/2020	Cards	\$3,465.23	
461298	10/08/2020	Grentich		\$576.50
CR000519	13/08/2020	Cash Cheques	\$92.00	
CR000520	13/08/2020	Cards	\$2,189.45	
472198	16/08/2020	Anders		\$210.00
275	20/08/2020	Cash Cheques	\$722.00	
487	25/08/2020	Wyand Electric		\$586.30
488	30/08/2020	Yuen		\$373.85
CR000521	30/08/2020	Cash Cheques	\$624.50	

Undo Reconciliation Bank Entry Get Statement

Cleared: \$0.00 \$0.00

Reconcile Cancel

Figure 3.3 Reconcile accounts screen

After comparing the August bank statement with the cash transactions in Figure 3.3 and ticking those that correspond, the result is Figure 3.4. The figures in a circle in the August bank statement on page 282 show the outstanding items that must now be put into our records.

AR Reconcile Accounts

Print Help for this window

Account: 1-1110 Business Bank Account #1 Closing Statement Balance: \$9,033.29

Last Reconciled Date: Calculated Statement Balance: \$8,112.97

Bank Statement Date: 31/08/2020 Out of Balance: -\$920.32

Mark All Cleared Transactions

☐	ID No.	Date	Memo	Deposits	Withdrawals
☐	472	12/07/2020	Kahn		\$56.00
☒	486	21/07/2020	Mahitita		\$139.90
☒	CR000516	31/07/2020	Cash Cheques	\$496.13	
☒	457234	2/08/2020	Anders		\$210.00
☒	459127	2/08/2020	Manrakin		\$410.00
☒	CR000517	2/08/2020	Cash Cheques	\$608.40	
☒	CR000518	2/08/2020	Cards	\$3,465.23	
☒	461298	10/08/2020	Grentich		\$576.50
☒	CR000519	13/08/2020	Cash Cheques	\$92.00	
☒	CR000520	13/08/2020	Cards	\$2,189.45	
☒	472198	16/08/2020	Anders		\$210.00
☒	275	20/08/2020	Cash Cheques	\$722.00	
☒	487	25/08/2020	Wyand Electric		\$586.30
☐	488	30/08/2020	Yuen		\$373.85
☐	CR000521	30/08/2020	Cash Cheques	\$624.50	

Undo Reconciliation Bank Entry Get Statement Cleared: \$7,573.21 \$2,132.70

Reconcile Cancel

Figure 3.4 Reconcile accounts screen after initial ticking

Williams Cycles Bank Statement				
Date	Particulars	Debit \$	Credit \$	Balance \$
2020				
Aug 01	Balance			2 672.46 Cr
Aug 01	Deposit		496.13	3 168.59 Cr
Aug 02	Withdrawal Online Anders 457234	210.00		2 958.59 Cr
Aug 02	Withdrawal Online Manrakin 459127	410.00		2 548.59 Cr
Aug 02	Deposit		608.40	3 156.99 Cr
Aug 02	Deposit Credit/Debit Cards		3 465.23	6 622.22 Cr
Aug 04	Cheque No 486	139.90		6 482.32 Cr
Aug 10	Withdrawal Online Grentich 461298	576.50		5 905.82 Cr
Aug 13	Deposit		92.00	5 997.82 Cr
Aug 13	Deposit Credit/Debit Cards		2 189.45	8 187.27 Cr
Aug 16	Withdrawal Online Anders 472198	210.00		7 977.27 Cr
Aug 20	Deposit		722.00	8 699.27 Cr
Aug 22	Deposit Krantz and Partners		790.00	9 489.27 Cr
Aug 29	Cheque No 487	586.30		8 902.97 Cr
Aug 30	Interest on Bonds		216.00	9 118.97 Cr
Aug 31	Bank Fee	15.00		9 103.97 Cr
Aug 31	Merchant Fee	70.68		9 033.29 Cr

Because the software knows that the outstanding items will generally be for Service Charges (bank fees and merchant fees) or Interest Earned, there is a button called Bank Entry at the bottom of the reconcile screen shown in Figure 3.4. If you click on the **Bank Entry** button, a screen will appear so the entries for the Bank Fee of \$15 and the Interest Received (interest on bonds) of \$216 can be recorded as in Figure 3.5.

AR Bank and Deposit Adjustments

Account: 1-1110 Business Bank Account #1 ☒ Tax Inclusive

Service Charges

Amount: \$15.00 Tax Code: FRE Tax: \$0.00

ID No.: BS310820 Job:

Date: 31/08/2020

Expense Account: 6-1300 Bank Charges

Memo: BS31 Aug 2020 Bank Fees

Interest Earned

Amount: \$216.00 Tax Code: FRE Tax: \$0.00

ID No.: BS310820 Job:

Date: 31/08/2020

Income Account: 4-4000 Interest

Memo: BS 31 Aug 2020 Interest

Record **Cancel**

Figure 3.5 Entry of outstanding items for bank fee and interest received

When you click on Record in Figure 3.5, the two entries will automatically be recorded and ticked in the Reconciliation screen.

The screen above can also be used for the Merchant Fees of \$70.68. However, the deposit of \$790 from Krantz and Partners on 22 August involves an individual Accounts Receivable account and so this must be recorded through **Sales, Receive Payments** as shown in Figure 3.6.

AR Receive Payments

Journal Register Help for this window

☒ Deposit to Account: 1-1110 Business Bank Account #1 Balance: \$8,437.94
☐ Group with Undeposited Funds:

Customer: Krantz and Partners ID No.: BS310820
 Amount Received: \$790.00 Date: 31/08/2020
 Payment Method: Details..
 Memo: Payment; Krantz and Partners

Invoice No.	Status	Date	Amount	Discount	Total Due	Amount Applied
00001732	Open	7/07/2020	\$790.00	\$0.00	\$790.00	\$790.00

☐ Include Closed Sales

Total Applied: \$790.00
 Finance Charge: \$0.00
 Total Received: \$790.00
 Out of Balance: \$0.00

Receive All

Record Cancel

Figure 3.6 Receive Payments screen for the receipt of cash from an accounts receivable

Obviously, an invoice would have been processed to show that Krantz and Partners owe us the money. The amount of \$790 will be applied against this invoice. You will then have to tick this deposit in the Reconcile screen to show that it reconciles.

After all the entries circled in the bank statement have been processed, the bank reconciliation process is complete with a zero balance difference between our cash records and the bank reconciliation. This completed bank reconciliation is shown in Figure 3.7.

AR Reconcile Accounts

Account: 1-1110 Business Bank Account #1

Closing Statement Balance: \$9,033.29

Last Reconciled Date:

Bank Statement Date: 31/08/2020

Calculated Statement Balance: \$9,033.29

Out of Balance: \$0.00

Mark All Cleared Transactions

ID No.	Date	Memo	Deposits	Withdrawals
472	12/07/2020	Kahn		\$56.00
486	21/07/2020	Mahitta		\$139.90
CR000516	31/07/2020	Cash Cheques	\$496.13	
457234	2/08/2020	Anders		\$210.00
459127	2/08/2020	Manrakon		\$410.00
CR000517	2/08/2020	Cash Cheques	\$608.40	
CR000518	2/08/2020	Cards	\$3,465.23	
461298	10/08/2020	Grentich		\$576.50
CR000519	13/08/2020	Cash Cheques	\$92.00	
CR000520	13/08/2020	Cards	\$2,189.45	
472198	16/08/2020	Anders		\$210.00
275	20/08/2020	Cash Cheques	\$722.00	
487	25/08/2020	Wyand Electric		\$586.30
488	30/08/2020	Yuen		\$373.85
CR000521	30/08/2020	Cash Cheques	\$624.50	
BS310820	31/08/2020	BS 31 Aug 2020 Bank Fees		\$15.00
BS310820	31/08/2020	BS 31 Aug 2020 Merchant Fees		\$70.68
BS310820	31/08/2020	BS 30 Aug 2020 Interest	\$216.00	
BS310820	31/08/2020	Payment; Krantz and Partners	\$790.00	

Undo Reconciliation Bank Entry Get Statement

Cleared: \$8,579.21 \$2,218.38

Reconcile Cancel

Figure 3.7 Completed bank reconciliation screen

The transactions that are left unticked are those that are outstanding and will carry forward into next month's bank reconciliation. This bank reconciliation process is exactly the same as that shown in Illustrative example 2. The only difference in the computer package is that the Bank Reconciliation Statement above shows not only the outstanding items, but all the reconciled items as well. If you click on the **Reconcile** button, all the reconciled items will no longer form part of the reconciliation process and the only items left will be the three outstanding items, similar to the August Bank Reconciliation Statement on page 239.

The whole accounting process using MYOB AccountRight

You should now be able to set up the accounts in MYOB for a business; record various transactions in subsidiary ledgers for accounts receivable, accounts payable and inventories (using weighted average); prepare balance day adjustments entries; and display the various reports required to run a business. The following is a brief summary of the process. If you require more information refer to pages 249 and 339 of *Units 1 & 2*.

Setting up

Step 1 Click on the **Create** button and complete the information for the MYOB product name, company information and financial year, using a MYOB sample list of accounts for a retail or wholesale business, the name of the file and where the file will be saved.

Step 2 Because the GST will be implemented and separate ledgers for accounts receivables, accounts payables and inventories are going to be used, some extra set-up information will need to be entered.

The setting up for these elements is done through **Setup** in the main menu. The first option to look at is the **Preferences** option in Setup. Click on each of the options for System, Windows, Reports & Forms, Banking, Sales, Purchases, Inventory Security and Emailing, and see what the defaults selections are.

Step 3 In order that the correct amount of GST is charged and collected, various GST codes are used so that the calculation of GST is automatic. To see the GST codes previously set up, click on **Lists, Tax Codes**. The most common tax codes used will be GST (non-capital items that attract the normal 10 per cent GST), FRE (0 per cent as this is GST free), CAP (for capital acquisitions such as office equipment and motor vehicles attracting 10 per cent GST) and N-T (not reportable and so 0 per cent GST). These codes are generally attached to every account so that whenever the account is affected, the GST is automatically calculated. You can see the default tax codes by clicking on **Lists, Accounts**. If any of the tax codes are incorrect, the account can be edited and the code changed.

Step 4 Now that the underlying options for the accounting package and the GST codes have been set up, choices must be made about how to account for accounts receivable, accounts payable and inventories. For accounts receivable and accounts payable, the easiest way to set these up is through **Setup** and then **Easy Setup Assistant**. Now look at the following:

- In **Customise**, pay particular attention to **Data Entry** and **Record Selection**.
- In **Accounts**, as shown in Figure 3.8 for Accounts List, you will either create or edit accounts so that account number 4-2000 is Sales, account number 5-1000 is Cost of Goods Sold and account number 5-1500 is Inventory Adjustment. Any new accounts or changes to the names of accounts can be done here or through **Lists, Accounts** in the top menu.



Figure 3.8 Easy Setup Assistant for Accounts, Accounts List

It is vital to again emphasise that the Chart of Accounts is the whole basis for entry into the general ledger. It is most important that these accounts and account numbers are correct as they are also the basis of all reports coming from the system. Ensuring these accounts are correct can be time consuming but it is absolutely essential.

- In **Sales**, the following should be chosen:
 - 1 **Layout**: click on **Item Layout** for invoices so that the perpetual inventory system will be used. This will keep track of all inventories sold.
 - 2 **Selling Details**: for Item Price Level, the base selling price is correct; for the Income Account, leave this blank as there can be many forms of income; and make the Credit Limit \$50 000 so you can enter most transactions. In reality, this credit limit would be set at the proper limit.
 - 3 **Tax Codes**: choose the GST code.
 - 4 **Linked Accounts**: check the correct accounts have been chosen for Account for Customer Receipts and Account for Undeposited Funds.
 - 5 **Historical Sales**: enter details of existing customer accounts when first setting up the accounting system – see later on page 289.
- In **Purchases**, the following should be chosen:
 - 1 **Layout**: click on **Item Layout** for invoices so the perpetual inventory system will be used. This will keep track of all inventories purchased.
 - 2 **Buying Details**: for the Expense Account, leave this blank as there can be many expenses used; and make the Credit Limit \$50 000 so you can enter most transactions. In reality, this credit limit would be set at the proper limit.
 - 3 **Tax Codes**: choose the GST code.
 - 4 **Linked Accounts**: check the correct account has been chosen for Account for Paying Bills.
 - 5 **Historical Purchases**: enter details of existing supplier accounts when first setting up the accounting system – see page 290.

Finally, click on **Lists, Accounts** and check that all accounts and the tax codes applicable to those accounts are correct.

Step 5 So that the various menu options for processing transactions actually post amounts to the correct accounts, it is important that the accounting system knows the accounts to use. In **Setup, Linked Accounts**, check each of Accounts & Banking Balance, Sales Accounts and Purchase Accounts to ensure that the accounts are correct.

Step 6 Create Customer Cards for each customer. This records details relating to each customer, such as name, address and so on. This can be done in advance through **Lists, Cards, Customer**, and **New**; or created at the time of the transaction.

Step 7 Create Supplier Cards for each supplier. This records details relating to each supplier such as name, address and so on. This can be done in advance through **Lists, Cards, Supplier**, and **New**; or created at the time of the transaction. Because suppliers are often paid large amounts of money, it is vital that the information is correct. Often only senior people are allowed to create new suppliers on the system. This is to avoid employees setting up fictitious suppliers and then paying fictitious invoices from these suppliers.

Step 8 Create Items to buy and sell in order to make a profit. Because the perpetual inventory system is being used and the weighted average inventory costing method applied, the accounts to record these inventory movements must be detailed. Click on **Lists, Items, New** and a typical product to be bought and sold results, as shown in Figure 3.9. As well as setting up in **Profile** the accounts for recording cost of goods sold, sales and inventories (very important), enter in **Buying Details** the appropriate GST code (e.g. GST or FRE), and in **Selling Details** the base selling price for the product and the appropriate GST code (e.g. GST or FRE). Every product bought and sold will require a separate and unique Item number, so this process is quite tedious to set up. However, once it is done, most elements rarely change except perhaps the selling price.

AR Item Information

New

DRNK2000 Energy 2 ltr

Profile Item Details Buying Details Selling Details History Auto-Build

Item Number: DRNK2000

Name: Energy 2 ltr

☐ Inactive Item

Quantity On Hand: 0

Current Value: \$0.00

Average Cost: \$0.00

Committed: 0

On Order: 0

Available: 0

☒ I Buy This Item

☒ I Sell This Item

☒ I Inventory This Item

Cost of Sales Account: 5-1000 Cost of Goods Sold

Income Account for Tracking Sales: 4-2000 Sales

Asset Account for Item Inventory: 1-1320 Inventory

Copy From Spell

OK Cancel

Figure 3.9 Item product screen

In summary, the initial setting up of the system can be a lengthy process. However, once it is done correctly, it will only change if circumstances change.

Entering transactions through the menu options

Having completed the initial set-up, the opening entries can now be recorded.

Opening the accounting records – pre-conversion

The term used by MYOB to convert an existing set of accounting records is called ‘pre-conversion’. This means that if there are any opening balances, then these must be recorded first. This generally involves the setting up of accounts in the general ledger, and then ensuring that the individual amounts for the accounts receivable, accounts payable and inventories subsidiary ledgers match the control accounts in the general ledger. Suppose we had the following information to begin the records in MYOB.

At 1 July 2020, a business called Brogham Wholesale ABN 32 783 719 423 had the following details. None of these amounts are affected by GST as they are on an accrual basis. As a result, the GST has already been taken into account.

General ledger accounts

Cash at Bank	\$12 000	Accounts Receivable Control (Debtors)	\$2 300	Inventories	\$35 210
Equipment	\$25 000	Bank Loan	\$16 000	Accounts Payable Control (Creditors)	\$8 510
Capital	\$50 000				

Accounts Receivable

Wranz	\$870
I Pontia	\$1 430

Accounts Payable

Vermanter Supplies	\$5 700
Munkong Ltd	\$2 810

Inventories

ANN250 Annox 250g	5000 @ \$5.25	\$26 250
BUH500 Buhan 500g	800 @ \$11.20	\$8 960

If you carried out the set-up steps previously outlined, all the accounts in the general ledger would be correct and the customer names, supplier names and inventory detail would also have been set up. We must now enter the financial details:

- General ledger account balances – this can be done as a standard general journal entry at 1 July 2020. Alternatively, the amounts can be entered through **Setup, Balances, Account Opening Balances**. After completing this process, the subsidiary ledger balances must match the amounts in the control accounts in the general ledger.
- Accounts receivable – the details can be entered through **Setup, Balances, Customer Balances**. Click on **Add Pre-Conversion Sale** and enter the details of each accounts receivable with no GST. Before leaving this screen, the Out of Balance Amount should be \$0.00. The Pre-Conversion Customer Balance screen is shown in Figure 3.10. This information can also be checked through **Setup, Easy Setup Assistant, Sales, Historical Sales**.

AR Customer Balances

Help for this window

☐ Customer Detail
 ☒ Customer Summary

Customer Name	Card ID	Amount Due
→ Wranz	*None	\$870.00
→ I Pontia	*None	\$1,430.00

Total Sales: \$2,300.00
 Linked Receivables Account Balance: \$2,300.00
 Out of Balance Amount: \$0.00

Add Pre-Conversion Sale Close

Figure 3.10 Pre-conversion customer balance screen

- Accounts payable – the details can be entered through **Setup, Balances, Supplier Balances**. Click on **Add Pre-Conversion Purchase** and enter the details of each accounts payable with no GST. Before leaving this screen, the Out of Balance Amount should be \$0.00. The Pre-Conversion Supplier Balance screen is similar to that shown in Figure 3.10, except that it is for suppliers. This information can also be checked through **Setup, Easy Setup Assistant, Purchases, Historical Purchases**.
- Inventories – It is very important that the items have been set up through **Lists, Items, New**, and that the details of the ledger accounts for **I Buy This Item**, **I Sell This Item** and **I Inventory This Item** for each new item have been completed before entering the individual inventory details. Once this has been completed, the details can be entered through **Inventory Command Centre, Adjust Inventory**. Make sure that the date is correct. Then for each item number, insert Item Number, Quantity, Unit Cost and Account (the relevant Inventory account number you entered as 'I Inventory This Item' – it is most important that this is the Inventory asset account). Use the Tab key to move to each column. The Adjust Inventory screen is shown in Figure 3.11, with the Inventory account being 1-1320.

Having completed this process, it is most important to check that the following reports (at 1 July 2020) are correct before proceeding:

- **Accounts, Trial Balance** – debit equals credit, and each account is the correct balance.
- **Sales, Receivables Reconciliation (Detail)** – each customer amount is correct, and the Out of Balance Amount is \$0.00.
- **Purchases, Payables Reconciliation (Detail)** – each supplier amount is correct, and the Out of Balance Amount is \$0.00.
- **Inventory, Inventory Value Reconciliation** – each inventory item is correct, and the Out of Balance Amount is \$0.00.

AR Adjust Inventory

Journal Register

Help for this window

Inventory Journal No.: I000001

Date: 1/07/2020

Memo: Pre-conversion inventory

☐ Year-End Adjustment

Item Number	Quantity	Unit Cost	Amount	Account	Job	Memo
ANN250	5,000	\$5.25	\$26,250.00	1-1320		
BUH500	800	\$11.20	\$8,960.00	1-1320		

Record Cancel

Figure 3.11 Adjust inventory screen

The usual transactions can now be entered through the various command centres.

Banking command centre

The important thing about this option is that the computer knows that all these cash receipts and payments affect the Bank account as set up in Step 5 previously. When you enter the data, the computer only wants to know the details relating to the other side of the transaction. There are three key options in the **Banking** command centre:

- **Receive Money** This option is used for all receipts of money from organisations that are not set up as accounts receivable. For example, if \$400 is received as commission, the computer knows that the money will be debited to the Bank account. When you complete the screen, you will be telling the computer the details of the credit entry that relates to commission revenue. If money is received from an Accounts Receivable, it is NOT recorded here.
- **Spend Money** This option is used for all payments of money to organisations that are not set up as accounts payable. For example, if you pay \$1200 in rates to the council, the computer knows that the money will be credited to the Bank account. When you complete the screen, you will be telling the computer the details of the debit entry that relates to rates. If money is paid to an accounts payable, it is NOT recorded here.
- **Reconcile Accounts** As previously shown on page 279, this is where the bank reconciliation process is completed.

Purchases command centre

It is important to understand that because subsidiary ledgers are used for accounts payable, all transactions have to be entered into the individual accounts payable accounts. The control account in the general ledger will then be automatically updated. Also, because the Item layout is being used for tax invoices, each individual inventory item must be recorded as purchased and this will automatically update the Inventories (control) account in the general ledger.

Therefore, if a transaction involves an accounts payable, the **Purchases** command centre must be used. There are two main options:

- **Enter Purchases** As shown in Figure 3.12, a representation of a tax invoice will appear and the details relating to the supplier and each item purchased including quantity, item number and cost will be entered. If this is a cash purchase, then an accounts payable called Cash Purchases will be created, the inventory items recorded and the cash paid immediately. As a result, there should never be a balance in the Cash Purchases subsidiary ledger account. Regardless of whether it is a cash or credit purchase, to record the purchase of individual inventories, this **Enter Purchases** option must be used. If the transaction involves a purchase return, it is exactly the same as a purchase except negative quantities (e.g. -3) are recorded for the quantities being returned.
- **Pay Bills** This option is used to pay bills created under Enter Purchases.

The screenshot shows the 'Purchases - New Item' window. At the top, there are menu items: Print, Send To, Journal, Layout, Register, and a Help button. The 'Purchases Type' is set to 'Bill'. The 'Supplier' field is empty. 'Terms' are '0% 1st Net 30th after EOM'. 'Tax Inclusive' is checked. The 'Ship to' field is empty. 'Purchase No.', 'Date', and 'Supplier Inv No.' are empty. Below these is a table with columns: Bill, Received, Backorder, Item Num..., Description, Price, Disc%, Total, Job, Tax. The table is currently empty. Below the table are fields for 'Comment', 'Ship Via', and 'Promised Date'. To the right of these are summary fields: 'Subtotal: \$0.00', 'Freight: \$0.00', 'Tax: \$0.00', and 'Total Amount: \$0.00'. There is also a 'GST' field. At the bottom, there are fields for 'Journal Memo: Purchase' and 'Bill Delivery Status: Already Printed or Sent'. To the right of these are 'Paid Today: \$0.00' and 'Balance Due: \$0.00'. At the very bottom are buttons for 'Save as Recurring', 'Use Recurring', 'Spell', 'Record', and 'Cancel'.

Figure 3.12 Enter purchases

Sales command centre

Once again, because subsidiary ledgers are used for accounts receivable, all transactions have to be entered into the individual accounts receivable accounts and the control account in the general ledger will be automatically updated. Also, because the Item layout is being used for tax invoices, each individual

inventory item must be recorded as sold, and this will automatically update the Inventories (control) account in the general ledger.

Therefore, if a transaction involves an accounts receivable, the **Sales** command centre must be used. There are two main options:

- **Enter Sales** Similar to Figure 3.12, a representation of a tax invoice will appear and the details relating to the customer and each item sold including quantity, item number and selling price will be entered. The weighted average cost method will be used to calculate the cost price of each item sold and will automatically be recorded. If this is a cash sale, an accounts receivable called Cash Sales will be created, the inventory items recorded and the cash received immediately. As a result, there should never be a balance in the Cash Sales subsidiary ledger account. Regardless of whether it is a cash or credit sale, to record the sale of individual inventories, this **Enter Sales** option must be used. If the transaction involves a sales return, it is exactly the same as a sale except that negative quantities (e.g. -2) are recorded for the quantities being returned.

If a bad debt occurs, this will also be done through **Sales, Enter Sales**. After entering the Customer, click on the Layout button at the top and use a Service Layout. The account to be affected is bad debts and the amount will be negative (e.g. -\$300). If the amount being written off originally had GST, make sure the GST is in the tax code. This will not only write off the account, but also send the correct amount to the relevant GST account. For example, if I Pontia's account of \$1430 previously set up in the Pre-Conversion had to be written off as a bad debt at 30 November 2020, Figure 3.13 shows the appropriate screen, with the account number for bad debts being 6-1500.

The screenshot shows the 'Enter Sales' window with the following details:

- Sales Type:** Invoice
- Customer:** I Pontia
- Terms:** 0% 1st Net 30th after EOM
- Tax Inclusive:** ☒
- Ship to:** I Pontia
- Invoice No.:** 00000003
- Date:** 30/11/2020
- Customer PO No.:**

Description	Account No.	Amount	Job	Tax
Bad Debt	6-1500	-\$1,430.00		GST

Salesperson:

Comment:

Ship Via:

Promised Date:

Subtotal: -\$1,430.00

Freight: \$0.00

Tax: -\$130.00

Total Amount: -\$1,430.00

Journal Memo: Sale; I Pontia

Referral Source:

Invoice Delivery Status: To be Printed

Paid Today: \$0.00

Payment Method: Cash

Balance Due: -\$1,430.00

Buttons at the bottom: Save as Recurring, Use Recurring, Reimburse, Spell, Record, Cancel.

Figure 3.13 Writing off a bad debt

If you wish to close the original invoice, you should then apply the credit of \$1430 to the original invoice through **Sales, Sales Register, Returns & Credits, Apply to Sale, Amount Applied, \$1430, Record**.

- **Receive Payments** This option is used to receive money created under Enter Sales.

Inventories command centre

The perpetual inventory system is often used in computer packages because of the greater control over inventories. One of the advantages is that, at any time, the computer records can show what quantities of any stock item **should** be on hand and someone can go and check if that quantity actually **is** on hand. If there is a discrepancy, it is recorded in the Inventories command centre. This can be done through **Count Inventory** and any appropriate stock loss can be brought to account. Generally, a Cost of Sales account called Inventory Adjustment with an N-T tax code is created before this process is carried out. For example, if a check were made on the previously discussed Pre-Conversion inventory at 1 July 2020, and it was found that for inventory item ANN250 Annox 250g there was only 4980 on hand instead of 5000, the adjustment through Count Inventory would appear as per Figure 3.14.

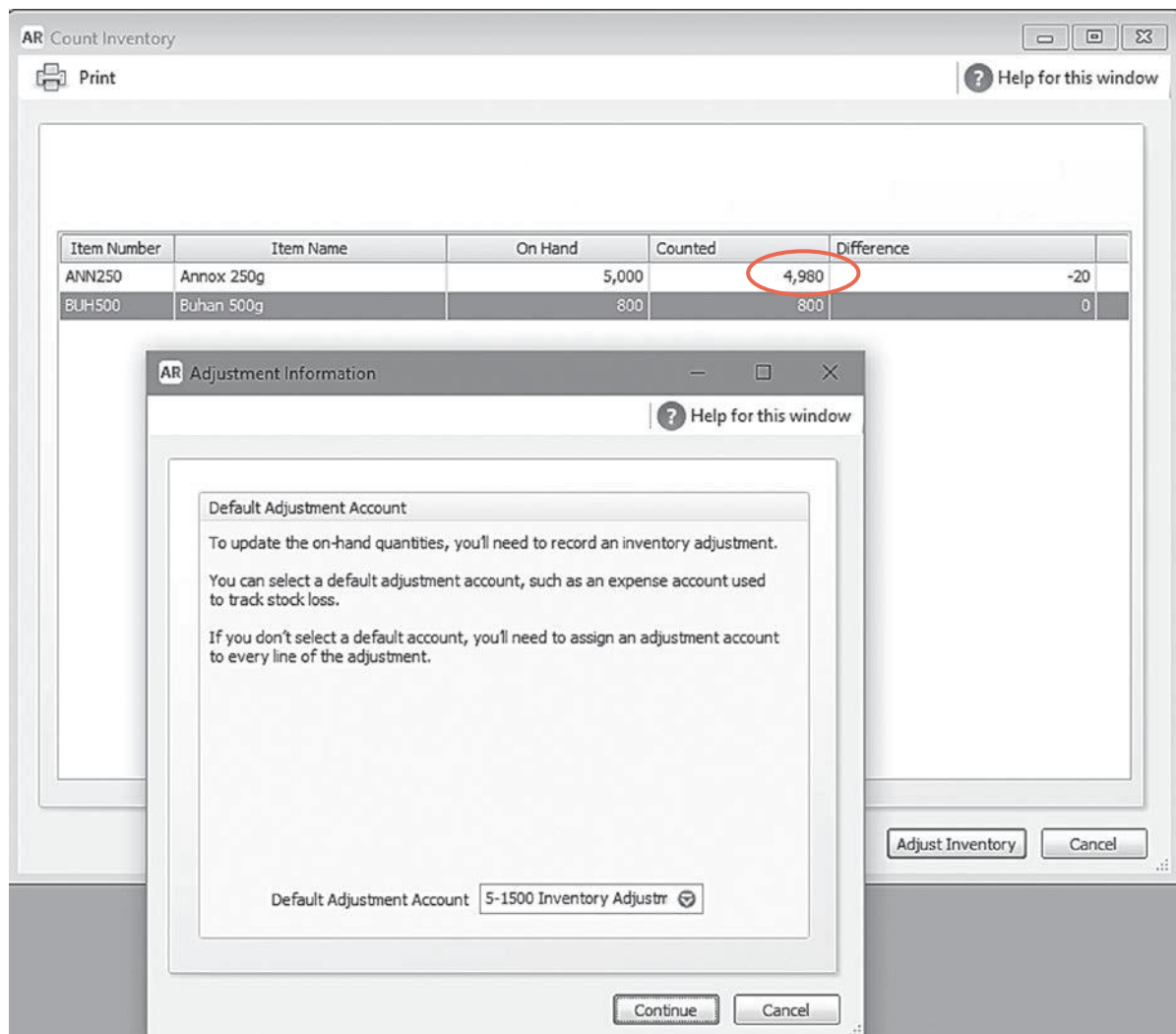


Figure 3.14 Count inventory screen

After clicking on the **Adjust Inventory** button at the bottom, another window will appear asking what account you want the adjustment to go to. In this instance, the Default Adjustment Account is 5-1500 Inventory Adjustment. After clicking on the **Continue** button, this will create another screen that prepares the adjustment inventory entry for a -20 quantity and an amount of -\$105.00 to Inventory Adjustment as shown in Figure 3.15.

AR Adjust Inventory

Journal Register Help for this window

Inventory Journal No.: IJ000002

Date: 1/07/2020

Memo: Inventory count

☐ Year-End Adjustment

Item Number	Quantity	Unit Cost	Amount	Account	Job	Memo
ANIN250	-20	\$5.25	-\$105.00	5-1500		

Record Cancel

Figure 3.15 Adjust Inventory screen

Click on **Record** and the inventory adjustment will be complete.

Accounts command centre

General journal entries are entered through **Accounts, Record Journal Entry**. Only transactions that cannot be entered through the other command centres will be entered via a general journal. These are typically balance day adjustment entries and reversing entries.

Tips

- It is very important that sales and purchase transactions are entered in date order so that the appropriate weighted average calculations are performed for inventory and cost of goods sold.
- Make sure you enter the correct date for each entry, **especially the correct year**. If you don't, the transaction will be recorded correctly but will not appear as expected in the reports.
- If you want to see the debit and credit effect of each transaction before you click on the Record button and post to the ledger, use **Edit, Recap Transaction** or **CTRL R**. If you have already recorded and posted the entries, click on **Transaction Journal** at the bottom of each Command Centre screen to see the effect of each data entry. It is important that you use the correct dates for **From:** and **To:** in the Transaction Journal.

Reports

The great thing about an accounting package is that reports can be prepared at any time. **Reports** can be found in the main menu along the top or towards the bottom of any command centre. Table 3.1 lists typical reports used to manage a business.

Table 3.1 Common MYOB AccountRight reports

Command Centre	Report
Accounts	Accounts List [Detail] General Ledger [Detail] Trial Balance Balance Sheet Profit & Loss Statement Transaction Journals
Banking	Reconciliation Report Transaction Journals
Sales	Aged Receivables [Detail] Receivables Reconciliation [Detail] Transaction Journals
Purchases	Aged Payables [Detail] Payables Reconciliation [Detail] Transaction Journals
Inventory	Item List [Summary] Item Transactions Inventory Value Reconciliation Transaction Journals

Tips

- When printing the Profit and Loss Statement and the Balance Sheet, check that the profit figure is the same in each report.
- Check subsidiary ledgers and the general ledger:
 - The total of the Aged Receivables [Detail] report should be the same as the Accounts Receivable figure in the Trial Balance/Balance Sheet.
 - The total of the Aged Payables [Detail] report should be the same as the Accounts Payable figure in the Trial Balance/Balance Sheet.
 - The total in the Items List [Summary] report should be the same as the Inventory figure in the Trial Balance/Balance Sheet.

End of year rollover

At the end of the financial year, all the revenue and expense accounts for the year must be closed off and any profit or loss transferred to the Capital account. This is done through **File, Close a Year, Close a Financial Year**. Error checks could also be made through **Accounts, Company Data Auditor** to see that the data is as error free as possible before the rollover. Obviously, all your data should have been backed up before starting this rollover process.

Once you have rolled over into the new financial year, any reversing entries would be entered. The business is now ready to begin recording transactions for the new financial year.

Backup

As discussed in Chapter 1, backup of data is vital in accounting systems. At various intervals, it is essential that the data file you have created is backed up to a different place to where the data is being stored, preferably at a different site. If the file gets corrupted or if there is a fire and your computer is destroyed, you will need to obtain that backup to begin operations again. To back up your file, use the **File** option in the main menu and then **Back Up**. If something happens to your data file and you have to open a backup file, you will have to use the **File, Restore** option.

3.34

- Describe the initial setting up process in MYOB for a typical business. Although this takes some time, explain why is it so important.
- Describe the process in MYOB for opening general ledger account balances (pre-conversion), and opening balances in the Accounts Receivable, Accounts Payable and Inventory subsidiary ledgers.
- Why are the usual transactions of a business recorded in MYOB through menu options? What are these transactions and what menu options are used?
- What happens with a rollover in MYOB?
- Why is backing up so important in accounting systems?

3.35

You are given the following details of the books of Walker Industries (453 Trander Road, Brisbane 4000) at 31 May. GST is applicable to relevant items unless otherwise stated and the business's ABN is 73 342 894 568. The accrual basis of GST is used and the BAS is prepared monthly.

General ledger accounts

Cash at Bank	\$18 000	Accounts Receivable Control	\$6 000	Inventories	\$129 000
Fittings and Fixtures	\$18 000	Computers	\$48 000	Accounts Payable Control	\$7 500
Bank Loan	\$67 500	Capital	\$144 000		

Schedule of Accounts Receivable

Hillier Co Ltd	\$4 350
R Wilson	\$1 650

Schedule of Accounts Payable

Charlton Ltd	\$1 800
Chan & Co	\$5 700

Inventory Listing (excluding GST)

T500 (GST-free)	3000 @ \$15	\$45 000
Y430 (GST)	1000 @ \$50	\$50 000
Z297 (GST)	2000 @ \$17	\$34 000

Transactions for June, including any applicable GST, were:

June 1	Paid Charlton Ltd \$1800 in full settlement of debt, payment no 126549.
1	Paid three months' rent of \$8800 to A J Realty on cheque 697.
1	Sold 72 units of T500 @ \$25 to G Silvio on tax invoice 441 (GST-free).
2	Received from Hillier Co Ltd \$4350 in full settlement of debt, receipt 921.
3	Cash sales of 10 units of Z297 @ \$39.60.
4	Purchased 200 units of Y430 @ \$55 from Charlton Ltd on tax invoice 1186.
4	G Silvio returned 9 units of T500 sold on June 1, adjustment note 268 (GST-free).
7	Sold 140 units of Y430 to Gillispie Bros @ \$110 on tax invoice 442.
12	Paid salaries \$2400 on payment no 471224.
12	Paid telephone \$1100 on payment no 564196.
16	Purchased 350 units of Z297 from D Maldovic @\$18.70 on tax invoice 748.
22	Returned 7 units of Z297 to D Maldovic, adjustment note 481.
26	Paid salaries \$2400 on cheque 698.
29	Purchased fittings and fixtures on credit from Carlyle Co Ltd for \$3300 on tax invoice 628.
30	Paid freight inwards of \$660 on cheque 699.
30	Owner withdrew \$1000 by cheque 700.
30	Wrote off the R Wilson account, which included GST, as a bad debt.

Walker Industries Bank Statement				
Date	Particulars	Debit \$	Credit \$	Balance \$
June 1	Balance			18 000 Cr
1	Payment 126549	1 800		16 200 Cr
2	Deposit		396	16 596 Cr
3	Deposit		4350	20 946 Cr
10	Chq 697	8 800		12 146 Cr
12	Payment 564196	1 100		11 046 Cr
12	Payment 471224	2 400		8 646 Cr
29	Chq 699	660		7 986 Cr
30	Fees	85		7 901 Cr

Walker Industries uses a subsidiary ledger for accounts receivable, accounts payable and inventories.

- a Prepare the:
- bank reconciliation statement
 - ledger
 - trial balance before adjustments

- iv balance day adjustments at 30 June to account for the following (to the nearest dollar):
- inventory quantities on hand

T500	2930
Y430	1060
Z297	2330

- two months' rent is prepaid
 - interest on loan is calculated at 10 per cent per annum and one month is due
 - depreciation for one month on computers is calculated at 30 per cent per annum diminishing balance
 - depreciation for one month on fittings and fixtures is calculated at 20 per cent per annum straight line (estimated residual value is nil)
 - \$480 outstanding wages
 - doubtful debts are to be provided at 2 per cent of the balance of accounts receivable
- v trial balance after adjustments
- vi Profit & Loss Statement and Balance Sheet
- vii Accounts Receivable listing
- viii Accounts Payable listing
- ix Inventory listing
- x rollover to the new accounting period of July
- xi prepare reversing entries at 1 July.
- b On 21 July, the BAS for GST is prepared. If money is owed to the ATO a cheque is prepared on that date. If money is owed by the ATO the receipt is received on 31 July. Record the required amount. Cents would not normally be included but record them in this instance. Print a trial balance.

3.36

On 1 July, Wendy Baker decided to convert her accounting records for her business (Baker Enterprises of 563 Prestal Avenue, Brisbane 4000) over to a computer system and to use a perpetual system of inventory control. All transactions included GST where applicable and the ABN is 19 438 452 946. The accrual basis is used for GST and a BAS is prepared monthly.

The following items were in her Statement of Financial Position at 30 June:

Accounts Receivable	\$	\$
W Black (123 Grand Street, Brisbane 4000)		459.05
Broton Trading Co (34 Top Street, Brisbane 4000)		1 279.00
Inventories		
A101 300 units at \$21.50 cost price excluding GST	6 450.00	
B111 100 units at \$10.60 cost price excluding GST	<u>1 060.00</u>	
		7 510.00
Motor vehicle		21 200.00
Equipment		4 300.00
Bank overdraft		16 155.80
Accounts Payable		
Yeumen Enterprises (213 Bopin Street, Sydney 2000)		342.80
Tyrone Ltd (178 Wilson Parade, Melbourne 3000)		1 249.45

The following transactions occurred during July:

July 1	Bought goods on credit from Tyrone Ltd, tax invoice 34216:
	A101 200 @ \$23.65 \$4 730.00
1	Received \$1279.00 from Broton Trading, receipt 186.
2	Cash purchases on cheque 3673:
	A101 230 @ \$24.20 \$5 566.00
	C121 400 @ \$11.55 \$4 620.00
2	Returned goods to Tyrone Ltd, adjustment note 5437:
	A101 20 @ \$23.65 \$473.00
7	Paid wages \$890 on payment no 326889.
7	Paid Yeumen Enterprises \$342.80 on cheque 3674.
9	Sold goods on credit to Byron Ltd (34 Typhon Street, Adelaide 5000) on tax invoice 2376.
	A101 310 @ \$46.20 \$14 322.00
	C121 123 @ \$25.30 \$3 111.90
10	Paid advertising \$1958.00 on payment 738222.
14	Received commission on sales \$331.10 on receipt 187.
15	Cash sale as per cash docket 562:
	C121 25 @ \$25.30 \$632.50
18	Cash sales as per cash docket 563:
	B111 20 @ \$27.50 \$550.00
19	Sold goods on credit to W Black on tax invoice 2377:
	A101 105 @ \$46.20 \$4 851.00
21	W Black returned goods, adjustment note 387:
	A101 3 @ \$46.20 \$138.60
21	Paid wages \$890 on payment no 816392.
27	Cash purchases on cheque 3675:
	B111 45 @ \$12.10 \$544.50
31	Paid rent for July \$2 200 on payment no 884743.

The following bank statement details were available:

Baker Enterprises Bank Statement				
Date	Particulars	Debit	Credit	Balance
July 1	Balance			16 155.80 Dr
1	Deposit		1 279.00	14 876.80 Dr
7	Payment 326889	890.00		15 766.80 Dr
15	Deposit		632.50	15 134.30 Dr
15	Payment 738222	1 958.00		17 092.30 Dr
16	Deposit		331.10	16 761.20 Dr
21	Payment 816392	890.00		17 651.20 Dr
31	Fee	11.70		17 662.90 Dr
31	Payment 884743	2 200.00		19 862.90 Dr

Complete the following:

- a Enter the transactions in the ledger of Baker Enterprises.
- b Prepare a bank reconciliation statement.
- c Print the general ledger and trial balance to check the accuracy of the entries.
- d Enter the following balance day adjustments:
 - inventories on hand at 31 July as per a physical stocktake were:

A101	290 units
B111	125 units
C121	252 units

- provide for doubtful debts for the first time at 3 per cent of accounts receivable (to nearest \$)
- write off depreciation on motor vehicle at 20 per cent straight line (residual value is \$1200) for one month (to nearest \$)
- write off depreciation on equipment at 25 per cent diminishing balance for one month (to nearest \$)
- outstanding interest on overdraft \$100
- outstanding commission \$285
- outstanding wages \$445.
- e Print the general ledger.
- f Print a final trial balance.
- g Print the Accounts Receivable listing.
- h Print the Accounts Payable listing.
- i Print the Inventory listing.
- j Print a Profit & Loss Statement and Balance Sheet for the month of July.
- k Begin the new period – August.
- l Record reversing entries on 1 August.
- m Pay the GST at 21 August. Cents would not normally be included, but record them in this transaction.
- n Prepare a trial balance as at 21 August.

REVIEW AND REFLECT

This chapter continued the discussion about internal controls, specifically the internal controls over cash. This is a very important asset and one that is easy to steal so internal controls are very important. Regardless of the size or nature of the business, one of the most important internal controls is the bank reconciliation, which allows the business's records to be checked against a completely independent document – the bank statement. With the trend towards electronic banking, the bank statement is always available. Businesses are able to see all transactions, including those they were not aware of. Typically, this includes electronic receipts of cash and bank fees and charges.

This chapter also introduced the concept of budgeting. The cash budgeting process ensures that businesses have an adequate flow of cash to meet their commitments. A cash budget allows a business to look into the future and estimate the likely receipts and payments for a period, usually up to six months ahead. Any possible shortfalls or excesses of cash can be determined and appropriate action taken. The interpretation of the cash budget is very important and procedures were outlined that will help the user to write a meaningful report or letter of advice on the cash budget. The impact of GST on the budget was explained and illustrated.

Used in conjunction with the three main reports that must be prepared for interested parties – the Statement of Profit or Loss, the Statement of Financial Position and the Statement of Cash Flows – a cash budget will help to ensure a business's long-term survival. No business can survive without cash. The three financial statements show what has happened to the business in the past. The cash budget tries to predict what will happen to the business in the future.

The complete accounting process in an accounting package was then outlined, using MYOB AccountRight as an example. The bank reconciliation process in MYOB was explained. Finally, the complete accounting process – including setting up, pre-conversion, opening the records, entering transactions through the various menu options, reports, end of year rollover and backing up – was discussed.

3.37 Chapter summary

Complete the following tasks and questions, and you will have constructed a brief summary of the work on management of cash covered in this chapter:

- a What are the seven principles of internal accounting controls?
- b Describe the important general internal controls over cash.
- c What specific internal controls apply to cash receipts?
- d What specific internal controls apply to cash payments?
- e What purpose does a bank reconciliation serve?
- f Who owes whom if the balance of the bank statement is a debit?
- g Describe some of the outstanding items found in a bank reconciliation statement.
- h What is a budget?
- i How does a budget help control business operations?
- j Name some different types of budgets a business might prepare.
- k What is a cash budget?
- l Explain the reasons for preparing a cash budget.
- m How is a cash budget prepared?
- n How is the information in a cash budget interpreted and reported on?
- o Explain how credit transactions affect the preparation of the cash budget.
- p Explain the impact of the GST on a cash budget.
- q Why is the cash budget considered an essential tool for the long-term survival of a business?
- r Describe the initial setting up process in MYOB for a typical business.
- s Describe the process in MYOB for opening general ledger account balances (pre-conversion), and balances in the Accounts Receivable, Accounts Payable and Inventory subsidiary ledgers.

- t Describe how the usual transactions of a business are recorded in MYOB through menu options.
- u Where are most of the balance day adjustment and reversing entries recorded?
- v What happens when there is a rollover in MYOB?
- w Why is backing up data so important in accounting systems?

3.38 Conceptual review

What internal controls would help protect against the following threats?

- a A fictitious statement of account arrives and it is paid.
- b A customer's account is written off as a bad debt in order to conceal the theft of money paid by the customer.
- c A supplier's invoice overcharges for the items delivered.
- d The petty cashier has 'borrowed' \$500 from the petty cash fund over the last two years.
- e A laptop computer is stolen.
- f Inventories are stolen from the warehouse.

3.39 Conceptual review

Complete the following tables.

- a Control of cash

Possible problems	Appropriate controls
Inadequate cash flow to pay bills, purchase inventories, pay wages and expand operations	
Loss of cash due to theft, mismanagement or destruction	

- b Control of accounts receivable

Possible problems	Appropriate controls
Sales lost to excessively tight credit policies, and customers going to other suppliers	
Customers who have been granted credit not paying or paying late because of lack of funds, fraud, bankruptcy or liquidation of their business	
Goods and services being delivered, but not properly charged or paid for, due to poor recordkeeping or fraud by customers or employees	

c Control of inventories

Possible problems	Appropriate controls
Inventory shortages due to poor planning, poor purchasing, poor recordkeeping, unexpected demand, unavailability from suppliers, or theft by employees or outsiders	
Damage to inventory through poor handling or storage	
Poor identification of inventory items, which may then be shipped incorrectly or left to deteriorate	
Overvaluation of inventory (and profits), because it has become obsolete, has deteriorated or is excess to requirements, so its true market value is less than cost	

3.40 Application

At the annual show, the cashier in a box office receives cash from customers and operates a machine that ejects serially numbered tickets. To gain admission to the ride, the customer hands the ticket to an operator stationed 10 metres from the box office at the entrance to the ride. The operator tears the ticket in half, opens the door for the customer, and returns the stub to the customer. The operator drops the other half of the ticket into a locked box.

Discuss the internal controls operating in this system.

3.41 Application

The following information relates to the business of Crasbourne Flights, owned by R Bradley. Complete the general journal, Cash at Bank account and prepare a bank reconciliation statement as at 31 December 2020.

Crasbourne Flights Bank Reconciliation Statement as at 30 November 2020			
		\$	\$
Debit balance as per bank statement			1 000
Add Outstanding payments			
	111892	<u>700</u>	<u>700</u>
			1 700
Less Outstanding deposits			<u>500</u>
Credit balance as per Cash at Bank account			<u>\$1 200</u>

Ledger of Crasbourne Flights

Date	Particulars	Ref	Debit \$	Credit \$	Balance \$
Cash at Bank					No 3103
31/12/2020	Inventory			100	3 920 Cr

Crasbourne Flights
Cash Deposits

Date	Doc ID	Deposits
01/12/2020	CRS	420
10/12/2020	CRS	1 750
15/12/2020	371	1 160
21/12/2020	CRS	270
31/12/2020	CRS	1 010

Crasbourne Flights
Cash Withdrawals

Date	Doc ID	Withdrawals
02/12/2020	217320	190.00
10/12/2020	341553	410.00
14/12/2020	402134	1 160.00
17/12/2020	523196	240.00
28/12/2020	672341	870.00
28/12/2020	675998	4 360.00
31/12/2020	892156	100.00

Crasbourne Flights Bank Statement				
Date	Particulars	Debit \$	Credit \$	Balance \$
01/12/20	Balance			1 000 Dr
02/12/20	Deposit		500	500 Dr
02/12/20	Deposit		420	80 Dr
02/12/20	Withdrawal Online 111892	700		780 Dr
02/12/20	Withdrawal Online 217320	190		970 Dr
10/12/20	Withdrawal Online 341553	410		1 380 Dr
11/12/20	Deposit		1 750	370 Cr
14/12/20	Withdrawal Online 402134	1 160		790 Dr
16/12/20	Deposit		1 160	370 Cr
17/12/20	Withdrawal Online 523196	240		130 Cr
21/12/20	Deposit		270	400 Cr
28/12/20	Withdrawal Online 672341	870		470 Dr
28/12/20	Withdrawal Online 675998	4 360		4 830 Dr
29/12/20	Deposit Ninanu Travel		1 329	3 501 Dr
31/12/20	Interest on Overdraft	14		3 515 Dr
31/12/20	Bank Charges	10		3 525 Dr

3.42 Conceptual review

In the preparation of the cash budget, where would the business obtain information for the following figures?

- a** cash sales
- b** credit sales
- c** the rate at which accounts receivable pay their accounts
- d** cash purchases
- e** credit purchases
- f** normal operating expenses
- g** GST payments.

3.43 Application

From the following information from Maynard Batteries, whose business is registered for GST, prepare a cash budget for the months of September, October and November, and write a letter of advice to P Maynard.

Estimated figures are as follows:

	September \$	October \$	November \$
Cash sales	99 000	126 500	110 000
Credit sales	110 000	121 000	99 000
Cash purchases	55 000	49 500	60 500
Credit purchases	82 500	88 000	99 000
Rent received	1 100	1 100	1 100
Wages	6 800	6 800	7 500
Other operating expenses	11 400	11 400	12 700
Buildings		77 000	77 000

- Accounts receivable regularly settle their accounts as follows.
 - 90 per cent in the month following sale
 - 10 per cent in the second month.
- Accounts payable are paid in the month after purchase.
- Actual credit sales in July and August were \$82 500 and \$88 000, respectively.
- Other actual figures in August were: cash sales \$88 000, cash purchases \$66 000, credit purchases \$55 000, rent received \$1 100, wages \$6 800, other operating expenses \$10 300.
- The other operating expenses have included an amount of \$400 per month for depreciation. Because of the new building program, this expense will increase to \$600 in November.
- The bank balance at 31 August was \$5000 debit.
- The BAS is submitted monthly.

3.44 Conceptual review

Explain the differences between cash flows and revenue/expense flows.

3.45 Application of MYOB

For each of the following, describe how it would be processed in MYOB:

- a The initial setting up of a business.
- b Creating new accounts and editing existing accounts.
- c Creating customer cards, supplier cards and inventory items.
- d Ensuring that the various data entry screens can process cash receipts to the bank account, cash payments to the bank account, sales invoices to trade debtors control, purchase invoices to trade creditors control, and movements of inventory items to inventories control.
- e Entering opening balances into the general ledger.
- f Entering opening accounts receivable balances into the customer subsidiary ledger.
- g Entering opening accounts payable balances into the supplier subsidiary ledger.
- h Entering opening inventory item balances into the inventory subsidiary ledger.
- i Cash receipts from customers that are not accounts receivable.
- j Cash receipts from customers that are accounts receivable.
- k Cash sales under the perpetual inventory system.
- l Cash payments to suppliers that are not accounts payable.
- m Cash payments to suppliers that are accounts payable.
- n Cash purchases under the perpetual inventory system.
- o Performing a bank reconciliation.
- p Credit sales to customers and all the accounts, customers and items affected by an amount.
- q Credit sales returns to customers.
- r Credit purchases from suppliers and all the accounts, suppliers and items affected by an amount.
- s Credit purchases returns from suppliers.
- t Writing off a bad debt.
- u Ensuring the correct GST code is attached to transactions.
- v Generating reports.
- w Recording inventory shortages after an inventory count or stocktake.
- x Recording most balance day adjustments.
- y Recording reversing entries.
- z Rollover at the end of the financial year.
- aa Backing up.
- ab Restoring data if a file is lost or corrupted.

3.46 Financial reporting case – Woolworths Group Ltd

Follow the weblink to the 2018 annual report for Woolworths Group Limited. Answer the following questions relating to Woolworths Group Limited Consolidated.

- a What are the balances of cash at 30 June 2017 and 2018?
- b By how much has the cash increased or decreased, and by what percentage?
- c For Statement of Financial Position purposes, what does cash include? (See Note 1.)
- d What is the amount of cash at 30 June 2018 in the Statement of Cash Flows?
- e What was the amount of cash received from customers for the year ended 30 June 2018?

Extra questions and activities

Refer to NelsonNet for extra questions on Chapter 3. These questions include multiple choice, true/false, and a selection of other questions and activities.



Woolworths
Group Limited
annual report



Extra questions
and activities

4

COMPLETE ACCOUNTING PROCESS FOR A TRADING GST BUSINESS

LEARNING OBJECTIVES

When you are competent in the work covered by this chapter you should be able to:

- explain the complete accounting process
- recognise the interrelationships between the major elements of the accounting process
- prepare accounting records for the process from source documents to trial balance
- prepare accounting records and reports, including all balance day adjustments; fully classified Statement of Profit or Loss and Statement of Financial Position; and reversing entries
- solve accounting problems using reconstructed accounts if necessary.

Complete accounting process for a trading GST business

The complete accounting process

- Source documents
- General journal
- Bank reconciliation
- Ledgers
- Trial balance
- Balance day adjustments

- End of period reports (monthly or yearly)
- Closing entries
- Reversing entries

Cash vs accrual accounting

- Problem-solving and reconstructing accounts

Review and reflect

The complete accounting process

Having completed *Units 1 & 2* and Chapters 1–3 of this book, you should have a good understanding of accounting. In this chapter, we will concentrate on the whole process so you have a clearer conceptual understanding of the various elements. Now that the bank reconciliation has been discussed in Chapter 3, we can look at the complete accounting process as shown in Figure 4.1.

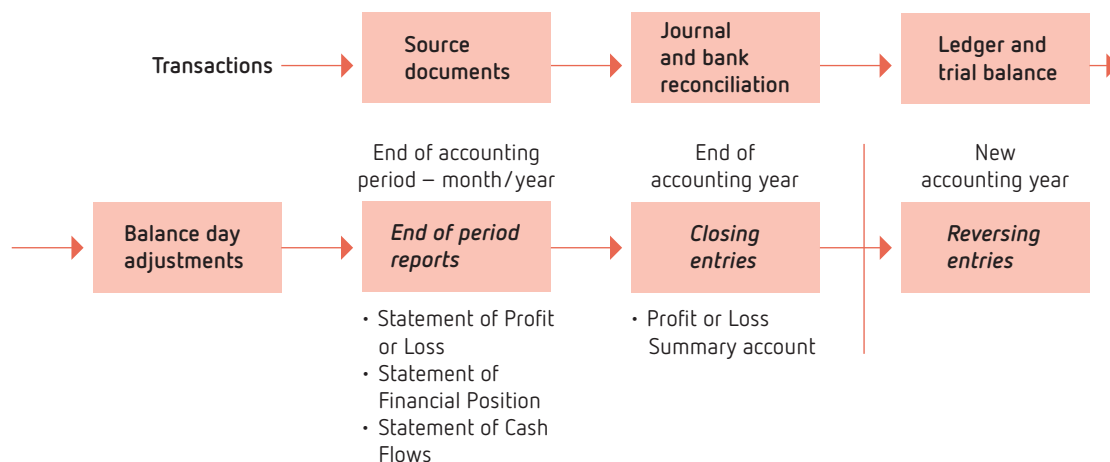


Figure 4.1 The complete accounting process

Each of these elements has been studied previously. We will therefore give you a very brief summary of the concepts and the page numbers where they were previously covered. However, this chapter does not concentrate on these individual elements. Its main purpose is to show you how the whole accounting system fits together. Accounting is a continuous process. You should therefore recognise the interrelationships between these elements in the preparation of a set of accounting records.

Source documents

In Chapter 3 of *Units 1 & 2*, we saw that for every transaction there must be a source document to verify that the transaction took place. Source documents also provide details of a transaction. Table 4.1 summarises the transactions and resultant source documents.

Table 4.1 Source documents used to evidence transactions

Transaction	Source document
Cash receipts	Receipt (copy) Cash register docket (individual sales) Cash register summary (total sales for day) Bank deposit slip (evidences cash and cheques deposited at the bank) Bank statement (electronic funds transfer [EFT] receipts – credit/debit card bank deposits, EFT deposits from accounts receivable, interest received)
Cash payments	Electronic Funds Transfer [EFT] – bank payments Cheque (butt) Bank statement (merchant fees, bank charges, interest paid, prearranged periodic EFT payments and transfers by bank, dishonoured cheques)
Purchases of goods, services and non-current assets on credit (with GST)	Tax invoice (original)

Transaction	Source document
Return of goods previously purchased on credit (with GST)	Adjustment note (original)
Sales of goods, services, and non-current assets on credit (with GST)	Tax invoice (copy)
Return of goods previously sold on credit (with GST)	Adjustment note (copy)
Internal transactions and adjustments	Journal voucher Internal memorandum

Note that under accrual accounting, revenue is recognised for the sale of inventories in a trading business when the goods have been delivered not when the cash is received. For service businesses, the revenue is recognised when the service has been performed not when the cash is received.

General journal

In Chapter 3 of *Units 1 & 2*, we saw that a general journal was introduced into the accounting process to record transactions in chronological (date) order. The general journal represents the debit and credit entries that result from a source document. Table 4.1 outlines the various types of transactions. In accounting packages, each of these general journal entries can be coded, such as CR for cash receipts, CP for cash payments, SJ for credit sales (and sales returns), PJ for credit purchases (and purchases returns) and GJ for all other transactions. This is so that reports can be generated for various categories of general journal transactions that occur.

Bank reconciliation

In chapter 3, it was demonstrated that a bank reconciliation shows that agreement exists between the business's cash records and the bank's records. The bank reconciliation procedure was outlined on page 234. The cash deposits in our records are compared with the credit column of the bank statement and the cash withdrawals/payments in our records are compared with the debit column of the bank statement. After this process, any items in the bank statement that are not in our records are treated as transactions of the business and are entered into the general journal with the bank statement being the source document. These include such things as direct deposits, bank fees and so on. The bank reconciliation statement shows that our bank balance and the bank's balance will be in agreement if the transactions the bank does not know about are reconciled.

Ledgers

In Chapter 2 of *Units 1 & 2*, it was shown that the ledger lists all the accounts of the organisation, with an account being a record where all changes to a particular item are shown. The most common ledger is the general ledger; and if only one ledger is kept, then it is the general ledger. The numbering system in the general ledger is based on the chart of accounts.

However, in accounting packages, several ledgers are used. These are subsidiary ledgers called an Accounts Receivable ledger, an Accounts Payable ledger and an Inventories ledger. The use of a general ledger and subsidiary ledgers was discussed in Chapter 7 of *Units 1 & 2*. The two basic rules were:

- In the general ledger, the double-entry principle is adhered to – debit must always equal credit.
- Whatever is posted to either side of the control account in the general ledger must also be posted in detail to the same side of the subsidiary ledger.

Interesting accounting fact

Did you know?

A Standard Chart of Accounts for non-profit organisations

The Standard Chart of Accounts (SCOA) provides a consistency in accounting categories and terms used within non government organisations (NGOs). In turn, this allows government departments to aggregate and compare financial data for policy development, and administration costs are significantly reduced in both the government and not for profit (NFP) sectors.

The numbering in the SCOA is flexible. It is guided by a number of commercially available accounting packages and all accounts mentioned will not be required by all organisations that use the chart.

Source: 'Standard Chart of Accounts (and data dictionary), Statement of Intent', paragraphs 2 and 3 (sentence 1), Australian Charities and Not-for-Profits Commission

Follow the weblink to view the chart of accounts.



Chart of accounts

Trial balance

A trial balance is used to check the arithmetical accuracy of the ledger. It is an important control as it allows errors to be detected if the debit column does not equal the credit column. You should be aware that there are certain errors that are not disclosed by the trial balance (see page 61 of *Units 1 & 2*). A procedure to locate trial balance errors was also outlined on page 62.

For a comprehensive illustrative example showing the general journal to the ledger to the trial balance, review pages 201–06 of *Units 1 & 2*.

Balance day adjustments

As discussed in Chapter 2 in this book, a business must be able to determine how efficiently it has been operating in the past and what its prospects are for the future. To enable this to be done, the life of the business is divided into arbitrary periods (the accounting period concept), and a profit figure is determined for that period (usually one year).

However, because not all transactions fit exactly into this period, certain adjustments have to be made. Rather than matching revenues with expenses, the emphasis now is on determining conceptually whether an item fits the definition of revenue, whether an item fits the definition of an expense, and then subtracting all expenses from all revenues to obtain a profit figure. As well, the approach is much broader than concentrating on only the revenues and expenses. This broader approach entails recognising that all the relevant assets, liabilities, revenues and expenses for the period are recorded, and ensuring that both the resultant financial statements are accurate. All these adjustments must be duly authorised by an appropriate person/s.

We have discussed some balance day adjustments. They are listed here to show the adjustments necessary at the end of an accounting period (month or year). For further details, refer back to Chapter 9 in *Units 1 & 2* and Chapter 2 in this book. The major balance day adjustments have been discussed on page 130 and are for:

- inventories
- accrued expenses
- accrued revenues
- prepaid expenses
- unearned revenues
- provision for doubtful debts
- accumulated depreciation.

In most situations with these balance day adjustments, it is easier to concentrate first on the asset or the liability being affected. For example, if there is outstanding commission owed to us as a result of certain sales, then money is owed to us, so it is an asset and therefore an Accrued Revenue. If, at the end of the period, money is owed for wages, then we have a liability and therefore an Accrued Expense. Think about what is happening to the asset or liability first. The other side of the double entry, which involves a revenue or an expense, will follow.

End of period reports (monthly or yearly)

Two major end of period reports are the Statement of Profit or Loss and the Statement of Financial Position. These are reports that are prepared outside the ledger. They can be prepared at any time and generally at least monthly, but they must be prepared yearly. These reports are generally fully classified and are vital in allowing the owner to see how the business has been performing. Fully classified Statements of Profit or Loss and the Statements of Financial Position were discussed on pages 112 and 120.

The other major financial report is the Statement of Cash Flows. This shows the various cash flows from operating, investing and financing. As we saw from *Units 1 & 2* on page 119, the Cash at Bank account is one source for this data. In the cash flows from operating activities in the Statement of Cash Flows, all figures are inclusive of GST.¹ This is very logical as the movements of cash for such items are the gross amounts including GST and the statement reflects that. This section appears as:

Cash flows from operating activities

- receipts from customers (inclusive of GST)
- interest received
- payments to suppliers (inclusive of GST)
- payments to employees
- interest paid.

Also included in the operating activities is the GST received or paid on any investing and financial items. When the GST is involved, the preparation of the Statement of Cash Flows becomes more complicated and is beyond the scope of this text. You still have to understand what the Statement of Cash Flows shows, and analyse and interpret it (see Chapter 5). However, you are not required to formally prepare one.

Closing entries

In order to determine whether the firm has made a profit or loss for a particular accounting year, all the revenue and expense accounts must be closed off to the profit-determining account called the Profit or Loss Summary account. The Profit or Loss Summary account is used to calculate the net profit for the organisation.

The entries that close off the revenue and expense accounts at the end of an accounting year are called 'closing entries'. The closing entries perform two functions.

- They close off the individual revenue and expense accounts ready for the next accounting year.
- They transfer the balances of revenue and expense accounts to the Profit or Loss Summary account so that net profit can be determined.

The end result is that all revenue and expense accounts have a zero balance ready to commence the next accounting year.

The Drawings account is also closed off to Capital so that it has a zero balance for the new year. Examples of the closing entry procedure were shown in *Units 1 & 2* on page 316.

¹ Urgent Issues Group (2004), *Interpretation 1031 Accounting for the Goods and Services Tax (GST)*, paragraph 25.

Reversing entries

In the process so far, we have been concentrating on ensuring that the figures presented in the accounts are correct for the present accounting period. However, it is equally important that any figures in the accounts are correct for the new accounting period. Reversing entries are used:

- to ensure that 'correct' amounts for revenues and expenses are taken into account in the period they actually occur
- to cancel the temporary asset and liability accounts created on balance day (i.e. prepayments and accruals).

If, for example, wages of \$2000 are outstanding at the end of the accounting year, under accrual accounting, we would account for that amount by a balance day adjustment. This means that for the current accounting period, wages are \$2000 higher.

However, when the actual payment of \$2000 is made in the next accounting period on, say, 5 July and an entry is made on the debit side of wages, it cannot be counted in that next accounting period. It has already been allocated to the previous accounting period. A reversing entry for \$2000 must be made to decrease the expense account by \$2000 and to cancel the liability for wages by \$2000.

Reversing entries must be done at the beginning of a new financial year. If monthly reporting is being carried out, they will also be done at the beginning of each new month. For a full discussion of reversing entries, see *Units 1 & 2*, page 320.

For a comprehensive illustrative example of AJ's Equipment showing the process from trial balance to fully classified financial statements with adjustments, review pages 150–57.

Real-world application



Basic record keeping requirements

Setting up the right record keeping system for your business will help you work efficiently, meet legal requirements and strengthen customer and staff relationships.

There are certain record keeping requirements for businesses in Queensland, and there may be specific laws and requirements related to your industry sector. It's a good idea to protect yourself by seeking expert advice before setting up a record keeping system for your business.

Laws that apply to your business will determine how long you need to keep records for. If you use an electronic record keeping system, you must also be able to produce a hard copy of a record if the Australian Taxation Office (ATO) or Australian Securities and Investments Commission (ASIC) request it.

For financial reporting, ASIC's Regulatory index – financial reporting breaks reporting requirements down by business type.

Personal financial records must be kept for 5 years, whereas the following records must be kept for 7 years:

- financial records for your company
- most employee records
- all records of fringe benefits and capital gains.

Basic records

To meet basic legal requirements, you must keep the following:

- a cash book or financial accounting program – that records cash receipts and cash payments
- bank accounts – cheque books, deposit books and bank statements

- employment records – hours of work, overtime, remuneration or other benefits, leave, superannuation benefits, termination of employment, type of employment, personal details of workers, employee personal contact and employment details
- occupational training records – for both you and employees to comply with work, health and safety laws including evacuation and emergency training attendance
- sales records – invoice books, receipt books, cash register tapes, credit card documentation, credit notes for goods returned and a record of goods used by the business owner personally
- proof of purchases – cheque butts (larger purchases), petty cash system (smaller cash purchases), receipts, credit card statements, invoices, any other documents relating to purchases including copies of agreements or leases
- work, health and safety (WHS) records – workplace incidents, risk register and management plan, names of key WHS people (e.g. WHS representative, Trained Safety Advisor (TSA), first aid attendant), chemical storage records, first aid incident register, workplace assessments, Material Safety Data Sheets (MSDS).

It is a good idea to keep personal and business records separate, to simplify business reporting and tax returns. For example, using a dedicated business credit and debit card for business expenses will make it easy to separate business and personal expenses.

End of financial year records

To meet legal requirements, maximise your tax return or minimise your tax bill at the end of the financial year, keep the following records:

- details of stock on hand – at the beginning and end of the financial year
- a list of debtors and creditors – for the entire financial year
- capital gains details – records of asset purchase dates and agreements, records of sale, disposal and proceeds received, details of commissions paid or legal expenses, improvements made to an asset and any other records relevant to how you calculate your capital gain or capital loss
- depreciation details – original purchase agreements or tax invoices, a depreciation schedule, the cost of transporting the items to your business (if applicable), installation costs (if applicable)
- expense records – cheque butts, receipts, cash register tapes, copies of statements and invoices, credit card documentation, details of payments by cash and log books
- staff and wages details – full details of wages, employment contracts, tax deducted, fringe benefits, superannuation, sick pay, holiday pay
- basic accounting records – stock records, accounts receivable, accounts payable, other records
- agreements – sales and purchase contracts, loan agreements, rental agreements, lease agreements, franchise agreements, sale and lease back agreements, trading agreements with suppliers, legal documentation
- other documents – deposits with utilities, contracts with telephone companies, your business name registration certificate, capital gains records.

Source: 'Basic record keeping requirements', *Business Queensland*, <https://www.business.qld.gov.au/running-business/finances-cash-flow/records/requirements>, © The State of Queensland 2018.



Business
records

4.1

Explain the complete accounting process.

4.2

- Why are source documents such an important part of the accounting process?
- For each of the categories of major transactions, name the various source documents used.

4.3

The bank statement is an important source document, especially in these days of electronic banking. Explain the types of transactions this source document evidences.

4.4

Why are subsidiary ledgers used in accounting?

4.5

- a What types of errors are not disclosed by a trial balance?
 - b If a trial balance does not balance, what process would you use to solve this?
-

4.6

Describe the accounting theory relevant to the determination of profit for a period.

4.7

For each of the following balance day adjustments, explain why they are done, the relevant accounting entry, and why each component is debited and credited:

- accrued expenses
 - accrued revenues
 - prepaid expenses
 - unearned revenues
 - provision for doubtful debts
 - accumulated depreciation
 - inventory adjustments.
-

4.8

- a Describe the accounting entry for the purchase of insurance for a year. What is the balance day adjustment at the end of each month? Give an example to aid your explanation.
 - b Describe the accounting entry if insurance is paid for monthly out of the bank account. Is any balance day adjustment required?
-

4.9

Describe the nature of inventory adjustments and why these adjustments are required.

4.10

Explain the difference between closing entries and reversing entries.

4.11

Explain the relationship between balance day adjustments and reversing entries.

4.12

Why do some balance day adjustments require reversing entries and others do not?

4.13

The following information is about the business of Bertucci Glamour owned by S Bertucci at 1 November 2020. Enter the transactions into the general journal, post to the T form of general ledger, and prepare a trial balance. Unless otherwise stated, all relevant items attract GST.

- Assets – cash at bank \$24 000; inventories \$41 500; motor vehicle \$13 500; furniture and fittings \$900; equipment \$6000; accounts receivable: Shen Ltd \$66, G Brownlee \$66.
- Liabilities – accounts payable: Ampex Ltd \$56, JJ Traders \$110, Southern Ltd \$38, Nasiri Wholesale \$52.

Transactions for month

Nov 1	Bought goods from Southern Ltd \$5500.
	Cash sales \$660, cost price \$210.
	Paid advertising \$99.
4	Sold goods to G Brownlee \$3300, cost price \$1200.
6	Paid JJ Traders in full settlement of account.
	Purchased goods for cash \$660.
7	G Brownlee returned goods \$110, cost price \$30.
	Received cash from Shen Ltd \$66.
	Sold goods to Shen Ltd \$990, cost price \$420.
12	Bought goods from James & Co \$880.
13	Paid wages \$3100.
17	Paid Southern Ltd \$38.
22	Bought goods from Nasiri Wholesale \$1870.
	Obtained loan from bank \$40 000.
23	Received commission \$220.
25	Bought new motor vehicle from Day Ford for \$33 000 cash.
26	Cash purchases \$440.
27	Returned goods to Nasiri Wholesale \$220.
	Paid Nasiri Wholesale \$52.
	Cash sales \$2420, cost price \$860.
	Paid Ampex Ltd \$25.
	Paid wages \$3100.
29	Paid rent \$2200.
30	Received cash from G Brownlee \$55.
	Cash drawings \$3000.

4.14

The following information, on 1 February 2020, is about the business of Bandright Products, which is owned by E Stanley. Prepare the triple column format of ledger and a trial balance at 28 February 2020. Unless otherwise stated, all relevant items attract GST.

- Assets – land \$350 000; buildings \$250 000; accounts receivable: F Karlsson \$1600, H Fischer \$2800, S Harris \$3000, Mayers Ltd \$200; motor vehicle \$26 000; plant and equipment \$14 000; inventories \$26 000; cash at bank \$24 400.
- Liabilities – accounts payable: R Amstey \$1500, Hoffnung Ltd \$1800, Patterson Bros \$3300; loan from AG Ltd \$10 000.

Transactions for February

Feb 1	Bought goods from Mayers Ltd \$2310. Cash purchases \$660.
2	Sold goods for cash \$880, cost price \$376.
4	F Karlsson paid \$1600. Paid R Amstey \$1500.
7	Owner took \$110 worth of GST inclusive stock for personal use.
9	Charged H Fischer \$5 interest on overdue account.
12	Sold goods on credit to F Karlsson \$1760, cost price \$521.
14	Bought furniture on credit from Mentory Furniture \$891.
17	S Harris paid \$2000. Bought goods on credit from Wilson Pty Ltd \$1540.
18	Paid wages \$1600.
19	Returned damaged goods to Mayers Ltd \$220. Received notice that Patterson Bros had charged us \$10 interest.
21	Sold goods on credit to S Harris \$550, cost price \$238.
23	Cash sales \$242 (GST free), cost price \$87. Sold equipment for \$1100 (carrying amount \$1000).
25	F Karlsson returned damaged goods \$110, cost price \$46. Paid Hoffnung Ltd \$1800.
28	H Fischer paid \$1000.

(Note: If you think the general journal helps your understanding of the process, prepare entries as rough workings when required.)

4.15

On 1 December 2020, Jason Thomascus decided to take over an existing business. He therefore commenced this new business with the following assets and liabilities. Unless otherwise stated, all relevant items attract GST.

Cash	\$240 000
Accounts receivable	
K Jackson	1 000
Inventories	58 000
Motor vehicle	25 000
Accounts payable	
Yule Enterprises	4 000
I Miskén	500

Thomascus called his business Wintergarden Supply Co. He also decided to buy a building and rent any excess space to C Maranta. This payment by Maranta was to be a direct payment into the bank account at the end of each month.

During the month of December, the following transactions occurred.

Dec	2	Obtained finance of \$500 000 for new building from SWT Bank.
	4	Purchased new land and buildings for \$660 000. The land was valued at \$440 000 and the building was valued at \$220 000, bank cheque no 934067.
		Informed the \$1000 debt for K Jackson was K Jacobson's debt (entry required).
		Cash purchases \$2640, payment no 119231.
		Cash sales on credit/debit cards as per cash register summary \$880, cost price \$370.
	5	Bought goods on credit from QFE Industries \$891, tax invoice no 34219.
	7	Returned goods worth \$231 to QFE Industries as they were the wrong type, adjustment note no 126.
		Paid advertising \$462, payment no 203885.
	9	Sold goods on credit to Barker Jones Pty Ltd, worth \$2530, tax invoice no 001, cost price \$1290.
	12	Paid wages \$1240, payment no 304881.
		Cash sales on credit/debit cards as per cash register summary \$5830, cost price \$2890.
	23	Bought goods on credit from Master Sellers \$2343, tax invoice no 38750.
	26	Paid wages \$1240, payment no 451028.
	27	Sold goods on credit to V Thames, \$3630, tax invoice no 002, cost price \$1800.
	28	V Thames returned goods worth \$561, adjustment note no 001, cost price \$228.
	30	Bought goods for cash \$594, payment no 889312.
		Paid Yule Enterprises \$4000, payment no 890338.
	31	Paid drawings \$1800, payment no 912312.
		Cash sales as per cash register summary \$33, cost price \$14.
		Cash sales on credit/debit cards as per cash register summary \$4136, cost price \$1830.

Wintergarden Supply Co Bank Statement				
Date	Particulars	Debit \$	Credit \$	Balance \$
1/12/2020	Deposit		240 000.00	240 000.00 Cr
2/12/2020	Loan Finance		500 000.00	740 000.00 Cr
4/12/2020	934067	660 000.00		80 000.00 Cr
4/12/2020	119231	2 640.00		77 360.00 Cr
4/12/2020	Deposit Cards		880.00	78 240.00 Cr
7/12/2020	203885	462.00		77 778.00 Cr
12/12/2020	304881	1 240.00		76 538.00 Cr
13/12/2020	Deposit Jacobson		1 000.00	77 538.00 Cr
13/12/2020	Deposit Cards		5 830.00	83 368.00 Cr
26/12/2020	451028	1 240.00		82 128.00 Cr
28/12/2020	Deposit Maranta		3 630.00	85 758.00 Cr
30/12/2020	889312	594.00		85 164.00 Cr
30/12/2020	890338	4 000.00		81 164.00 Cr
31/12/2020	Deposits Cards		4 136.00	85 300.00 Cr
31/12/2020	912312	1 800.00		83 500.00 Cr
31/12/2020	Bank Charges	15.00		83 485.00 Cr

You are required to:

- a post to the T form general ledger
- b prepare a bank reconciliation statement
- c prepare a trial balance.

4. 16

On 1 June 2020, Gennie Yuen took over an existing business called Rayford Enterprises. She provides the following items which were in the Statement of Financial Position at the commencement of this new business.

Cash at Bank	\$21 290
Accounts receivable	
Allan Knott	360
Bradfield Industries	673
Jenny Durant	87
Inventories	15 200
Equipment	16 000
Land	236 000
Building	145 900
Accounts payable	
Konners Ltd	349

Transactions for June

Unless otherwise stated, all relevant items attract GST.

June 1	Cash purchases \$2940.30, payment no 173490.
3	Bought goods on credit from Venneer Industries for \$323.40, tax invoice no 9827.
4	Cash sales as per cash register summary \$5040.20, cost price \$2520.00. Received in the post a cheque for \$360 from A Knott. Paid rates \$917.40, payment no 267357.
8	Returned goods worth \$73.70 to Venneer Industries, adjustment note no 1264. Paid wages \$820.00, payment no 6736.
11	Sold goods on credit to Adams Ltd worth \$462.00, tax invoice no 231, cost price \$180.00. Cash sales by credit/debit cards as per cash register summary \$723.80, cost price \$392.21.
16	Cash purchases \$7429.40, payment no 337199.
19	Sold goods on credit to Miller Pty Ltd for \$141.90, tax invoice no 232, cost price \$54.60.
22	Paid wages \$820, cheque no 462001.
25	Bought goods on credit from Able Grange Ltd for \$473, tax invoice no 32766.
30	Paid freight on sales \$232.10, payment no 721999. Paid Venneer Industries \$249.70, payment no 727443. Miller Pty Ltd returned goods worth \$11.00, adjustment note no 121, cost price \$4.60.

The following details were available from the bank.

Rayford Enterprises Bank Statement

Date	Particulars	Debit \$	Credit \$	Balance \$
2020				
June 01	Deposit		21 290.00	21 290.00 Cr
June 04	Deposit		5 400.20	26 690.20 Cr
June 04	Payment 173490	2 940.30		23 749.90 Cr
June 04	Payment 267357	917.40		22 832.50 Cr
June 08	Payment 279166	820.00		22 012.50 Cr
June 11	Deposit Rent Klug		2 431.00	24 443.50 Cr
June 11	Deposit		723.80	25 167.30 Cr
June 16	Payment 337199	7 429.40		17 737.90 Cr
June 21	Deposit Bradfield Ind		673.00	18 410.90 Cr
June 22	Payment 462001	820.00		17 590.90 Cr
June 30	Payment 721000	232.10		17 358.80 Cr
June 30	Bank Fee	12.00		17 346.80 Cr

For the month of June:

- post to the triple column form of general ledger
- prepare a bank reconciliation statement
- prepare a trial balance.

(Note: if you think the general journal helps your understanding of the process, prepare entries as rough workings when required.)

4.17

The following is the trial balance of Wilson BBQs as at 30 June 2020. On the basis of this information, prepare a fully classified Statement of Profit or Loss and Statement of Financial Position.

Wilson BBQs Trial Balance as at 30 June 2020		
Account	Debit \$	Credit \$
S Wilson – Capital		125 420
S Wilson – Drawings	500	
Advertising	750	
Bad and Doubtful Debts	550	
Bank		16 550
Rent Revenue		4 000
Accounts Payable Control		6 400
GST Collected		690
GST Credits Received	150	
Accounts Receivable Control	7 000	
Provision for Doubtful Debts		600
Delivery Vehicle	8 000	
Accumulated Depreciation on Delivery Vehicle		2 400
Delivery Vehicle Expenses	430	
Bank Charges	100	
Commission Revenue		220
Prepaid Insurance	2 800	
Building	52 000	
Interest on Mortgage	5 000	
Telephone	460	
Mortgage on Land		120 000
Office Furniture	4 000	
Accumulated Depreciation on Office Furniture		1 000
Petty Cash	40	
Land	200 000	
Cost of Goods Sold	43 100	
Sales		75 000
Accumulated Depreciation on Building		2 000
Sales Returns	2 000	
Salaries – Sales	16 500	
Rates	900	
Inventories	10 000	
	<u>\$354 280</u>	<u>\$354 280</u>
<i>Adjustments</i>		
• Inventories as per physical stocktake at 30 June 2020 are \$9950.	• Accrued rent revenue is \$150.	
• Depreciate delivery vehicle at 10% on cost.	• Sales salaries owing are \$85.	
• Provision for doubtful debts to be \$500.	• Insurance prepaid is \$40.	
• Depreciate office furniture at 20% reducing balance.	• Depreciation on building at 2.5% of cost.	

4.18

The following trial balance has been extracted from the ledger of Rasick Pet Supplies on 30 June 2020. Using this information, prepare a fully classified Statement of Profit or Loss and Statement of Financial Position.

Rasick Pet Supplies Trial Balance as at 30 June 2020		
Account	Debit \$	Credit \$
Cash in Hand	20	
Drawings	210	
Prepaid Insurance	870	
Cartage Outwards	790	
Advertising	1 730	
Building	20 000	
Land	130 000	
Cost of Goods Sold	124 630	
Cash at Bank	1 640	
Furniture	3 000	
Interest on Mortgage	800	
Sales Returns	2 900	
Bank Charges	370	
Accounts Receivable	8 600	
Inventories	52 700	
Rates	1 900	
Salaries – Sales	27 700	
Shop Equipment	8 500	
Goodwill	14 500	
Shares in XYZ Ltd	10 000	
Bad and Doubtful Debts	80	
Capital – P Rasick		140 840
Accounts Payable		3 000
GST Collected		1 560
GST Credits Received	440	
Dividends Received		180
Loan on Mortgage		10 000
Sales		250 600
Provision for Doubtful Debts		100
Accumulated Depreciation on Building		2 000
Accumulated Depreciation on Furniture		600
Accumulated Depreciation on Shop Equipment		2 500
	<u>\$411 380</u>	<u>\$411 380</u>

Adjustments

- Inventories on hand after physical stocktake on 30 June 2020 are \$52 500.
- Prepaid advertising is \$40.
- Salaries outstanding are \$150.
- Accrued interest on mortgage is \$200.
- Provision for doubtful debts to be 3% of accounts receivable.
- Depreciation on buildings to be 5% straight line.
- Depreciation on furniture to be 20% straight line.
- Depreciation on shop equipment to be 25% reducing balance.
- No insurance is prepaid.

4.19

At 1 June 2020, you are given the following details of the books of Geebung Trading, which is owned by M Caruana.

Cash at bank \$14 210; accounts receivable: Hagan Trading \$2900, B Yui \$1100; inventories \$86 000; shop fittings \$12 000; motor vehicle \$32 000; accounts payable: V Brange \$1200, Kronten Ltd \$3800; loan from bank \$45 000.

Geebung Trading
Bank Reconciliation Statement as at 31 May 2020

		\$	\$
Credit balance as per bank statement			13 600
Add Outstanding deposits			<u>800</u>
			14 400
Less Outstanding payments	4349	<u>190</u>	<u>190</u>
Debit balance as per Cash at Bank account			<u>\$14 210</u>

Transactions for June

Unless otherwise stated, all relevant items attract GST.

June	1	Paid V Brange in full settlement of debt, payment no 111342.
		Paid Kronten Ltd \$3800, payment no 113776.
		Paid 2 months' rent \$4400, payment no 114299.
		Sold goods to T Chenovic \$990, tax invoice no 231, cost price \$402.
	2	Received from Hagan Trading in full settlement of debt, receipt no 459.
	3	Cash sales \$132 as per cash register summary, cost price \$41.
	4	Purchased goods from V Brange \$6160, tax invoice no 983.
		T Chenovic returned \$55, adjustment note no 129, cost price \$17.
	7	Sold goods to Klarkson Pty Ltd \$8580, tax invoice no 232, cost price \$4798.
	14	Paid wages \$1200, payment no 238110.
	15	Paid telephone \$583, payment no 248229.
	16	Purchased goods from L Yinson \$3200 (GST free), tax invoice no 561.
	20	Sold goods to Hagan Trading \$6400 (GST free), tax invoice no 233, cost price \$3080.

21	Returned goods to L Yinson \$120 (GST free), adjustment note no 318.
24	Cash sales \$1023 credit/debit cards as per cash register summary, cost price \$462.
28	Paid wages \$1200, payment no 534999.
	Cash purchases \$330, payment no 582441.
29	Paid for petrol for car \$110, cheque no 4350.
30	Paid for advertising \$242, payment no 787218.
	Purchased goods from Kronten Ltd \$1760, tax invoice no 341.
	Purchased shop fittings on credit from Warten Pty Ltd \$1650, tax invoice no 349.
	Purchased shop fittings for cash \$1100, payment no 867229.
	Owner withdrew \$550 worth of GST inclusive goods.
	Owner withdrew \$500 in cash, cheque no 4351.

Geebung Trading Bank Statement

Date	Particulars	Debit \$	Credit \$	Balance \$
1/06/2020	Balance			13 600.00 Cr
1/06/2020	Deposit		800.00	14 400.00 Cr
1/06/2020	Brange 111342	1 200.00		13 200.00 Cr
1/06/2020	Kronten 113776	3 800.00		9 400.00 Cr
1/06/2020	Hanscome Ltd 114299	4 400.00		5 000.00 Cr
2/06/2020	Deposit		2 900.00	7 900.00 Cr
3/06/2020	Sales		132.00	8 032.00 Cr
10/06/2020	4349	190.00		7 842.00 Cr
14/06/2020	Deposit B Yui		1 100.00	8 942.00 Cr
14/06/2020	Yunst 238110	1 200.00		7 742.00 Cr
14/06/2020	Telstra 248229	583.00		7 159.00 Cr
24/06/2020	Deposit Cards		1 023.00	8 182.00 Cr
28/06/2020	Yunst 534999	1 200.00		6 982.00 Cr
28/06/2020	Smilter 582441	330.00		6 652.00 Cr
30/06/2020	WRC Advert 787218	242.00		6 410.00 Cr
30/06/2020	Zentus 867229	1 100.00		5 310.00 Cr
30/06/2020	Bank Charges	12.00		5 298.00 Cr

Geebung Trading trades six days a week. The owner advises that she concentrates on sales, and an office person is employed to run the office. The financial year ends at 30 June each year.

You are required to prepare the:

- a general journal
- b general ledger in triple column format
- c bank reconciliation statement
- d trial balance before adjustments

- e balance day adjustment entries on office memorandum at June 30 for the following:
 - inventory shortage \$230 after stocktake
 - one month's rent
 - interest on loan, calculated at 12 per cent per annum and one month is due
 - depreciation for one month on motor vehicle at 30 per cent per annum diminishing balance
 - depreciation for one month on shop fittings at 20 per cent per annum straight line
 - commission owed to the business \$2350
 - two days' outstanding wages
 - doubtful debts provision at 2 per cent of the balance of accounts receivable (to the nearest \$)
- f trial balance after adjustments
- g Statement of Profit or Loss and Statement of Financial Position as at 30 June 2020
- h closing entries and post to the ledger. After the closing entries are posted to the ledger, what accounts are left? Are they the same balances as in the Statement of Financial Position?
- i reversing entries on 1 July and post to the ledger. After the reversing entries are posted, what is the effect on the revenue and expense accounts? What happens when the cash is paid/received for these items?

4.20

Hay Markets has provided you with the following information in relation to wages.

Wages up to 1 April, \$702 000

Accrued Wages

31 March	\$23 000
30 April	\$19 000
31 May	\$27 000
30 June	\$10 000

Cash Payments for Wages

During April	\$244 000
During May	\$289 000
During June	\$310 000

- a Prepare the Wages and Accrued Wages accounts using a triple column ledger.
- b Determine the amount for wages to appear in the Statement of Profit or Loss at the end of April, May and June. Assume 30 June is the end of the financial year.
- c What is the amount of Accrued Wages at the end of April, May and June in the Statement of Financial Position?

4.21

For each of the following errors, show the general journal entry required to fix it. If a journal entry cannot fix the error, how can it be fixed?

- a A new Cabby tray top for a single cab utility car costing \$7700 (including GST) was incorrectly recorded as a repair instead of being capitalised.
- b An amount of \$880 (GST free) was recorded for the purchase of goods. However, when the cheque appeared on the bank statement, the amount was for \$870. The amount on the bank statement was correct.
- c A mistake was made in the calculation for depreciation on furniture. The depreciation expense was understated by \$2000.
- d Babson Wholesalers sold us some goods for \$3410 (including GST). They rang to say we had not paid the bill. The tax invoice was found in a drawer and had not been processed.
- e A year's worth of insurance for \$5220 (GST \$420) was purchased on 1 April and was recorded as Insurance expense. At the end of the financial year at 30 June, it was discovered that no adjustments had been made.
- f In the bank statement, a deposit of cash from the cash register was shown as \$1890.20. However, the actual amount deposited was \$1980.20. The bank had made an error.

4.22

Even though we have tried to show how individual parts that make up the accounting process fit into the system, it is sometimes difficult to see how the whole system works. Accounting is a continuous process. Experience has shown that the working of single problems does not necessarily give an understanding of the overall process.

This question shows the accounting process of a business from its infancy to the end of a financial year and into the new financial year. It has most of the transactions that would occur in a normal business. By working through it, you will see how the system works as a whole and revise the work covered so far.

The business of M Teys

Mike Teys decided to commence business as a sole trader on 1 May 2020. The organisation is to be known as Wilmast Trading Co and the following steps were taken to commence the business.

- 1 M Teys invests \$700 000 into the business on 1 May. It consists of:

	\$
Inventories	50 000
Delivery vehicle	9 600
Shop fittings	2 100
Office furniture	1 800
Computer system	16 000
Building	254 800
Land	305 200
The balance is made up of cash.	

- 2 S Thomas lent the business \$75 000 on 1 May 2020. Repayments were to be made quarterly from that date.
- 3 The name was registered under the Business Names Act and the appropriate form was completed. The business was also registered for GST and the ABN is 26 332 513 998.
- 4 M Teys decided to bank with the Bank of Australia. He therefore opened an account in the name of Wilmast Trading Co. All money received was to be deposited intact in this account. All money paid was to be by a cheque drawn on this account or by electronic transfer.
- 5 It was decided to rent some of the building for the time being until that space is required. Rent is calculated on a seven-day basis. When money is received, it will be posted to the Rent Revenue account.
- 6 Appropriate forms were completed to arrange for:
 - the power to be connected
 - the telephone and Internet to be connected through Optas
 - a private mail box at the local post office.
- 7 Two people were employed to help in the running of the business – one for helping with sales and one in the office.
- 8 Arrangements were made for the following insurances:
 - fire on the building and inventories
 - consequential loss to preserve earning capacity in case of fire
 - motor vehicle comprehensive for motor vehicle for delivery of goods sold
 - burglary in case inventories are stolen as a result of breaking and entering
 - public liability in case people are accidentally hurt on the business's premises

- workers' compensation in case employees are injured at work
- cash in transit insurance for money being transported from the business premises to the bank
- plate glass in case glass is damaged.

Accounting records to be kept by the business

- general journal
- general ledger in T form
- bank reconciliation
- trial balance
- payroll details

Fortnightly pay, working five-day weeks

A Flinders (sales)	\$ 960
M Nguyen (office)	<u>\$1 150</u>
	\$2 110

The perpetual inventory system will be used.

In case the business accumulates too much cash, it has been decided that some of this money will be invested in government bonds or in the shares of various companies.

After processing the documents for May, the following information is available.

Wilmast Trading Co Bank Reconciliation Statement as at 31 May 2020			
		\$	\$
Credit balance as per bank statement			66 885.00
Add Outstanding deposits			<u>495.00</u>
			67 380.00
Less Outstanding payments			
	105	3 000.00	
	106	1 520.00	
	108	<u>540.00</u>	<u>5 060.00</u>
Debit balance as per Cash at Bank account			<u><u>\$62 320.00</u></u>

Wilmast Trading Co
Trial Balance as at 31 May 2020

No	Account	Debit \$	Credit \$
1101	Sales		32 798
1101A	Sales Returns	70	
1106	Rent Revenue		6 200
2105	Cost of Goods Sold	10 030	
2301	Advertising	670	
2303	Delivery Vehicle Expenses	292	
2305	Sales Salaries	1 920	
2408	Insurance	500	
2411	Office Salaries	2 300	
2412	Postage	35	
2416	Stationery	152	
2417	Sundry Expenses	23	
2419	Telephone and Internet Expense	220	
2420	Travel Expenses	432	
2502	Bank Charges	14	
2503	Credit/Debit Card Fees	385	
3102	Cash in Hand	150	
3103	Cash at Bank	62 320	
3104.1	V J Heffernan & Co	2 600	
3104.3	Blyth & Green	215	
3104.4	Olsen & O'Mara	365	
3104.7	Tucker Industries	6 490	
3106	Inventories	75 000	
3109	Prepaid Insurance	5 500	
3201	Government Bonds	12 000	
3301	Office Furniture	1 800	
3302	Delivery Vehicles	9 600	
3303	Shop Fittings	2 100	
3304	Computer System	16 000	
3305	Building	254 800	
3306	Land	305 200	
4101.1	Trindle Ltd		6 400
4101.2	Mills Supply Co		19 910
4101.3	Hepworth Ltd		10 075
4102.1	GST Clearing (Payable)	75 200	
4201	Loan from S Thomas		75 000
5101	M Teys – Capital		700 000
5101A	M Teys – Drawings	4 000	
		<u>\$850 383</u>	<u>\$850 383</u>

Required:

- Before processing the transactions for June, prepare a Statement of Profit or Loss and a Statement of Financial Position from the trial balance as at 31 May 2020. As this was just an indicator of how well the business was going, no other balance day adjustments are required to be done.
- Enter the balances into the T form of general ledger.

Transactions for June

Watson Ford Tax Invoice	
No 215	1 June 2020
To: Wilmast Trading Co Delivery Vehicle \$9900*	
* GST included	

Wilmast Trading Co Tax Invoice	
No 007	3 June 2020
To: Blyth & Greene \$7469*	
* GST included	

Wilmast Trading Co Cash Register Summary	
4 June 2020	\$560*
* GST of \$45	

Cost price of goods \$3860

Cost price of goods \$176

Wilmast Trading Co Tax Invoice	
No 008	10 June 2020
To: VJ Heffernan & Co \$7100*	
* GST of \$602	

Bank of Australia Electronic Payment	
Payer Name: Wilmast Trading Co	
Amount: \$220	
Payment Date: 10 June 2020	
Description: Advertising	
Payment No: 116288	

Wilmast Trading Co Cash Register Summary	
11 June 2020	\$3410*
* GST of \$286	

Cost price of goods \$2510

Cost price of goods \$1030

Wilmast Trading Co Tax Invoice	
No 009	11 June 2020
To: A Johnson Ltd \$2860*	
* GST included	

Bank of Australia Electronic Payment	
Payer Name: Wilmast Trading Co	
Amount: \$1150	
Payment Date: 12 June 2020	
Description: Nguyen Wages	
Payment No: 122824	

Mills Supply Co Tax Invoice	
12 June 2020	No 991
Sold To: Wilmast Trading Co	
\$1870*	
* GST included	

Cost price of goods \$1140

Bank of Australia Electronic Payment	
Payer Name: Wilmast Trading Co	
Amount: \$10075	
Payment Date: 12 June 2020	
Description: Hepworth Ltd	
Payment No: 215366	

Bank of Australia Electronic Payment	
Payer Name: Wilmast Trading Co	
Amount: \$6400	
Payment Date: 12 June 2020	
Description: Trindle Ltd	
Payment No: 216295	

Bank of Australia Electronic Payment	
Payer Name: Wilmast Trading Co	
Amount: \$19910	
Payment Date: 12 June 2020	
Description: Mills Supply Co	
Payment No: 217482	

Bank of Australia Electronic Payment	
Payer Name: Wilmast Trading Co	
Amount: \$960	
Payment Date: 12 June 2020	
Description: Flinders Wages	
Payment No: 218479	

Wilmast Trading Co Adjustment Note	
No 003	21 June 2020
To: VJ Heffernan & Co \$330*	
* GST included	

Cost price of goods \$145

Wilmast Trading Co Cash Register Summary	
22 June 2020	\$5962*
Credit/Debit Cards	
* GST included	

Cost price of goods \$2638

**Wilmast Trading Co
Receipt**

No 003 23 June 2020
To: Olsen and O'Mara
For: Declared bankrupt – received 80c
in \$
\$292

Office memorandum

Date 23 June 2020

Particulars: Received 80c in the \$
from Olsen & O'Mara,
Write the rest off as a bad debt.
GST of \$6 is applicable

**Mills Supply Co
Adjustment Note**

No 267 26 June 2020
To: Wilmast Trading Co
\$847*
* GST included

**Bank of Australia
Electronic Payment**

Payer Name: Wilmast Trading Co
Amount: \$960
Payment Date: 26 June 2020
Description: Flinders Wages
Payment No: 398103

**Bank of Australia
Electronic Payment**

Payer Name: Wilmast Trading Co
Amount: \$1150
Payment Date: 26 June 2020
Description: Nguyen Wages
Payment No: 399704

No 112109

Date: 30 June 2020

To: M Teys

For: Drawings

\$1000

No 112110

Date: 30 June 2020

To: APCD Ltd

For: Shares in APCD Ltd

\$9700

Office memorandum

Date: 4 July 2020
Particulars: Stocktake revealed there
were \$63078 worth of
inventories on hand at
30 June 2020.

Office memorandum

Date: 4 July 2020
Particulars: At a meeting with the accountant, the following
was decided for the financial period ended 30 June 2020 (to the
nearest dollar):

- a Depreciation
 - Buildings – 40 years straight line
 - Delivery vehicles – 30 per cent per annum diminishing balance
 - Shop fittings – 5 years straight line
 - Office furniture – 5 years straight line
 - Computer system – 4 years straight line.
- b An adjustment to be made for the half month rent prepaid.
- c An adjustment to be made for the 1.5 months interest on
5 per cent government bonds.
- d An adjustment to be made for four working days salaries
still owing.
- e One more month insurance expense to be recorded.
- f It was estimated that \$150 worth of rates is owing for this period.
- g Provision for doubtful debts to be 2 per cent of accounts
receivable.
- h An adjustment to be made for interest of \$1125 owing on loan
from S Thomas.

Bank of Australia 1001 Queen Street, Brisbane 4000 BSB 143 887 Account No 267198 Wilmastr Trading Co 47 Cave Street Brisbane 4000				
Page No 2				
Date	Particulars	Debit	Credit	Balance
2020		\$	\$	\$
June 01	Balance			66 885.00 Cr
June 01	Auto Withdrawal Electricity Co	154.00		66 731.00 Cr
June 01	Cheque 108	540.00		66 191.00 Cr
June 01	Auto Withdrawal Optas	110.00		66 081.00 Cr
June 01	Deposit		495.00	66 576.00 Cr
June 04	Deposit		560.00	67 136.00 Cr
June 04	Cheque 105	3 000.00		64 136.00 Cr
June 10	Withdrawal Online Trend Adv 116288	220.00		63 916.00 Cr
June 12	Withdrawal Online Flinders 218479	960.00		62 956.00 Cr
June 12	Withdrawal Online Nguyen 122824	1 150.00		61 806.00 Cr
June 12	Deposit		3 410.00	65 216.00 Cr
June 12	Deposit Farnshaw Rent		6 820.00	72 036.00 Cr
June 12	Withdrawal Online Trindle Ltd 216295	6 400.00		65 636.00 Cr
June 12	Withdrawal Online Mills Supply 217482	19 910.00		45 726.00 Cr
June 12	Withdrawal Online Hepworth Ltd 215366	10 075.00		35 651.00 Cr
June 22	Deposit Cards		5 962.00	41 613.00 Cr
June 23	Deposit		292.00	41 905.00 Cr
June 26	Withdrawal Online Flinders 398103	960.00		40 945.00 Cr
June 26	Withdrawal Online Nguyen 399704	1 150.00		39 795.00 Cr
June 26	Deposit Heffernan		2 600.00	42 395.00 Cr
June 27	Deposit Tucker Ind		6 490.00	48 885.00 Cr
June 29	ATO GST		75 200.00	124 085.00 Cr
June 30	Deposit Blyth & Green		215.00	124 300.00 Cr
June 30	Merchant Fees	89.00		124 211.00 Cr
June 30	Bank Fee	14.00		124 197.00 Cr

Required for June

- a Write up the general journal daily from the appropriate documents (exclude the office memoranda dated 4 July 2020).
- b Post the journal to the ledger daily.
- c Prepare the bank reconciliation statement.
- d Post the additional journal entries to the ledger.
- e Prepare the trial balance.
- f Make any other journal entries that are necessary to finalise the accounts (see office memoranda dated 4 July 2020) and post to the ledger.
- g Prepare another trial balance after the accounts have been adjusted at balance day.

- h Prepare a properly classified Statement of Profit or Loss and Statement of Financial Position.
- i Close off all revenue and expense accounts to the profit-determining account (journal entries are required).
- j Make sure all accounts (including revenue and expenses) are ready to start the next financial year.

Questions

- 1 What elements of control are evident in this business?
- 2 Do you think that the advertising campaign was successful?
- 3 Why have some accounts in the ledger not been used? Why was provision made for them in the chart of accounts?
- 4 How would the business conduct a stocktake?
- 5 How are most receipts from debtors and payments to creditors handled?
- 6 After completing the update of the journal and ledger from the bank statement, do you think most businesses would wait until the end of the month for a bank statement and then do this update? Why? How can this be done more efficiently?
- 7 What is the name given to the series of entries that come from the office memoranda dated 4 July 2020? What is (are) the reason(s) for making these entries?
- 8 Why is it that zero balances are left in revenue and expense accounts at the end of the financial year? What effect do reversing entries have on revenue and expense accounts? Why do we have reversing entries?
- 9 Can M Teys take the profits out in cash? What would you do with the profit if you were M Teys?
- 10 Comment on the amount of profit that the business made. Remember that it is only for two months.

Transactions for July

Bank of Australia Electronic Payment

Payer Name: Wilmast Trading Co
Amount: \$9900
Payment Date: 1 July 2020
Description: Watson Ford
Payment No: 520977

Wilmast Trading Co Cash Register Summary

9 July 2020 \$8630*
Credit/Debit Cards
* GST of \$773

Cost price of goods \$3975

Wilmast Trading Co Tax Invoice

No 010 10 July 2020
To: Blyth & Greene \$6853*
* GST included

Cost price of goods \$3592

Bank of Australia Electronic Payment

Payer Name: Wilmast Trading Co
Amount: \$960
Payment Date: 10 July 2020
Description: Flinders Wages
Payment No: 613221

Bank of Australia Electronic Payment

Payer Name: Wilmast Trading Co
Amount: \$1150
Payment Date: 10 July 2020
Description: Nguyen Wages
Payment No: 614390

Mills Supply Co Tax Invoice

14 July 2020 No 1825
Sold To: Wilmast Trading Co
\$3620*
* GST of \$275

Bank of Australia Electronic Payment

Payer Name: Wilmast Trading Co
Amount: \$1023
Payment Date: 21 July 2020
Description: Mills Supply Co
Payment No: 712997

Bank of Australia Electronic Payment

Payer Name: Wilmast Trading Co
Amount: \$960
Payment Date: 24 July 2020
Description: Flinders Wages
Payment No: 772993

Bank of Australia Electronic Payment

Payer Name: Wilmast Trading Co
Amount: \$1150
Payment Date: 24 July 2020
Description: Nguyen Wages
Payment No: 778225

**Mills Supply Co
Adjustment Note**

No 399 24 July 2020
To: Wilmast Trading Co
\$253*
* GST included

**Bank of Australia
Electronic Payment**

Payer Name: Wilmast Trading Co
Amount: \$1961
Payment Date: 25 July 2020
Description: ATO GST
Payment No: 781932

**Wilmast Trading Co
Adjustment Note**

No 004 27 July 2020
To: Blyth & Greene \$781*
* GST included

Cost price of goods \$320

No 112111
Date: 31 July 2020
To: M Teys
For: Drawings
\$3000

**Wilmast Trading Co
Cash Register Summary**

31 July 2020 \$8190*
* GST of \$624

No 112112
Date: 31 July 2020
To: City Council
For: Rates
\$542

No 112113
Date: 31 July 2020
To: S Thomas
For: Interest on loan
\$1700

Cost price of goods \$3200

Bank of Australia 1001 Queen Street, Brisbane 4000 BSB 143 887 Account No 267198 Wilmast Trading Co 47 Cave Street Brisbane 4000 Page No 3				
Date	Particulars	Debit	Credit	Balance
2020		\$	\$	\$
July 01	Balance			124 197.00 Cr
July 01	Auto Withdrawal Electricity Co	154.00		124 043.00 Cr
July 01	Auto Withdrawal Optas	110.00		123 933.00 Cr
July 01	Withdrawal Online Watson Ford 520977	9 900.00		114 033.00 Cr
July 04	Cheque 110	9 700.00		104 333.00 Cr
July 09	Deposit		8 630.00	112 963.00 Cr
July 10	Cheque 109	1 000.00		111 963.00 Cr
July 10	Withdrawal Online Flinders 613221	960.00		111 003.00 Cr
July 10	Withdrawal Online Nguyen 614390	1 150.00		109 853.00 Cr
July 10	Deposit Farnshaw Rent		6 820.00	116 673.00 Cr
July 21	Withdrawal Online Mills Supply 712997	1 023.00		115 650.00 Cr
July 24	Withdrawal Online Flinders 772993	960.00		114 690.00 Cr
July 24	Withdrawal Online Nguyen 778225	1 150.00		113 540.00 Cr
July 25	Deposit Blyth & Green		7 469.00	121 009.00 Cr
July 27	Deposit Heffernan		6 770.00	127 779.00 Cr
July 29	ATO GST	1 961.00		125 818.00 Cr
July 31	Merchant Fees	129.00		125 689.00 Cr
July 31	Bank Fee	14.00		125 675.00 Cr
July 31	Aus Gov (Interest on Bonds to 15 July)		100.00	125 775.00 Cr

Required for July

- a Make sure you have recorded reversing entries from the previous month.
- b Write up the general journal daily from the appropriate documents.
- c Post the journal to the ledger daily.
- d Prepare the bank reconciliation statement.
- e Post the additional journal entries to the ledger.
- f Prepare the trial balance.
- g Look at the Office Wages and Salaries account. Explain the effect of the reversing entry.
- h If financial statements were prepared from this July trial balance, would it portray an accurate picture of the business? Why?

Interesting accounting fact**Did you know?****Which documents to shred and which to keep**

Category	Minimum retention policy
Company documents	
Accounting records detailing company transactions, including supporting documents	7 years
Formal company documents: • Statutory books • Board minutes • Resolutions	Indefinitely
Other business registers	5 years (min.) from date of last entry
Personnel files	
Payroll, wage and other employee records	Min. 7 years from end of financial year
GST records	
Details relating to: • Taxable supply • Importation • Creditable acquisition • Creditable importation	5 years following assessment period
Corporation tax records	
Records of all: • Company assets (e.g. receipts, sales and purchases) • Company liabilities • Income and expenses	5 years (min.) from end of accounting period. Longer if returns are late

Source: Shred-it, 'The Shred-it Guide to Document Retention', p. 2

Shred-it
document
retention policy

Cash vs accrual accounting

In the previous chapter, it was pointed out that in order to run a business, four essential reports are needed:

- 1 The Statement of Profit or Loss to see if the business is making a profit and can therefore survive into the future.
- 2 The Statement of Financial Position to see the stability of the business.
- 3 The Statement of Cash Flows to see where the cash has come from and been spent.

These reports look backwards and show how the business has performed in the last accounting period (month or year). The final report looks forward and tries to predict the future.

- 4 The cash budget shows projected cash inflows and outflows, and the resultant cash position at the end of each month. This ensures we have enough cash to meet our commitments.

Many business owners do not understand the difference between profit and cash, and cannot understand that a business can make a profit of, say, \$100 000 for the year, but be on the brink of insolvency because it has little cash to meet debts. In order to run a business, it is crucial that you understand the difference between cash flows and revenue/expense flows, and this can be shown in the following examples, some of which were briefly discussed in Chapter 3.

- a Suppose our firm has \$100 000 in the bank to begin a business. We buy \$80 000 worth of inventories for cash and within the first month we sell \$40 000 worth of inventories on credit for \$70 000.

Operating expenses for the month are \$10 000. Our Statement of Profit or Loss would appear as follows:

Statement of Profit or Loss for month ended 30 June	
	\$
Sales	70 000
Less Cost of Sales	<u>40 000</u>
Gross profit	30 000
Less Expenses	<u>10 000</u>
Net profit	<u><u>\$20 000</u></u>

Statement of Financial Position as at 30 June 2020			
	\$		\$
Assets		Owner's Equity	
Cash at Bank		Capital	100 000
(100 000 – 80 000 – 10 000)	10 000	Add Net profit	20 000
Accounts Receivable	70 000		
Inventories	<u>40 000</u>		
	<u><u>\$120 000</u></u>		<u><u>\$120 000</u></u>

At this point in time we have made a substantial \$20 000 profit for a month's trading (\$240 000 for a whole year), but we only have \$40 000 worth of inventories to sell for the next month. Because the normal terms of trade are 30 days for accounts receivable, the accounts receivable will not pay us for at least another month. Where are we going to find the cash to buy another \$40 000 worth of inventories? For the next month of operations, we need the \$10 000 to pay for operating expenses, so there is no cash left. We either have to borrow the money or we can approach our suppliers to buy the inventories on credit. Credit may not be granted because the business has no credit or payment history.

This illustration shows you that although we have made a healthy profit, we have no cash left to continue our business. If all the goods were sold for cash, we would have adequate supplies of

cash to buy the necessary inventories. Because we sell on credit, there is a time lag between when a sale is made (in accrual accounting this is when profit is recognised) and when the cash is actually received. It is this time lag that can enable a profit to be made in the accounting sense, but leave the business with no cash.

- b** On the other hand, if we can buy inventories on credit, we are improving our cash position, as we now have 30 days in which to find the cash to make the payment. The purchase is recognised immediately (under accrual accounting), but our cash is not affected for 30 days. As a strategy, firms try to make their accounts receivable pay as quickly as possible. However, they try to stretch the terms of trade for accounts payable as long as possible.
- c** Because of accrual accounting, balance day adjustments ensure that profit is different to cash. For example, prepaid expenses are paid in this accounting period, but their effect is felt in the following accounting period. Cash is required this period, but profit is affected next period.
- d** The repayment of a loan requires cash, but generally only part of this repayment (interest) would have an effect on profit. Cash can therefore be required to make these repayments, but profit is not affected to the same degree.
- e** The purchase of non-current assets requires a large amount of cash, but the profit is only affected by depreciation, which is allocated over the entire life of the asset (this was explained in detail in Chapter 1). For example, if a firm buys plant and equipment for \$30 000 cash and the asset is expected to last five years, \$30 000 cash must be found immediately, but profit will be affected by depreciation of \$6000 for each of the next five years.

Another difference relates to the GST. When goods and services are sold, the money received includes the GST, but all that money does not belong to the business. The business keeps 10/11, which is the net amount, and this is the amount shown as revenue. The business forwards the other 1/11 to the ATO. Likewise, when payments are made to suppliers, the payments for those goods and services include GST. That GST component must be paid for immediately. The business shows 10/11 (the net amount) as an inventory or expense, and the other 1/11, which is a GST credit, will not be received from the ATO until later. Not only is there a timing difference but the Statement of Profit or Loss and the Statement of Financial Position are exclusive of the GST, while cash accounting in the Cash at Bank account (and the Statement of Cash Flows) includes the GST (see page 313).

A business cannot therefore merely look at the profit figure if it is to survive. The timing of when cash is received and paid, and the resultant cash balance, are crucial. This is why all four reports are necessary to run a business.

4.23

Brian Williamson runs a small butcher shop in a local shopping centre. Williamson Meats employs two people and is open seven days a week. Williamson has kept very good records, with typical items including:

- payment of wages for his employees
- payment of rent for his shop plus one other shop
- payment of insurance premiums
- an amount of money invested in a term deposit, with interest received half yearly in September and March
- sub-rental of the other shop to a local baker
- cash received for most sales, but he does sell to some trusted customers on credit
- assets such as shop fittings and fixtures.

Williamson has asked you to prepare his financial statements at the end of the year. He has been keeping very good control over his cash, and because his cash has increased considerably over the year, he is very confident that he has made a profit. However, recently he was chatting with another butcher at the Master Butchers Association. This butcher told him that when accountants prepare financial statements, cash is not the most important thing and that a method called 'accrual accounting' is used.

Williamson approaches you in your capacity as his accountant and asks you to explain accrual accounting. Write a letter to Williamson that explains:

- the difference between cash and accrual accounting
- how balance day adjustments affect the financial statements. To aid your explanation, use examples (with appropriate figures) of the items mentioned above
- that profit is not the difference between the opening and closing cash balance.

Problem-solving and reconstructing accounts

At this point in time, you should have a very good understanding of accounting. Using this understanding, you should be able to solve problems of an accounting nature. One of the keys to solving accounting problems is reconstructing accounts. If you are unsure about something, draw a T account and think through the various items that are generally in the account and on what side. For example, a typical Inventory account looks like this:

Inventories			
Opening Balance	10 000	Purchases Returns	1 500
Purchases of Inventory (Cash or Credit)	80 000		
		Closing Balance	15 000
	<u>\$90 000</u>		<u>\$90 000</u>

What is the missing figure, typically called the 'hole in the account'? This was discussed in *Units 1 & 2* on page 307, and also in Chapter 2 when determining the amount that provides for doubtful debts on page 103. Broadly speaking, if you know four of the five items that make up a typical account, or three out of the four items and so on, you can determine the amount of the outstanding item by drawing a T account and finding the hole.

Conceptually, what is missing in this Inventory account on the credit side? It is cost of goods sold. By completing the account, you can determine the missing account and the missing amount.

Inventories			
Opening Balance	10 000	Purchases Returns	1 500
Purchases of Inventory	80 000	Cost of Goods Sold	73 500
		Closing Balance	15 000
	<u>\$90 000</u>		<u>\$90 000</u>

This gives rise to a common formula for cost of goods sold, which is:

$$\text{Opening inventories} + \text{purchases (net)} - \text{closing inventories.}^2$$

Whenever you are faced with an accounting problem, draw a T account (or as many as you like) and work out what the debits and credits will be and the missing amount/s.

Try the following problems.

- ² There are other expenses relating to cost of goods sold, such as freight inwards, customs duty and so on, which may or may not be relevant. If these are relevant, the full formula will be:

$$\text{Cost of goods sold} = \text{Opening inventories} + \text{Purchases (net)} + \text{Any other expense incurred in getting the goods ready for sale (freight inwards, customs duty)} - \text{Closing inventories.}$$

4.24

S Black commenced a business called River Marine with capital of \$100 000 on 1 July 2019. Black was not a very good recordkeeper. However, from various documents, at 30 June 2020 she was very sure of the following amounts:

Cash at bank \$16 000; inventories \$25 000; equipment \$42 000; plant \$100 000; accounts receivable \$6000; investments \$10 000; accounts payable \$14 000.

During the period, \$20 000 cash was withdrawn. Goods of \$4400 were also withdrawn and S Black paid in \$10 000 as extra capital.

Determine the amount of profit, and prepare a Statement of Financial Position as at 30 June 2020.

Hint: Think of the elements in a typical capital account. If you have a figure for all but one, use the 'hole in the account' technique to work out the missing item.

4.25

The following information is available for Montel Marvels. Ascertain the profit and state the financial position of the business as at 31 December 2020.

	1 January 2020	31 December 2020
	\$	\$
Cash at bank	35 800	10 000
Accounts receivable	58 000	40 000
Inventories	20 000	17 000
Investments	40 000	0
Plant and equipment	140 000	80 000
Accounts payable	15 000	20 000
Loan from bank	30 000	0

Additional information

- New capital introduced during the year, \$30 000.
- Drawings made during the year, \$4000.

4.26

From the following information for Benji's Medical Supplies, which is owned by Benji Malouf, prepare:

- a cash from operating activities report for the fortnight to 14 August 2020, assuming a cash basis of accounting is used
- a profit report for the period to 14 August 2020, assuming an accrual basis of accounting is used
- a financial position report at 14 August 2020.
- There is a crisis emerging. What is it?

Benji has just commenced business and sells only GST-free products, but can claim any applicable GST credits. He wishes to know the profit for the first fortnight of operation.

List of Receipts		
Date	Receipts	Bank
		\$
Aug 4	Sales	3000
6	L Bory	2500
8	Sales	3750
13	Sales	250
10	Sales	2750
12	C Jefferson	1000
14	Sales	5000

List of Payments		
Date	Payments	Bank
		\$
Aug 1	Inventories	8630
5	Telephone	121
8	Wages	2000
8	Sundry expenses	77
10	Rent	2860
12	Inventories	1500

Additional information

- Cost of goods sold is always 40 per cent of sales.
- Wages owing on 14 August 2020, \$1800.
- Rent paid in advance, \$500.
- Credit sales for the period, \$10 000.
- Cash at bank at 1 August 2020, \$5000.

Hint: You should know where these various items are used. Try to do this without re-creating lots of ledger accounts. You are not asked to do the ledger, so any ledger accounts you create are simply workings. Time taken to complete this task is important.

4.27

L Stivas is a sole trader who runs and owns Stivas Industries, suppliers of a food product that is GST free. On the basis of the following information, prepare:

- a profit report for the week to 5 January 2020, assuming the accrual basis of accounting is used
- a short explanation in written form to justify your exclusion of any receipts or payments in the ascertainment of the profit figure.

List of Receipts		
Date	Receipts	Bank
		\$
Jan 1	Capital	20 000
1	Sales	10 000
3	L Gibbons	5 000
4	Sales	15 000
4	Interest	200
5	Rent	4 400
5	B Phelan	7 000

List of Payments		
Date	Payments	Bank
		\$
Jan 1	Inventories	6 475
1	Equipment	11 000
2	Sundry expenses	22
2	Petty cash	100
3	C Sheuen	2 000
3	Inventories	5 900
4	Wages	6 000
4	Drawings	1 000
5	M Frederikson	3 000

Additional information

- Inventories on hand at 5 January 2020, \$23 875.
- Rent received in advance, \$2500.
- Wages owing at 5 January 2020, \$1000.
- Credit sales for the period, \$20 000.
- Purchases of \$25 000 were made on credit.

Hint: You should know where these various items are used. Try to do this without re-creating lots of ledger accounts. You are not asked to do the ledger so any ledger accounts you create are simply workings. Time taken to complete this task is important.

4.28

You are given the following information about the business of Quintar Products, which is owned by Allan Karakas. The business has been run on a part-time basis and is not registered for GST. The following is a summary of the cash transactions for the year.

Summary of Receipts		Summary of Payments	
Balance 1/7/2019	1 658	Motor Vehicle (purchased 1/1/20)	15 000
Loan from Parents	30 000	Cash Purchases	45 900
Cash Sales	62 320	Drawings	28 600
Additional Capital	25 000	Rent	15 000
		Phone	820
		Advertising	303
		Bank Fees	100
		Fuel	480
		Accounts Payable	3 400
		Balance 30/6/2020	9 375
	<u>\$118 978</u>		<u>\$118 978</u>

At 30 June 2020, Karakas ascertains the following:

Inventory on hand \$13 600

Owing to creditors \$1 300

Owing for rent \$1 450

25% straight line depreciation on applicable assets

Karakas mainly operates under cash accounting and can see that his cash balance has improved over the year. He thinks he has done fairly well. However, he wants the records to be prepared under accrual accounting and for this to continue into the future.

You are required to prepare:

- a listing of operational cash receipts and cash payments at 30 June 2020 to show a surplus/deficit under cash accounting
- a Statement of Profit or Loss as at 30 June 2020 under accrual accounting
- a Statement of Financial Position as at 30 June 2020 under accrual accounting
- a brief comment on the results
- an opening entry to begin the new financial year.

4.29

Jenny Mason buys several products from one supplier and sells on credit to various retailers throughout the district. She sometimes employs a friend to help out when needed. At the end of each year, she keeps a record of all her assets and liabilities, and tries to calculate her profit based on cash accounting. However, she wants to become more professional and move to accrual accounting as she does not seem to be making much money. She has registered a business called Funtastics, but is not registered for GST. She supplies the following information.

J Mason			
Statement of Assets and Liabilities at 30 June 2019			
	\$		\$
Assets		Liabilities	
Cash at Bank	3 450	Creditor	6 000
Sundry Debtors	8 800	Capital	27 250
Inventories	9 000		
Motor Vehicle	12 000		
	<u>\$33 250</u>		<u>\$33 250</u>

During the year ended 30 June 2020, the following transactions took place.

	\$		\$
Cash payments		Cash receipts	
Creditor	17 110	Debtors	59 050
Other expenses	4 320		
Wages	3 000		
Purchases of inventories	2 000		
Rent	16 000		
Drawings	19 200		
Other transactions			
Returns to creditor	1 400		
Returns from debtors	800		
Interest charged on customers' overdue accounts	100		
Bad debt written off	1 000		

At 30 June 2020, Mason ascertains the following:

	\$
Inventories	7 000
Creditor	6 480
Motor vehicle	10 000
Accrued wages	50
Prepaid rent	1 500
Sundry debtors	7 470

Prepare the following as at 30 June 2020:

- the cash at bank account. Under cash accounting, what was the net operational surplus/deficit?
- a Statement of Profit or Loss
- a Statement of Financial Position
- an explanation as to why drawings are so high
- the opening entry to begin a new set of records under accrual accounting.

Hint: you will have to reconstruct the debtors, inventories and creditors accounts to obtain the main figures to use in calculating profit.

REVIEW AND REFLECT

This chapter showed the interrelationships that exist between the major elements of the accounting process. These elements included source documents, general journal, bank reconciliation, general ledger, balance day adjustments, reports, closing entries and reversing entries.

The difference between cash and accrual accounting was also revisited. Problem-solving using reconstructed accounts was discussed as well.

4.30 Chapter summary

Complete the following tasks and questions and you will have constructed a brief summary of the work on the complete accounting process for a trading GST business as covered in Chapter 4.

- a Name in correct order the most important components or steps in the accounting process.
- b Name the main categories of transactions and the source documents from which they are prepared.
- c List the steps in the bank reconciliation procedure.
- d Why is the bank reconciliation prepared?
- e Name four important types of ledgers that a business uses.
- f List the errors that are not disclosed by a trial balance.
- g How is the value of inventories (stock) obtained at the end of a period?
- h What is the general journal entry to adjust for an accrued expense?
- i What effect does the general journal entry for accrued revenues have on the ledger?
- j What is the general journal entry to adjust for a prepaid expense?
- k What effect does the general journal entry for unearned revenues have on the ledger?
- l Why are two entries necessary for the adjustment of doubtful debts?
- m What is the aim of adjusting the books for depreciation?
- n What is the purpose of closing entries?
- o What is the purpose of reversing entries?
- p Which balance day adjustments do not require reversing entries?
- q Name four important reports necessary to run a business.
- r Explain the difference between cash and accrual accounting.

4.31 Problem-solving and communication case

Adam Hardcastle runs a retailing business, which sells tiles to the public and to the building trade. It is 15 July and he has just been presented with the Statement of Profit or Loss and the Statement of Financial Position for the previous year ended 30 June. For the last six months, Hardcastle has been having tremendous difficulty meeting his debts and is absolutely amazed when the accountant provides him with a net profit figure of \$100 000. This represents a net profit margin of 10 per cent, which is well above the industry average of 5 per cent. Hardcastle simply cannot understand how this situation could arise, as he has been struggling even to draw wages for himself since there never seems to be enough cash to go around.

Hardcastle decides to write a letter to his accountant asking him to explain the anomaly that he has made a very good net profit, but has very little cash.

As the accountant, you investigate the records and financial statements of Adam Hardcastle and as at 30 June you discover the following:

- The amount of accounts receivable is \$50 000, \$35 000 of which has been outstanding for over three months. Hardcastle explains that in order to make sales he is quite prepared to sell on very long terms of trade, otherwise customers will go elsewhere.
- The amount of inventories is \$75 000, well above the industry average of \$50 000.

- Accounts payable are \$500. This figure is low because his supplier insists that he pay for all goods purchased in cash immediately.
- An insurance premium of \$1300 was paid on 23 June for insurance for the next 12 months.
- Ten thousand dollars has been paid for new shop fittings.
- Fifteen thousand dollars was spent on an advertising campaign to promote sales in the following 12 months.

Specifically referring to the above, write a letter to Adam Hardcastle that explains the apparent anomaly.

4.32 Problem-solving

A small electrical retailer buys a product for \$1200 and marks it up 25 per cent to obtain the selling price. GST is then added when sold. If somebody came into the store and stole one of these products, how many would the retailer have to sell to recover the cost of the goods stolen?

4.33 Problem-solving

A wholesaler marks up their goods by an average of 50 per cent. If an accounts receivable goes bad for \$8800 (including GST), what \$ value of sales would have to take place for the firm to make up for the bad debt?

4.34 Problem-solving and correction entry

You are checking the accounts of an association called CBWQ, which has individual members and institution members (they pay a larger amount for all people in the institution to be a member). The association is registered for GST, and charges GST on all transactions accordingly. In 2020, an individual membership costs \$110 and an institution membership costs \$330.

The association decided to have a conference. The fees for the conference were \$220 for individual members, \$396 for non-members and \$660 for institution members, with five members being allowed to attend at the institution rate.

Three non-members decided to come to the conference and the institution they worked for duly paid the \$1188 for them to attend. This was entered in the records of the association on 30 May 2020.

Three weeks later, the non-members realised that if their institution became a member for \$330 and then paid the conference institution rate of \$660, they should be able to get a refund of \$198 and still attend the conference. They sent an email to the conference organiser and after consulting with the treasurer and committee, the change was agreed to and \$198 was refunded to the institution on 26 June 2020.

Required:

Determine the appropriate entry/ies to correct the amounts in account numbers 1102 Subscriptions – Institution, 1106 Conference – Non-Member, and 1111 Conference – Institution.

Hint: As in any correction, look at what has been recorded, determine what the end result should be, and then determine the correction entry/ies to achieve that result.

Extra questions and activities

Refer to NelsonNet for extra questions on Chapter 4. These questions include multiple choice, true/false, and a selection of other questions and activities.



Extra questions
and activities

5

PERFORMANCE ANALYSIS OF COMPANIES

LEARNING OBJECTIVES

When you are competent in the work covered by this chapter you should be able to:

- describe various types of ratios
- explain the differences between the various forms of business ownership
- explain the different types of ratios
- explain how to use a ratio analysis for both internal and external stakeholders
- explain the relationships between the Statement of Profit or Loss, the Statement of Financial Position and the Statement of Cash Flows
- calculate appropriate ratios, and analyse and interpret financial statements and ratios for a public company
- evaluate the performance of a public company.

Performance analysis of companies

Accounting and legal considerations for companies

- Ownership of companies
- Types of companies
- Formation of companies
- Types of shares
- Shareholders' equity for companies
- Company accounts

Final financial reports for external use

Comparison of internal and external reports

Analysis and interpretation of company reports

- Horizontal analysis
- Vertical analysis
- Ratio analysis
- Trend analysis and benchmarks
- Analysis and interpretation of the Statement of Cash Flows
- Analysis and interpretation of a public company

Review and reflect

Accounting and legal considerations for companies

The accounting for sole traders has previously been discussed. Sole traders and partnerships suffer from three major problems:

- an inability to raise large amounts of capital
- the unlimited liability of owners
- the dissolution of the business (in many cases) on the death or disability of the owners.

To overcome these and other problems, a new type of business organisation was formed. This business organisation is called a **company**.

A company is a type of business organisation, registered under the Corporations Act, which enjoys perpetual succession and whose capital is contributed by a number of persons.

Many companies were established to take advantage of this form of ownership, and it became necessary to protect the rights of persons contributing capital to companies. To do this, legislation was passed by parliament to regulate the conduct of companies. Because of the sizeable impact that companies have on our economy and our own personal daily lives, all companies formed are administered and wound up in accordance with the **Corporations Act**. This Act is uniform throughout Australia and is administered by the Australian Securities and Investments Commission (ASIC), which has branches in each state.

It is important to note that it is *not* possible for a company to bypass the provisions of the Corporations Act by drawing up any agreement. This is in contrast to partnerships, where a partnership agreement can overrule the **Partnership Act** provisions. Once the company is registered with ASIC, it is bound by the provisions of the Corporations Act and becomes a **separate legal entity**. This means that the company now has the same legal rights as a person. It can, using its legal representatives, take legal action through the courts of the land. The company may be taken to court and judgement made for or against it. Any legal action is taken against the company and not against the owners, as is the case with sole traders and partnerships. The company is also able to own property, incur liabilities, enter into contracts and so on.

As with all types of business organisations, the company is considered as a **separate accounting entity**. All transactions to be entered into the company's books must be seen from the company's point of view.

A company's capital is divided into small amounts known as shares. For example, a company's capital of \$500 000 may be divided into 500 000 \$1 shares, 250 000 \$2 shares, or 100 000 \$5 shares and so on.

When a company first issues shares, an invitation is made for shares to be purchased from the company. In large companies, this is called an initial public offering (IPO). Think about these as being brand new shares that have never been issued before. The invitation to buy shares is printed and is called a **prospectus**. If an applicant applies for shares in a company and the application is accepted, the buyer becomes a shareholder of the company. The shareholder is then liable to pay the value of the shares that have been allotted by the company. If the company is a limited company, such liability is limited to the face value of the shares the person has agreed to take. For example, if a shareholder is allotted 50 shares at \$2 each, the liability is limited to \$100 and even if the company in the future becomes unable to pay its debts, the shareholder's liability is limited to the face value of the shares held. If the shareholder paid the \$100 there is no liability for further payments from private funds. This is called **limited liability**. It is important to realise that in this instance the shares are being purchased directly from the company, thus the cash paid for the shares goes directly to the company.

In contrast, a person may become a shareholder of a company by buying shares through a stockbroker. This is the purchase of shares that have been previously issued by the company and are owned by an individual, a partnership or another company. A stockbroker is a person whose business involves buying and selling shares, on commission, through the stock exchange. The stockbroker is registered with the stock exchange, which is a centralised place of business where the shares of listed public companies are bought

and sold. In this particular instance, because the purchaser is buying the shares from another person (or entity) who owns the shares, the cash will flow from the purchaser to the seller. The stockbroker will take a commission for handling the transaction, but no cash will flow to the company.

When previously issued shares are bought and sold through the stock exchange, no accounting entries are made by the company. Company records are updated only to show the change of ownership.

Shares may also be transferred from one shareholder to another on completion of a written transfer form. This transfer does not need to go through a stockbroker or the exchange, and does not need to have the approval of the company. However, the company must be notified of a change in share ownership.

The company must keep a record of shares issued in a Register of Members. The Corporations Act states in what detail it is to be kept and these details include:

- names and addresses of individual shareholders
- shares held and their certificate numbers (if any)
- when shares were allotted and the number allotted
- when shares were acquired, and if and when shares were disposed of
- the amount unpaid on the shares to date.

This register is open for public inspection.

It is important to note that the company's accounting records document only the issue of new shares. Subsequent change of share ownership through sale of shares on the stock exchange or by private sale does not affect the capital records in the general ledger. The share ownership change is recorded through the Register of Members.

Ownership of companies

Rights of shareholders

Shareholders acquire certain rights, including the right to:

- attend the annual general meeting
- vote on matters requiring decisions at the annual general meeting, such as voting for directors and accepting the directors' report
- receive dividends on shares held when a dividend is available for distribution
- receive repayment of capital only after all other liabilities have been settled in the case of the winding up of the company.

Annual general meeting

The annual general meeting is held after the end of the financial year. It is held when the company has been able to prepare final reports to be distributed – as required by the Corporations Act – to all shareholders. This date can be up to five months after the end of the financial year.

At the annual general meeting, the directors of the company report to the shareholders present on the company's progress and future. They also report the proposed dividend for the past year – a matter of particular importance to shareholders. The shareholders must vote on whether or not to accept the proposed dividend. They may also have to vote to elect directors if vacancies have occurred, or on other matters requiring their consent.

Usually, only a small number of shareholders are present at such meetings, although it is possible for shareholders to give another person the right to vote on their behalf. This is called a **proxy vote**.

Types of companies

Companies are artificial entities created under the Corporations Act. A company is a separate legal entity distinct from its members and is therefore not affected by the death or disability of its members. However, the word 'company' in a business name does not necessarily indicate that the firm is a company. For

example, James & Co is a sole trader or a partnership as its title does not include abbreviations (discussed below) that indicate it is a company. The minimum number of shareholders in a company is one.

There are two main types of companies: proprietary and public.

Proprietary companies

These private companies usually have their liability limited by shares. They are often formed by families or by partnerships that desire the protection of limited liability. The Corporations Act places certain limitations on this type of company. These are:

- The number of shareholders that are not employees is limited to a maximum of 50.
- A restriction is placed on the right to transfer shares.
- A private company cannot invite the public to subscribe to shares or borrow money from the public by issuing debentures or depositing money with it.

Private limited companies must have the words 'Proprietary Limited' or 'Pty Ltd' in their name.

Public companies

A company is called a public company because it can advertise to the public to buy its shares or lend it money. Public companies can be limited by shares, limited by guarantee, unlimited with share capital, or no-liability companies:

- **Limited by shares** These may be offered to the public and are usually transferable on the stock exchange. This is the most common type of company in Australia. The company will have 'Limited' or 'Ltd' in its name.
- **Limited by guarantee** In these companies, the shareholders' liability is limited to the amount they have guaranteed to pay the company on demand. Clubs and non-profit organisations are commonly established as this type of company. This type of company can also be set up to organise a community event where the proceeds are expected to cover expenses. Should proceeds not cover expenses, the company calls on shareholders to pay up to the amount they guaranteed to pay.
- **Unlimited liability companies** The liability of a shareholder in this type of company is not limited to the value outstanding on shares held. The private assets of the shareholder could be called on to settle company debts. Unlimited companies are very unusual.
- **No-liability companies** In the Corporations Act, a no-liability company is a company in which the acceptance of a share does not constitute a contract to pay a call. The shareholder is not obliged to pay any outstanding amounts on the shares that may be called up by the company. Should the shareholder not pay the amount called up, the company will take back the shares. The shareholder then forfeits the shares. Mining companies can only be no-liability companies. The high risks involved in this industry make this form of ownership very attractive. A no-liability company must indicate this by having the words 'No-Liability' or its abbreviation 'NL' in its name.

For a public company, the usual method of borrowing money is to issue debentures. A debenture is a document issued by the company as evidence that it has borrowed the sum stated on the document for a specified period at a certain rate of interest. It is important to note that a debenture-holder is a creditor of the company, not an owner.

Formation of companies

Before a company can be registered by ASIC, certain legal formalities must be carried out. Since the formation of companies is more complex than the formation of a sole trader or partnership, government fees and legal costs are usually higher. It is advisable to employ a person such as a solicitor, who has expertise in this field, to draw up the documentation necessary to set up a company.

The Corporations Act is quite specific in what is required for company registration. To register a company, a person must lodge an application with ASIC. The application must set out many details

(e.g. the name to be used), including the type of company. ASIC will then give the company an Australian Company Number (ACN) and register it and issue a **Certificate of Registration** that sets out the company's name, its ACN, and the date and place of registration. An ACN must be on every public document that is signed, issued or published by the company. A public document means a business letter, statement of account, invoice, receipt, order for goods or services, and any official notice or publication signed by or on behalf of the company. It must also appear on every negotiable instrument and be on the seals of the company.

In general terms, a company's internal management may be governed by:

- provisions of the Corporations Act that set out replaceable rules
- a constitution, or
- a combination of both.

If a company does not wish to adopt the replaceable rules, it must have a constitution. For companies formed prior to 1 July 1998, the replaceable rules will only apply if there is no Memorandum of Association or Articles of Association.

From the date of receipt of a Certificate of Registration, a private company may commence business. However, a public company must issue shares before it can commence business. In order to raise capital, the company must issue a prospectus, a copy of which must be lodged and registered with ASIC. The prospectus must conform to the provisions of the Corporations Act. It usually contains an application form, which the prospective shareholder completes and returns with the necessary payment. The terms of issue of the shares – for example, whether a company requires payment in full on application or in instalments – are set out in the prospectus.

Persons desiring to set up a company and not wishing to undertake the registering procedure themselves may purchase a **shelf company**. Some firms specialise in selling registered companies. They complete all the documentation and register the company with ASIC. On payment of a fee, the purchasers become the owners of that company. Details of the company, such as name and share capital, can be changed (as allowed by law) to suit the needs of the purchasers. The documentation is likened to a book on a shelf. The money is paid and the book (documentation of the company) becomes the property of the buyer. Hence the name 'shelf company'.

Before examining the financial arrangements of companies, consideration should be given to the advantages and disadvantages of a company as a form of business enterprise.

Advantages of companies

The many advantages of companies as a form of business ownership include:

- the ability to raise greater amounts of capital for large-scale business operations
- the ability to gain limited liability for members through the separate legal entity concept
- the easy marketability of shares that, for public companies, is achieved through the stock exchange
- the larger resources at their disposal that enable companies to employ the best qualified staff
- shareholders (the owners) do not need to take an active part in the management of the company and can leave this to the professional managers employed by the company
- the company has perpetual succession and is unaffected by changes in shareholders as it is a separate legal entity. If shares are sold or a shareholder dies, the company continues to exist
- tax saving advantages in a company structure, such as whether the company tax rate is below relevant individual tax rates.

Disadvantages of companies

The disadvantages of this form of business organisation include the following:

- Some people feel that the regulations placed on companies by the Corporations Act are too severe and adversely affect their efficiency. They feel that too much time and resources are spent on complying with government regulations.

- Some people feel that the separation of shareholders from the running of the company is a disadvantage rather than an advantage. This would be the case only where management abuses their trust and uses the company to benefit its own ends and not the shareholders' interests, and where shareholders find it difficult to rectify the situation.

It is therefore desirable to compare limited companies and sole traders, as in Table 5.1, in the following areas:

Table 5.1 Comparison of limited companies and sole traders

Area	Limited company	Sole trader
1 Ownership	One or more	Only one
2 Capital	Divided into shares	Contributed by owner
3 Liability for firm's debts	Limited to the amount outstanding on the shares	Unlimited
4 Separate legal entity	Yes	No
5 Separate accounting entity	Yes	Yes
6 Management	Appointed by shareholders	The sole trader
7 Perpetual succession	Yes	No
8 Transferability of ownership	Shareholders do not need permission of company to sell shares	At discretion of sole trader

Types of shares

Basically, two types of shares may be issued by a company: ordinary shares and preference shares.

Ordinary shares

Ordinary shares are the most common type of share issued to obtain capital. The dividend paid on ordinary shares depends on the amount of profit made by the company and the directors' policy regarding the return of profits to shareholders. Ordinary shareholders have a right to vote at shareholders' meetings, but if the company is wound up they will be the last to receive repayment for amounts contributed.

Preference shares

As indicated by their name, preference shares are always given preference over ordinary shares on payment of a dividend. However, they may also be given preference over ordinary shares on return of capital on liquidation. In addition, preference shareholders do not normally have voting rights at annual general meetings.

Preference shares usually are not able to be redeemed by the company (i.e. bought back after a specified time). However, there are also **redeemable preference shares** that may be redeemed by the company at a fixed date in the future, or on call.

In addition, preference shares may have different conditions attached to their dividend. Usually they have a fixed dividend rate. For example, **8% preference shares** entitle shareholders to a dividend of 8 per cent. However, there are several variations on dividend payments:

- **Cumulative preference shares** – if insufficient profits are made in any one year to pay the stated dividend rate, any outstanding dividend must be paid in future years before ordinary shareholders can receive dividends.
- **Non-cumulative preference shares** – the dividend on these shares does not accumulate and, if profits are not large enough to cover the stated rate of dividend in any one year, the dividend is lost.
- **Participating preference shares** – provision may be made for shares of this type to be granted higher dividends than their fixed rate to allow them to be paid the same dividend as ordinary shares if the ordinary shareholders are to receive a higher rate of dividend.

5.1

If you were registering a business as a limited company, what are the advantages and disadvantages of this type of business organisation? Write a brief report for a client who is considering setting up a business as a company.

5.2

If you had to advise a person on whether to commence business as a sole trader or private company, what would be the important considerations?

5.3

Describe what you understand by the following terms:

- a company
- b company limited by shares
- c company limited by guarantee
- d no-liability company.

5.4

Explain the basic differences between public and private companies.

5.5

Visit ASIC's website by following the weblink and answer the following questions:

- a How can you contact ASIC?
- b Does the website contain details of regulatory resources? If so, write a short paragraph about some of the important ones.
- c Does the website contain any special warnings to consumers? If so, write a short paragraph about each one, and describe why you think ASIC may have issued this warning.



ASIC

Shareholders' equity for companies

Accounting for companies introduces many new accounts. The main changes to the normal accounting arrangements come in the owner's equity section of the Statement of Financial Position.

A sole trader usually has one Capital account, and all increases and decreases such as profit and drawings are recorded in this account. In contrast, the equity section of a company usually comprises three major categories:

- share capital/contributed equity
- reserves
- retained earnings.

Share capital/contributed equity This is the term used to describe the amounts that shareholders have paid to the company for the purchase of shares. It contains only amounts given to the company and thus for the issue of shares in the first instance. Subsequent sales of shares occur between individuals (usually on the stock exchange) and so the exchange of cash is between those individuals and does not enter the company's records.

Reserves This is the second category of shareholders' equity used in practice. This concept usually describes funds retained in the organisation and not paid out as dividends. These funds may have arisen because of 'capital' transactions (e.g. the revaluation of assets) or because profits made in the normal course of operations have not been paid out as dividends. It is important to realise that these reserves do not mean that an amount of cash is available to the value of the reserve. Cash would only be available if money were deliberately deposited in a bank account. The most common reserves by large companies are

a Hedge reserve, Foreign Currency Translation reserve, Share-Based Remuneration reserve and Asset Revaluation reserve/surplus. All of these are outside the scope of this text. We will simply use the term 'Reserve/s' to indicate these types of reserves in the Statement of Financial Position.

Retained earnings These are the amounts of after-tax profits earned by the company and retained in the business. These amounts can be carried over at the end of the year, and hence they may accumulate from year to year. If the company is making losses and not profits, and these amounts are carried over to future years, then the term more appropriate to describe this is **accumulated or retained losses**. This amount would be deducted from the total shareholders' equity.

Thus, the shareholders' equity section of the Statement of Financial Position would appear as follows:

Statement of Financial Position as at 30 June	
	\$
Shareholders' Equity	
Share Capital (80 000 shares paid to \$1 per share)	80 000
Reserves	40 000
Retained Earnings	50 000
Total Shareholders' Equity	<u>\$170 000</u>

5.6

Explain the terms 'share capital', 'reserves' and 'retained earnings'.

5.7

Classify each of the following accounts as an asset, liability, shareholders' equity, revenue or expense item:

- a retained earnings
- b accumulated losses
- c share capital
- d reserves.

Company accounts

Additional company expenses

There are additional expenses that companies have that do not appear in the accounts of other types of business organisations.

Directors' fees

Directors' fees is an expense incurred as a result of payment to directors who form part of the management team. Directors' fees are transferred to the Profit or Loss Summary account at the end of a financial year. They are classified as an administrative expense in the Statement of Profit or Loss.

Audit fees

The Corporations Act requires a public company to have its books audited by an independent group of registered accountants in order to verify the figures given in the final reports.¹ Audit fees are an expense to

¹ An external audit aims to verify the figures presented in the final reports and communicate this verification to the shareholders. An external audit is conducted by an outside group of qualified auditors so that complete independence is obtained. Many large firms also employ internal auditors to make constant checks on the accounting system and its operations. These auditors are employees of the firm, and as such do not give an independent opinion on the accounts. They report to management and not to shareholders.

the company, and are transferred to the Profit or Loss Summary account and treated as an administrative expense in the final reports.

Interest on debentures

Debentures are liabilities to a company as they represent amounts borrowed from outside stakeholders. Debentures are usually labelled, such as 6 per cent Debentures, which indicates the rate of interest to be paid on the debentures. Interest on debentures is paid according to the terms of the debenture, and the Interest on Debentures account is transferred to the Profit or Loss Summary account at the end of the financial year. In the final reports, it is treated as a finance expense.

Income tax²

A company, being a separate legal entity, is required to pay tax on its profits. This is called Income Tax or Company Tax Expense and will appear in the Profit or Loss Summary account. At the end of the financial year, the company must make an estimate of the amount of tax owing on the current year's profits. Although the actual payment differs depending on the amount of tax, the basic entry that is made by the company at the end of the financial year is:

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
June 30	Income Tax Expense Income Tax Payable (Income tax for current financial year)		47 500	47 500

Income tax is an expense and appears in the Statement of Profit or Loss. Income Tax Payable is a current liability and appears in the Statement of Financial Position. When the amount of tax is paid, the following entry is made:

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
Sept 30	Income Tax Payable Cash at Bank (Income tax paid in cash)		47 500	47 500

This basic entry is made irrespective of whether the cash payments are made in one lump sum or in instalments. The cash is reduced and hence the Cash at Bank account is credited, and the liability account Income Tax Payable is reduced and hence debited.

Dividends

Dividends are usually calculated on the **paid-up capital of the company**. They can be paid in the middle of a year (an interim dividend), or at the end of the year (a final dividend). In both cases the procedure

² The method used to record income tax in this text is called the tax payable method, where the income tax expense is based on taxable income. An alternative method of recording is the tax effect accounting method. This method is beyond the scope of this text.

is the same. The directors need to decide on the amount of dividend to be paid. When the dividend is declared, a liability is raised in the accounts. When the dividend is subsequently paid, usually after a period of a few months, the liability is extinguished and cash is paid out.

For example, if the paid-up capital of the company consists of 1.5 million \$1 fully paid shares and the directors decide to declare a dividend of 10 per cent, the amount of the liability set aside for the dividend would equal:

$$\$150\,000 = \left(\frac{10}{100} \times \$1\,500\,000 \text{ paid-up capital}\right)$$

The general journal entry to create the liability, assuming this is a final dividend, would be:

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
June 30	Final Dividend Final Dividend Payable (Declaration of final dividend of 10%)		150 000	150 000

The Final Dividend account is a profit-distributing account and is closed off to the Retained Earnings account. This in effect will reduce the amount of profits that will be retained in the company. The Final Dividends Payable account represents a current liability and appears in the Statement of Financial Position, because this dividend will not be paid until after the end of the financial year. You should note that an Interim Dividend Payable account would not appear in the Statement of Financial Position, because presumably this interim dividend would be paid before the end of the financial year.

The liability for the final dividend is extinguished when the final dividend is paid in cash after the end of the financial year. When this occurs, the following entry is made:

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
Aug 10	Final Dividend Payable Cash at Bank (Payment of final dividend)		150 000	150 000

Reserves

It is possible to retain part of the profits within the company. It may be necessary to retain part of the profits for future expansion so that smaller amounts of outside funds need to be borrowed in the future. The profits set aside are put into Reserve accounts. However, these funds do not necessarily represent cash. As previously mentioned, all of these reserves (Hedge reserve, Foreign Currency Translation reserve, Share-Based Remuneration reserve and Asset Revaluation reserve/surplus) are outside the scope of this text. We will simply use the term 'Reserve/s' to indicate these types of reserves in the Statement of Financial Position. The credit balance of the Retained Earnings account itself also represents a reserve.

Reserves, being part of undistributed profits, are part of shareholders' equity and are shown as separate amounts in that section of the Statement of Financial Position headed 'Reserves'.

To set aside undistributed profits to a reserve, it is necessary to make a general journal entry as follows:

General Journal				
Date	Particulars	Ref	Dr \$	Cr \$
June 30	Retained Earnings Reserve (Amounts transferred to Reserve)		XXX	XXX

This entry increases the equity account Reserve because it is credited. It also reduces the Retained Earnings account because it is debited.

Retained earnings

This chapter has concentrated on the changes to the accounting process that would be necessary for the accounts of a company. It is now time to bring this whole process together. On completion of the trial balance and the recording of any balance day adjustments necessary, the final accounts are prepared at the end of the financial year. The revenues and expenses that have been considered in previous chapters, together with those considered in this chapter (directors' fees, audit fees, income tax and so on), are transferred to the Profit or Loss Summary accounts by means of closing entries. After the Profit or Loss Summary account has been completed, the after-tax profit (or loss) for the period is known. This amount is transferred to the Retained Earnings account, where the final distributions to owners take place, and the figure for retained earnings to be carried forward to next year is known. Because of the more complicated distribution of profits in a company, it is necessary to consider in more detail the Retained Earnings account.

The Retained Earnings account is used for the distribution of profits. The following will appear in the account:

Balance

The opening balance represents the undistributed profits from previous periods and it could be either a debit or credit balance. It is normally a credit balance representing past profits retained in the business.

Net profit or loss after tax

The net profit or loss, after allowing for income tax, is transferred to this account. It would appear on the credit side if it were a net profit and on the debit side if it were a net loss.

This profit, along with any part of the opening balance, may be distributed as dividends or reserves.

Payment of dividends (interim and final)

These amounts represent the distribution of funds to shareholders and thus will appear on the debit side of the Retained Earnings account. Both of these entries appear in the account through a closing entry. In effect, they both represent a reduction of the amount left in retained earnings.

Transfer to reserves

Funds may also be transferred from the Retained Earnings account to various reserve accounts. If this occurs, then an entry is made on the debit side of the Retained Earnings account as this reduces the amount left in the account.

An example of a Retained Earnings account appears below.

Dr				Ledger				Cr
Date	Particulars	Ref	Amount \$	Date	Particulars	Ref	Amount \$	
Retained Earnings								
2020				2019				
June 30	Interim Dividend		8 000	July 1	Balance		10 000	*
30	Final Dividend		9 000	2020				
30	Reserves		5 000	June 30	Net profit (after tax)		80 000	
30	Balance c/d		68 000					
			<u>\$90 000</u>				<u>\$90 000</u>	
				July 1	Balance b/d		68 000	

* This could be a debit or credit opening balance, although it is usually a credit.

Any balance remaining in the Retained Earnings account is included in the shareholders' equity section of the Statement of Financial Position. The other items in this section are the amount of paid-up capital and the amounts for any Reserve accounts.

Assuming that the net profit before tax was \$110 000 and the income tax expense for the period was \$30 000, an extract from the Statement of Profit or Loss would appear as follows:

Statement of Profit or Loss (extract) for year ended 30 June 2020		
		\$
Net profit before income tax		110 000
Income tax expense		30 000
Net profit after income tax		<u>\$80 000</u>

A statement showing the details of the retained earnings is called a Statement of Changes in Equity and would appear as follows:

Statement of Changes in Equity for year ended 30 June 2020			
			\$
Retained earnings at 1 July 2019			10 000
Add Net profit after income tax			<u>80 000</u>
			90 000
Less Interim dividend paid	8 000		
Final dividend declared	9 000		
Transfer to reserve	<u>5 000</u>		<u>22 000</u>
Retained earnings at 30 June 2020			<u>\$68 000</u>

This can be a separate statement or appear at the bottom of the Statement of Profit or Loss.

The differences between accounting for a sole trader and a company are summarised in Table 5.2.

Table 5.2 Accounting differences between a sole trader and a company

Feature	Sole trader	Company
Legal entity	Business is not a separate legal entity; the owners are responsible for all debts	Company is a separate legal entity
Liabilities		Can issue debt in their own name (debentures or unsecured loans)
Expenses		May have additional expenses; for example, audit fees, directors' fees, interest on debentures. Legal and administrative costs of forming the company are also treated as an expense ³
Components of equity	Capital account	Share capital/Contributed equity, Reserves, Retained earnings accounts
Distributions to owners	Drawings (Owners cannot take a wage. All payments to owners are distribution of profits)	Dividends
Payment of tax	Individuals pay tax in their own name. Does not appear as an expense in the business's records	Company pays tax. Appears as an income tax expense in the company's records

5.8

Differentiate between the way a sole trader is taxed and the way a company is taxed.

5.9

Detail where you would expect the following items to appear in the internal accounts and reports of a company:

- a directors' fees
- b audit fees
- c interest on debentures
- d income tax.

5.10

Answer the following in relation to the payment of dividends by a company:

- a On what basis are dividends calculated?
- b Are dividends always paid on preference shares?
- c Does a Final Dividend Payable account appear in the Statement of Financial Position at the end of every financial year?
- d What is the difference between an interim dividend and a final dividend?

5.11

The following information was extracted from the books of Sherbert Co Ltd on 30 June 2020.

Issued capital

- 10 000 Ordinary shares paid to \$1
- 10 000 Ordinary shares paid to 50c
- 5 000 14% preference shares paid to \$2

³ See paragraph 69 of AASB, 138 Intangible Assets.

On 1 January 2020, the company paid an interim dividend of 8 per cent on the ordinary shares. On 30 June 2020, the directors recommended a final dividend of 8 per cent on the ordinary shares, and the preference share dividend was as stipulated.

On the basis of this information:

- a show the journal entries necessary to record the dividends
- b prepare the relevant ledger accounts
- c show how the above entries affect the Retained Earnings account.

5.12

Prepare an extract from the Statement of Profit or Loss and the Statement of Changes in Equity if you are given the following information for the year ended 30 June 2020.

	\$
Net profit (before tax)	32 000
Estimated tax liability for the year	10 000
Balance of retained earnings 1/7/19	3 000
Transfer to general reserve	1 500
Payment of interim dividend 31/1/20	5 000
Final dividend declared 30/6/20	10 000

5.13

On 30 June 2020, the issued capital of Jarvis Co Ltd consisted of 20 000 fully paid \$1 ordinary shares, 10 000 10 per cent fully paid \$2 preference shares and 15 000 10 per cent preference shares paid to 75c. At 30 June 2020, the estimated tax liability was \$40 000. The directors recommended the payment of the preference dividend and an ordinary dividend of 15 per cent.

On the basis of this information:

- a show the journal entries to record this information
- b show the Profit or Loss Summary and Retained Earnings accounts.

5.14

On 30 June 2020, the issued capital of Johnson Co Ltd consisted of 30 000 fully paid \$1 ordinary shares, 10 000 ordinary shares paid to 75c, and 20 000 fully paid \$2 14 per cent preference shares.

An interim dividend of 7 per cent was paid on 28 December 2019 on both the preference and ordinary shares. The directors recommend a final dividend of 9 per cent on ordinary and 7 per cent on preference shares.

The estimated liability for tax on this year's profits is \$32 000. The before-tax profits are \$107 000.

The directors propose to transfer \$12 000 to reserve.

The retained profits at 1 July 2019 was \$0.

On the basis of this information, prepare an extract from the Statement of Profit or Loss and the Statement of Changes in Equity.

Final financial reports for external use

The full financial reports, often called the external reports, produced by companies must include the following three statements:

- Statement of Profit or Loss
- Statement of Financial Position
- Statement of Cash Flows.

These three main reports are interrelated, and it is important that these interrelationships are understood when analysing the results of a business for a period:

- The profit after tax figure from the Statement of Profit or Loss appears in the Statement of Financial Position as an increase to the equity figure for Retained Earnings.
- The revenues and expenses from the Statement of Profit or Loss form the basis for the operating section of the Statement of Cash Flows, but are not exactly the same because the Statement of Cash Flows shows flows of cash only. Profit is not cash. A company can make big profits, but have little cash to pay its debts. This is why there is a separate statement devoted to the flows of cash.
- The final figure in the Statement of Cash Flows should be the balance of the Cash account listed in the asset section of the Statement of Financial Position.
- The dividends shown in the Statement of Financial Position appear in the financing section of the Statement of Cash Flows.

In order to cut down on unnecessary detail in the body of these statements, detailed financial information is often contained in Notes to each of the statements. Moreover, these three reports often show the 'consolidated reports' (if applicable), as well as the reports for the main (holding) company. The consolidated report is merely the addition of all of the results from the companies 'owned' by the main (parent) company. In the case of Woolworths Group Limited, a company included in the consolidated reports is ALH Group Pty Ltd (Hotels).

The preparation of final financial reports for external use is influenced by:

- legislative provisions set out in the Corporations Act
- Accounting standards issued by the Australian Accounting Standards Board (AASB)
- the requirements of the stock exchange.

The minimum information to be disclosed in the final reports is stipulated in the legislation and final reports must be prepared to satisfy these requirements, otherwise penalties may be imposed. The minimum requirements of disclosure set down do not mean that greater detail cannot be disclosed if the company considers it necessary. There has to be a balance between providing the information to satisfy the legal minimum disclosure requirements and providing sufficient helpful information to shareholders. In addition, a company's accounts are prepared in accordance with accounting standards. The stock exchange requires company reports to be of a desired standard if the company is to be listed on the stock exchange. Failure to meet the standards will mean that company shares cannot be traded through the stock exchange.

While the legislative, professional and stock exchange requirements influence the presentation of reports for external use, reports for internal use do not have to conform to these requirements. However, the requirements for external presentation have had a marked influence on the presentation of internal reports.

At the end of every financial year, every shareholder is required to receive the financial statements, the auditor's report, the directors' report and a directors' declaration for the year. In recent years, companies have tried to present their shareholders' reports as attractively as possible. Many reports are printed on high-quality paper with photographs recording company activities. They contain simple explanations of the financial reports presented. Many companies see their reports as a means of improving their public relations, particularly with shareholders.

Use is made of charts and graphs to visually display various aspects of the reports so that company shareholders without an accounting background can quickly understand complex financial statements. Refer to the Woolworths annual report on NelsonNet.



Woolworths
Group Limited
annual reports

5.15

Follow the weblink to examine the 2018 annual report for Woolworths Group Limited and answer the following questions:

- a List the contents of the Woolworths annual report, and the pages this information can be found on.
- b Using the information contained in the Chairman's report, write one paragraph that explains the results for the period.
- c Looking at the five-year analysis, what is the trend for:
 - i gross profit
 - ii profit after tax?
- d What is included in the directors' declaration? Who has signed this?
- e Which company prepares the external audit for Woolworths, and which individual signed the accounts?
- f Was the audit opinion a 'clean opinion'? If not, what was the nature of the qualification?

5.16

Using the report of Woolworths Group Limited, extract the following information:

- a What was the dividend per share paid in 2018?
- b How many Big W stores does Woolworths manage this year?



Wesfarmers
Limited annual
reports

5.17

Follow the weblink to obtain a copy of the 2018 annual report of Wesfarmers from their website. It owns Coles, (Coles was floated as a separate company on the ASX on 21 November 2018) which is a competitor to Woolworths.

- a Compare the contents of the reports of both Woolworths and the supermarket business of Coles in the Wesfarmers report.
- b From a shareholder's point of view, write a paragraph that states which report you find most useful. Use examples to justify your reasons.

Comparison of internal and external reports

While the format and content of external reports is governed by many sources, internal reports can be presented in whatever format is desired. In addition, internal reports usually contain much more information than external reports. This is because outside parties do not need the same amount of information for decision making as does management, nor does management wish to give competitors detailed information about the company's internal financial arrangements.

Earlier in this chapter, the preparation of accounts and reports for internal use was stressed. A comparison can now be made between the reports prepared for internal use and those prepared for external use. Compare one of the Profit or Loss and Retained Earnings statements you have prepared previously for internal use with Woolworths' statement of profit prepared for external use, as shown on the website.

Note the following points:

- The external statement of profit lacks detail on individual items of revenue and expense.
- The Statement of Profit or Loss is comparative. The statement must by law show at least the previous year's trading results.

Compare a Statement of Financial Position you have prepared for internal use with the Statement of Financial Position prepared by Woolworths. Note the following points:

- Disclosure of individual items of assets and liabilities is similar in the external report with detailed information supplied in the Notes.
- The Statement of Financial Position always shows comparative figures.

5.18

Explain what differences you would find when comparing reports prepared for internal and external use.

5.19

Examine the 2018 Statement of Profit or Loss, the Statement of Financial Position and the Statement of Cash Flows for Woolworths Group Limited and answer the following questions:

Consolidated Statement of Profit or Loss

- a What was the profit after income tax for the 2018 year? Was this an increase or a decrease on the prior year?
- b What was the cost of sales in 2018?
- c What was the basic earnings per share (EPS) in 2018?
- d What is the current income tax expense provided by the group?
- e Has the revenue from operating activities increased or decreased since last year? By how much?

Statement of Financial Position

- f What was the total assets for 2018?
- g What was the total equity for 2018? How is that separated between the different accounts?
- h Did Woolworths have any intangible assets? How much were they worth? What are intangible assets? Provide some examples of items you think might be classified as intangible assets.
- i What is the current level of issued capital and shares of the group?

Statement of Cash Flows

- j List the cash inflows from financing activities that Woolworths had in 2018.
- k Note the inclusion of income tax paid in the Statement of Cash Flows. Which section does it appear in? How much was this item?
- l Did Woolworths issue any new shares in 2018? Where did you look to obtain the information?
- m Overall, did Woolworths' cash position improve over the period?
- n What is the current cash provided by operating activities?

General accounting information

- o What is a segment disclosure?



Woolworths
Group Limited
annual reports

Analysis and interpretation of company reports

While the published financial reports of companies can tell us some things about the performance of one or more companies, one of the main ways that we can obtain in-depth information is to have a look at the relationships between various figures in the reports. As we saw in Chapter 2, there are essentially three different ways we can look at the relationships between various figures on the financial statements:

- horizontal analysis
- vertical analysis
- ratio analysis.

Horizontal analysis

This was covered in depth in Chapter 2, but essentially it involves taking a key line item in one of the financial statements, choosing a base year and calculating how much the item has increased or decreased each year from the base.

Vertical analysis

Vertical analysis is a technique for evaluating financial statement data that expresses each item in the financial statement as a percentage of a base amount. Essentially, rather than moving across the years, as a horizontal analysis does, this analysis moves vertically within the one statement. A key figure is usually

chosen; for example, total revenue in the Statement of Profit or Loss, and that is assigned 100 per cent. All items are then expressed as a percentage of that item. In the case of the Statement of Financial Position, total assets is usually assigned 100 per cent. Vertical analysis can provide insights into underlying conditions for an entity that may not be apparent from the raw figures. The vertical analysis of Woolworths Group Limited's Statement of Financial Position is shown in Figure 5.1.

Woolworths Group Limited Consolidated Statement of Financial Position					
	Note	2018		2017	
		\$M	%	\$M	%
Current assets					
Cash and cash equivalents	4.5	1273	5.4	909	3.9
Trade and other receivables	3.1	801	3.4	745	3.2
Inventories		4233	18.0	4207	18.3
Other financial assets	3.2	53	0.2	16	0.1
		6360	27.0	5877	25.5
Assets held for sale	5.2	821	3.5	1244	5.4
Total current assets		7181	30.5	7121	30.9
Non-current assets					
Trade and other receivables	3.1	93	0.4	72	0.3
Other financial assets	3.2	522	2.2	507	2.2
Property, plant and equipment	3.3	9026	38.3	8438	36.6
Intangible assets	3.4	6465	27.4	6533	28.4
Deferred tax assets	3.6.3	271	1.2	372	1.6
Total non-current assets		16377	69.5	15922	69.1
Total assets		23558	100.0	23043	100.0
Current liabilities					
Trade and other payables	3.7	6960	29.5	6812	29.6
Borrowings	4.6.3	604	2.6	254	1.1
Current tax payable		110	0.5	81	0.4
Other financial liabilities	3.8	50	0.2	314	1.4
Provisions	3.9	1451	6.2	1470	6.4
		9175	38.9	8931	38.8
Liabilities directly associated with assets held for sale	5.2	21	0.1	21	0.1
Total current liabilities		9196	39.0	8952	38.8
Non-current liabilities					
Borrowings	4.6.3	2199	9.3	2777	12.1
Other financial liabilities	3.8	61	0.3	116	0.5
Provisions	3.9	942	4.0	1011	4.4
Other non-current liabilities	3.10	311	1.3	311	1.3
Total non-current liabilities		3513	14.9	4215	18.3
Total liabilities		12709	53.9	13167	57.1
Net assets		10849	46.1	9876	42.9
Equity					
Contributed equity	4.3	6055	25.7	5615	24.4
Reserves	4.4	353	1.5	357	1.5
Retained earnings		4073	17.3	3554	15.4
Equity attributable to equity holders of the parent entity		10481	44.5	9526	41.3
Non-controlling interests		368	1.6	350	1.5
Total equity		10849	46.1	9876	42.9

Source: Woolworths Group Limited Annual Report 2018, p. 64

Figure 5.1 Vertical analysis of Woolworths' financial report

From the vertical analysis of Woolworth's Statement of Financial Position, we can see that the proportion of current assets to total assets decreased from 30.9 per cent in 2017 to 30.5 per cent in 2018. During this same period, the proportion of non-current assets to total assets increased from 69.1 per cent to 69.5 per cent. The proportion of funds contributed to equity in 2017 was 42.9 per cent, with 57.1 per cent being contributed by liabilities; whereas in 2018 the proportion of funds contributed to equity was 46.1 per cent with 53.9 per cent being contributed by liabilities. It appears that Woolworths' operations have been fairly stable.

You could conduct this same analysis for a competitor – for example, Coles – to enable a more insightful analysis. You could also compare these figures to industry benchmarks.

Ratio analysis

The third and main way that an analysis can be made of the financial reports of organisations is through ratio analysis. We have examined several groups of ratios to date:

- measures of profitability
 - gross profit ratio
 - net profit ratio
 - return on owner's equity
 - return on total assets
- measures of liquidity
 - current ratio
 - quick ratio
 - turnover of accounts receivable
 - turnover of inventories
- measures of stability
 - equity ratio
 - debt ratio
 - times interest earned.

Slight modifications have to be made to the methods of calculating some of the ratios illustrated in this book so far, due to the change in profit calculation as a result of income tax liability and shareholders' equity in companies. Where net profit was used for sole traders and partnerships in calculations, **net profit after tax** may be used for companies. For example:

$$\text{Net profit ratio} = \frac{\text{Net profit after tax}}{\text{Net sales}} \times 100$$

The one exception to this is the rate of return on total assets. Net profit before tax is generally used to exclude different taxing policies, and interest expense is added to exclude finance policies. The ratio is therefore:

$$\text{Return on assets} = \frac{\text{Net profit before tax} + \text{Interest expense (EBIT)}}{\text{Average total assets}} \times 100$$

The numerator is sometimes referred to as **earnings before interest and tax (EBIT)**.

EBIT is quite a common measure in companies, and is often used when trying to make comparisons with benchmarks and other companies in terms of performance. It is used because it takes out not only the effect of tax, but also the effect of financing, and that is why interest is not included. Another common measure used in companies is **EBITDA**, which is **earnings before interest, tax, depreciation and amortisation**. This takes EBIT and then subtracts the effect of the major non-cash items, which are depreciation and amortisation. EBITDA therefore takes out the effects of tax, financing and the accounting decisions relating to depreciation and amortisation. EBITDA is calculated as net profit before tax + interest + depreciation + amortisation.

One other point that is particular to companies is that the debt ratio can have a major impact. As a separate legal entity, companies can borrow money in their own right. Often lenders will put a **debt covenant** into the lending agreement, saying that a certain maximum debt level must not be exceeded. This debt ratio might be, say, 65 per cent. If such a covenant exists, then companies must be very careful not to breach it.

Even though the debt ratio and equity ratio are good indicators of the level of debt in a company, another ratio sometimes calculated is the **debt/equity ratio**. The debt/equity ratio is another way of expressing the debt ratio or the equity ratio. It is the ratio of outside liabilities (debt) to shareholders' equity, with a ratio of 1 meaning that debt and equity are equal. Anything above 1 means debt is greater than equity; and the closer to 2 the ratio is, the greater the cause for concern. Anything below 1 means debt is less than equity.

The debt/equity ratio is calculated as:

$$\frac{\text{Total liabilities}}{\text{Shareholders' equity}}$$

If total liabilities are \$320 000, total shareholders' equity is \$210 000 and total assets are \$530 000, the various ratios would be:

Debt ratio	$\frac{\text{Total liabilities}}{\text{Total assets}} \times 100$	$\frac{\$320\,000}{\$530\,000} \times 100$	60.38%
Equity ratio	$\frac{\text{Shareholders' equity}}{\text{Total assets}} \times 100$	$\frac{\$210\,000}{\$530\,000} \times 100$	39.62%
Debt/Equity ratio	$\frac{\text{Total liabilities}}{\text{Shareholders' equity}} \times 100$	$\frac{\$320\,000}{\$210\,000} \times 100$	1.52 : 1

Another way of calculating the debt/equity ratio is:

$$\frac{\text{Debt ratio}}{\text{Equity ratio}} = \frac{60.38\%}{39.62\%} = 1.52 : 1$$

Both the debt ratio of 60.38 per cent and the debt/equity ratio of 1.52 : 1 indicate that debt is starting to be high, but may not be a cause for concern provided repayments are being easily met.

Three other ratios used to evaluate profitability for companies are:

- Earnings per share (the profit earned on each ordinary share). This is found using the following calculation:

$$\frac{\text{Net profit after tax} - \text{Preference dividends}}{\text{Average number of ordinary shares}}$$

- Price earnings ratio (the number of times the market price per share covers profit per share). This is found by using the following calculation:

$$\frac{\text{Market price per ordinary share}}{\text{Earnings per share}}$$

- Dividend yield (the dividend received per share expressed as a percentage return on the market price per share). This is found by using the following calculation:

$$\frac{\text{Dividend per ordinary share}}{\text{Market price per share}} \times 100$$

Thus, with minor adaptations and a few additions, the same ratios that were outlined in Chapter 2 can be used to analyse and interpret company reports. A summary of these ratios for companies will be given in Table 5.3 on page 372.

Trend analysis and benchmarks

As we saw in Chapter 2, irrespective of which type of analysis is conducted, more information can be obtained about the organisation if the results being analysed for the year become part of a trend. The most common way to do this is to compare individual results for this year with those of past years (up to 10 years) to obtain an idea as to whether this year is in line with past results or is completely different. This is called **trend analysis**. Morningstar, an investment research firm, provides trend analysis on companies. An example of a Morningstar 10-year trend analysis for Woolworths is shown on page 403.

Likewise, comparison with **benchmarks** provides a glimpse into the performance figures of a firm. There are two types of benchmarks:

- Internal benchmarks are basically a comparison with previous years' results. On a very simple level, having **comparative figures** for the current year and the past year in the financial statements is an example of this. Alternatively, figures over several years can be gathered together to form a trend. This is often done with the aid of a spreadsheet.

Another form of internal benchmarking is used in the manufacturing industry and is often referred to as **standard costing**. Based on past experience, when an item is being made, the firm knows the various costs that should occur and this becomes the standard/benchmark. If the actual costs are different to this standard, a variance arises and any variances need to be investigated. This type of benchmarking is outside the scope of this text.

- External benchmarks provide a better comparison, as you are comparing the firm with external parties. There are two types of external benchmarking:

Industry benchmarks, where the comparison is made between the firm and the benchmarks for that particular industry. This is important because we want to know how the firm is performing compared to the industry average and therefore our competitors.

Inter-Industry benchmarks, where the comparison is made between the firm and the benchmarks for other industries.

The two most important for our purposes are internal comparative figures and industry benchmarks. On pages 182–83 in Chapter 2, industry benchmarks from the ATO and the Bank of Melbourne were discussed. These benchmarks are just as relevant for companies. Another benchmarking service for companies is offered by Reuters, an international news agency. An example of a Reuters industry benchmark for Woolworths is shown on page 405.

Analysis and interpretation of the Statement of Cash Flows

The information contained in financial statements is often difficult to understand and use to its best advantage in decision making, especially for non-accountants. To make the best use of the information in the statements, accountants, managers and other users have to use a process of analysis and interpretation to get what they want out of the maze of figures, and to make the figures and information understandable to others. Analysis helps users to distinguish the main elements and relationships shown in the statements. Interpretation translates the figures, percentages and so on into more easily understood forms of communication, such as written reports, supported by a few graphs or other visual images. The end result of this process is what we see in a company's annual report to its shareholders, or when an accountant prepares a written report for a client.

Thus, it is the interpretation of the Statement of Cash Flows that will allow decisions to be made about the operating, investing and financing activities of the enterprise. Past decisions to be evaluated in these areas, the degree to which cash has been used efficiently, and if there is sufficient cash being provided for future operations and growth will also be examined.

The accounting standards suggest that information in a Statement of Cash Flows will help to assess the ability of the business to:

- generate cash flows in the future
- meet its financial commitments when they fall due. This includes the ability to repay borrowings
- fund changes in the scope and/or nature of its activities
- obtain external finance when necessary.

More specifically, a Statement of Cash Flows helps to answer questions such as:

- How does the business finance its operations?
- How much of the cash comes from ongoing operations?
- Are the business's sources of cash long term or short term?
- Are the business's sources of cash external or internal?
- Is the business having difficulty in meeting its commitments?
- How was a large capital expenditure financed?
- In what ways has cash generated by the operations of the business been used?
- Why has cash decreased or the bank overdraft risen when the business made such a large profit?
- In relation to profit, were drawings or dividends for the period too high?

Finance and investment decisions must be based on sound management principles, thorough investigation of all alternatives, and good budgetary and evaluation procedures.

Finance is needed for:

- establishing a business
- day-to-day operations
- expansion or diversification
- specific projects
- drawings, dividends or return of capital
- paying taxation (if a company).

Some of the uses are short term – such as paying accounts payable, carrying more inventory or accounts receivable, investing in short-term securities, or holding cash. Some of the uses are long term – such as the purchase of non-current assets (e.g. plant or property), or repaying non-current liabilities (e.g. loans or mortgages).

Investment decisions about how to use available cash or whether to obtain or borrow more must be based on such factors as:

- risk involved
- rate of return
- cash flows generated
- effect on profitability
- taxation implications
- fit with general business objectives.

Sources of finance must be investigated to obtain funds that are:

- suited to the use contemplated
- at the least possible cost, whether this will be in terms of interest, dividends, drawings or opportunities forgone.

Possible sources of finance can be classified as either short or long term, and either internal or external to the business.

Sources and nature of finance		
Nature of finance	Internal sources (equity finance)	External source (debt finance)
Short term	• operations (revenue earned) • short-term loans from owners	• bank overdrafts • accounts payable • short-term loans • factoring (or sale of accounts receivable)
Long term	• capital from owners • retained earnings	• loans from banks and other financial institutions • mortgages • debentures • leases

Finance and investments must be matched so that:

- short-term finance is used for short-term purposes/day-to-day operations such as accounts payable, or a bank overdraft used for increasing inventory
- long-term finance is used for long-term purposes, such as large projects or expansion, or a mortgage to obtain new property or plant
- a balance between debt and equity financing is achieved.

Finally, it is important to consider how the business generates the cash. If the cash is coming from investing activities, this means that assets are being sold off and the business may be in difficulty. If the cash is coming from financing activities, this is acceptable if it is financing the purchase of long-term assets. However, this cannot occur for long. For the business to survive and be successful over the long term, the cash must be generated from operating activities.

Preparing a report or letter of advice

When interpreting and reporting on a Statement of Cash Flows, such financing and investment considerations should be kept in mind. Sensible conclusions can then be drawn and recommendations

made. In practice, this procedure would usually be carried out in conjunction with the interpretation of the other main accounting reports, the Statement of Profit or Loss and the Statement of Financial Position, but for simplicity we have kept the reports separate at this stage.

An appropriate report, analysing and interpreting the statement, would have:

- 1 a *heading* – shows the title of the report and the date prepared
 - 2 an *introduction* – sets out any conditions on preparation, scope and purpose of the report
 - 3 the *main text*, or body, of the report – broken into appropriate sub-sections; for example:
 - an analysis and interpretation of the *operating activities* to determine where the cash has been coming from and where it has been going to. The figure for operating activities should be examined, as it is only through sufficient increases in the operations of the business that the business can expand
 - an analysis and interpretation of the *investing activities* to determine where major investments in assets have been made and whether any assets have been sold
 - an analysis and interpretation of the *financing activities* to determine how investments have been financed and what payments have been made to decrease the amounts owed. The financing activities should be consistent with the investment activities; for example, large non-current assets should be financed by long-term finance. Perhaps other alternatives would have fitted better or resulted in less cost, yielded better return or a better balance of financing
 - change in the *cash position* to show the movement during the period and the cash position at the end of the period
 - 4 *general conclusions* – a brief summary of the main points mentioned above
 - 5 *recommendations* – recommendations for improvement
 - 6 *signature and position* of the preparer.
- A *letter of advice* would have similar information, except the structure would be in the form of a letter.

Illustrative example 1

Lennox Industries Ltd operates in a fast-growing coastal town. It is hoped to expand the business quite rapidly in coming years. Sales are expected to increase by at least 50 per cent next year. New plant, equipment and fittings will have to be purchased. In the Statement of Profit or Loss, all sales were for cash, the after-tax profit for the year was calculated at \$10 million and the net profit ratio was 5.26 per cent.

Given the following Statement of Cash Flows, prepare a report to the board of directors of Lennox Industries Ltd.

Lennox Industries Ltd
Statement of Cash Flows for year ended 30 June 2020

	\$'000	\$'000	\$'000
Cash flows from operating activities			
<i>Inflows</i>			
Receipts from customers		190 000	
<i>Outflows</i>			
Payments to suppliers for purchases	99 000		
Payments to employees	40 000		
Interest paid	2 000		
Payments for other operating expenses	35 000		
Income tax paid	<u>3 000</u>	<u>179 000</u>	
Net cash from operating activities			11 000
 Cash flows from investing activities			
<i>Outflows</i>			
Payments for long-term assets and other investments			
Land		<u>30 000</u>	
Net cash used in investing activities			(30 000)
 Cash flows from financing activities			
<i>Outflows</i>			
Repayment of borrowings	10 000		
Payment of dividends	<u>5 000</u>	<u>15 000</u>	
Net cash used in financing activities			(15 000)
Net increase (decrease) in cash held			(34 000)
Cash at beginning of reporting period			<u>25 000</u>
Cash at end of reporting period			<u><u>(\$9 000)</u></u>

In an analysis and interpretation of the Statement of Cash Flows for the board of Lennox Industries Ltd, which hopes to expand the business rapidly, the report may appear as follows:

Report to the board of Lennox Industries Ltd re Statement of Cash Flows

This report is derived from financial information for the year ended 30 June 2020, and discussions with management of the business. Inflows and outflows of cash from operating, investing and financing activities are analysed, and conclusions and recommendations are presented that concern the appropriateness of these in the present business circumstances.

Operating activities

Inflows from customers for sales have amounted to \$190 million (m). Outflows have amounted to \$179m. Only \$2m of this has been due to interest paid, with \$99m paid to suppliers for purchases, \$40m for wages, and \$35m for other operating expenses. Thus \$11m has been provided by operating activities. This is a reasonable result, as a business must generate positive cash flows from operations to survive

in the long run. It is also slightly above the profit after tax figure of \$10m, so it is unlikely that problems will result because of lack of cash to meet commitments in the operations area. It does not, however, provide much for investment and expansion.

Investing activities

No proceeds came from investing activities. There is, of course, no problem here because this simply means that no assets have had to be sold because of lack of performance, a change of direction of the business, or a shortage of cash.

An investment of \$30m has been made in land. This is a significant investment but certainly seems appropriate given management's plans for expansion.

Financing activities

It is usual to finance the purchase of such long-term assets with long-term cash flows from owners or borrowings. This general rule does not appear to have been followed in this case. Indeed, some rather questionable decisions have been made in this financing area. There have been major outflows of cash from the business. Ten million dollars worth of loans have been repaid, and \$5m worth of dividends were paid to the shareholders. Are the dividends of half of the year's profits excessive? Normally it would not be. However, in these circumstances, it may have been preferable to have left even more of the profits in the business to help fund the expansion. For similar reasons, repayment of part of the loan may not have been an appropriate action.

Change in the cash position

The net result of all these activities has been a major decrease in cash held of \$34m. This has led to a very much weakened cash position for the business. The year has seen a change from a positive cash balance at the start of the year of \$25m to an overdraft of \$9m at the end of the year. This highlights the inappropriateness of the use of short-term cash funds to finance the purchase of long-term assets. Liquidity measures, such as current or quick-asset ratios would now be dangerously low.

Conclusions

It is pleasing to see a good flow of cash from internal sources in the form of strong cash flows from operations. In the case of a business such as this, it is usually the most important source of cash. However, this flow is not adequate to meet the standard requirements of repaying loans, paying for non-current assets and paying dividends.

Recommendations

- The trend towards a very weak cash position cannot be allowed to continue. In the future, other sources of finance will be required to allow the rapid growth desired.
- The shareholders will almost certainly have to invest more funds in the business. If this is not possible (and the fact that dividends were taken may indicate that this is not), then long-term external funds may have to be sought. This is especially the case if the intention is to purchase more non-current assets.
- Planning for any expansion should begin immediately. A business growth plan should be prepared, indicating investment options along with budgets (especially a cash budget or projection). These will be required for presentation to external finance sources.
- If increased sales as forecast result in increased profits, a desirable balance between short-term and long-term and internal and external sources of funds should be able to be achieved.

Judith Mannot CPA

5.20

You are given the following Statement of Cash Flows for Jennings Ltd and some extra information about the company. Write a report to Theresa Corowa, chair of the board, advising the board about the implications of the report.

Jennings Ltd			
Statement of Cash Flows for year ended 30 June 2020			
	\$	\$	\$
Cash flows from operating activities			
<i>Inflows</i>			
Receipts from customers	230 500		
Interest received	<u>300</u>	230 800	
<i>Outflows</i>			
Payments to suppliers for purchases	67 000		
Payments to employees	50 000		
Payments for operating expenses	61 800		
Income tax	5 000		
Interest paid	<u>20 000</u>	<u>203 800</u>	
Net cash from operating activities			27 000
Cash flows from investing activities			
<i>Outflows</i>			
Payments for non-current assets and other investments			
Bonds	3 000		
Furniture	12 000		
Buildings	100 000		
Land	<u>60 000</u>	<u>175 000</u>	
Net cash used in investing activities			(175 000)
Cash flows from financing activities			
<i>Inflows</i>			
Proceeds from capital contributions	4 000		
Proceeds from borrowings			
Mortgage	<u>160 000</u>	164 000	
<i>Outflows</i>			
Repayment of borrowings			
Mortgage	20 000		
Payment of dividends	<u>24 000</u>	<u>44 000</u>	
Net cash from financing activities			<u>120 000</u>
Net increase (decrease) in cash held			(28 000)
Cash at beginning of reporting period			<u>6 000</u>
Cash at end of reporting period			<u><u>(\$22 000)</u></u>

Extra information

Equity ratio (2020) 43%
(2019) 57%

Accounts payable has decreased by \$12 000 over the period.

Analysis and interpretation of a public company

Table 5.3 provides a summary of the main ratios of a public company.

Table 5.3 Summary of main financial ratios for companies

Ratio	Formula	Measures	Benchmark
Profitability			
Gross profit ratio	$\frac{\text{Gross profit}}{\text{Net sales}} \times 100$	Gross profit per dollar of net sales	Industry average
Net profit ratio	$\frac{\text{Net profit after tax}}{\text{Net sales}} \times 100$	Net profit per dollar of sales	Industry average
Return on ordinary shareholders' equity	$\frac{\text{Net profit after tax} - \text{Preference dividends}}{\text{Average ordinary shareholders' equity}} \times 100$	Return on investment provided by owners	Current interest rates
Return on total assets	$\frac{\text{Net profit before tax} + \text{Interest expense (EBIT)}}{\text{Average total assets}} \times 100$	Return on all assets whether provided by owners or external parties	Industry average
Earnings per share (EPS)	$\frac{\text{Net profit after tax} - \text{Preference dividends}}{\text{Average number of ordinary shares}}$	The profit earned on each ordinary share	Industry specific
Price earnings (PE) ratio	$\frac{\text{Market price per ordinary share}}{\text{Earnings per share}}$	The number of times the market price covers the profit per share	Industry specific High PE-growth company Low PE-stable company
Dividend per ordinary share	$\frac{\text{Ordinary dividend}}{\text{Number of ordinary shares}}$	Dividends received per share	Amount compared to other returns/company's dividends
Dividend yield	$\frac{\text{Dividend per ordinary share}}{\text{Market price per ordinary share}} \times 100$	Dividend received per share expressed as a percentage of the market price per share	Comparative rates of return mediated by capital growth
Liquidity			
Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	Liquidity or ability to meet current debts with current assets	Greater than 2 : 1
Quick asset ratio	$\frac{\text{Cash} + \text{Near cash assets} + \text{Receivables}}{\text{Current liabilities}}$	Ability to meet immediate debts using only most liquid assets	Greater than 1 : 1

Ratio	Formula	Measures	Benchmark
Turnover of inventories*	$\frac{\text{Cost of goods sold}}{\text{Average inventories}}$	How quickly inventory is sold, and thus indicates liquidity of inventories	Industry average
Turnover of accounts receivable*	$\frac{\text{Net credit sales}}{\text{Average accounts receivable}}$	Effectiveness of collections and whether accounts receivable are too high	Industry average
Stability			
Equity ratio	$\frac{\text{Shareholders' equity}}{\text{Total assets}} \times 100$	Percentage of assets or funds provided by owners and extent of gearing	Greater than 50%
Debt ratio	$\frac{\text{Total liabilities}}{\text{Total assets}} \times 100$	Percentage of assets or funds provided by external parties, and extent of gearing	Less than 50%
Debt/equity ratio	$\frac{\text{Total liabilities}}{\text{Shareholders' Equity}}$	Ratio of debt to equity	Less than 1 : 1
Times interest earned	$\frac{\text{Net profit before tax + Interest expense (EBIT)}}{\text{Interest expense}}$	Available profits to meet interest expense	3–4 times

* If turnover is required in days, the turnover rate as calculated above must be divided into 365, or the number of days in the period that is relevant.

Also refer to page 190 in Chapter 2, where an approach was outlined that may help you interpret financial statements. This approach consisted of:

- 1 Collect the data and information.
- 2 Organise and interpret the data and information.
- 3 Make recommendations for decisions based on justifiable evidence.
- 4 Assess decisions made.

Real-world application



Integrated reporting – the future of accounting

A new wave of global non-financial reporting is changing the way accountants tell the story of their companies.

In brief

- Investors are demanding more information on strategies which build long-term value.
- More organisations such as Lend Lease, National Australia Bank, Stockland, Australia Post, Cbus and Vic Super are adopting the principles of integrated reporting.
- Important drivers of value are intellectual and natural capital and social and relationship capital.

In a move being led by international investors and company boards, the way that accountants carry out reporting is changing worldwide. A trend towards non-financial reporting is the way of the future, and is set to become the global norm ...

With about 1600 companies worldwide already adopting the principles of integrated reporting, in Australia these include corporate heavyweights such as Lend Lease, National Australia Bank, Stockland, Australia Post and superannuation funds Cbus and Vic Super.

...

'In Europe, the EU Non-Financial Reporting Directive this year will see 8000 companies integrate financial and non-financial reporting for the first time,' says [Richard] Howitt [the new CEO of the London-based International Integrated Reporting Council (IIRC)].

Powerful institutional investors, such as the world's biggest asset manager BlackRock, are leading the calls. 'Investors have been driving this from the start,' says Howitt. The pricing of risks and opportunities in today's more interconnected interrelated fast-changing world have not been properly captured by the existing corporate reporting system.

'It's important for that to change in order for capital market decisions to be taken efficiently and to reward long-term returns.'

Long-term benefits

Integrated reporting offers a more cohesive and efficient approach to corporate reporting across the short, medium and long-term, says Howitt. Academic and other research on adopting non-financial reporting demonstrates evidence of these benefits:

- A more stable long-term investor base
- Lower costs of raising capital
- Higher share price

The benefits can apply to both SMEs and large corporates, he adds. Research carried out by Professor Roger Simnett AO of the UNSW Business School found that for smaller listed firms, improved information provided to investors lowers the company's cost of equity capital. 'I want to emphasise that this is about changing and sustaining capital markets, and about improving the stability of the financial system of the world,' says Howitt.

A strong desire for good corporate governance in the wake of the Global Financial Crisis has been a key driver. 'Boards want a holistic approach. They want to know what's going on before bad things happen, so they know about them early and they have been dealt with. That's what good corporate governance is about, in a very simplistic way.'

What is the IIRC?

The IIRC was set up in 2010 ...

The IIRC now has a presence in 62 countries, including 20 of the 28 EU countries and all G20 countries, plus emerging and BRICS economies. 'If they (emerging market players) want access to international capital markets to grow fast – which is what they want to do to become global players, then integrated reporting is a fast-track way of doing it because this is the benchmark as far as international capital markets are concerned.'

The IIRC also has a big Silicon Valley initiative where it works with technology companies 'the Googles, Apples and Microsofts to ensure the next generation of technology reporting is integrated reporting.'

At present the world is in a 'breakthrough phase' of integrated reporting, where companies, investors, the accounting profession, regulators and other interest groups round the world are endorsing integrated reporting. In the next year, the IIRC will launch their 'global adoption phase'.

Integrated reporting explains how an organisation creates value over time to benefit stakeholders and shows how its business model interacts with the external environment and the 'six capitals' – financial, manufactured, intellectual, human, social and relationship and natural capital. Human and intellectual capitals are probably the two least understood areas in non-financial reporting, because they are not easy to quantify, Howitt told Acuity.

'As far as ideas and knowledge are concerned, intellectual capital is the biggest intangible in this developing digitalised economy. It's the most difficult but probably the most important to define and one of the most important for future success, survival and competitiveness.'

...

Source: 'Integrated reporting – the future of accounting', Shelley Dempsey, *Acuity Mag*, 31 October 2017



Integrated
reporting

Interesting accounting fact

Did you know?

Details of the ASX top 100 companies

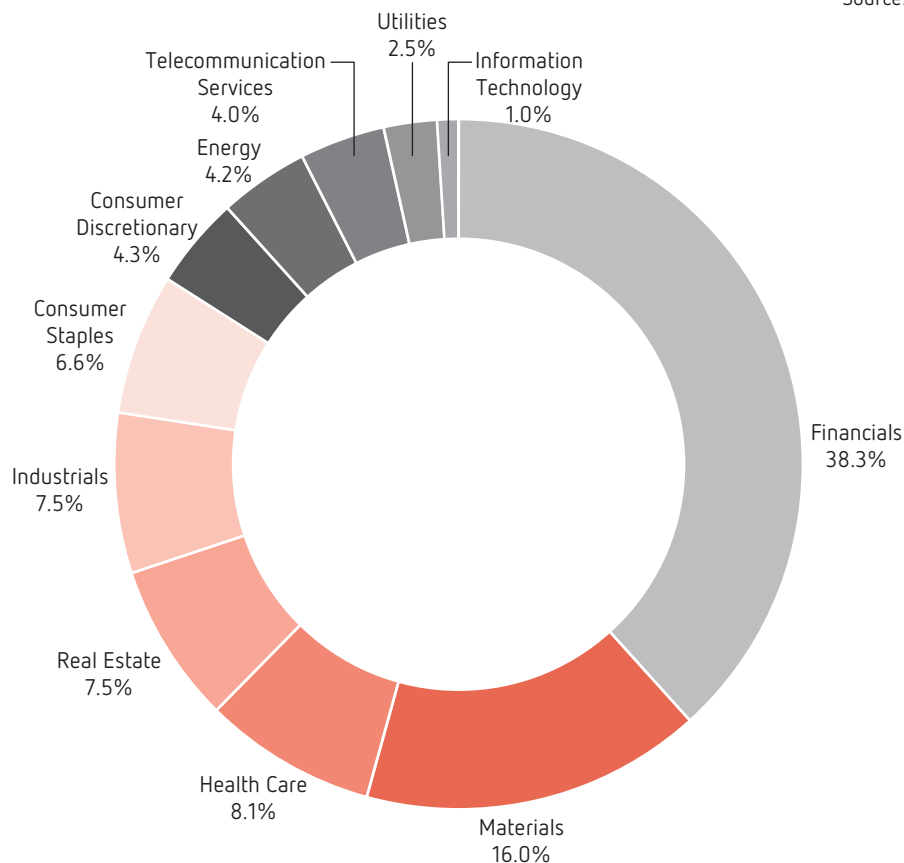
The S&P/ASX 100 (XT0) Index is comprised of Australia's large and mid-cap equities.

The index contains the 100 largest ASX listed stocks with the cut-off being a market capitalisation of approx. \$1.7 billion (AUD). Constituents account for approx. 74% (March 2017) of Australia's share market capitalisation.

The ASX 100 is well diversified with all 11 GICS Sectors represented. Financials and Materials (which includes resources) dominate the index, accounting for circa 39% and 16% of market-cap respectively (March 2017).

All S&P/ASX Indices use the Global Industry Classification Standard (GICS) to categorise constituents according to their principal business activity.

Source: ASX 100 List



ASX top 100

Data updated: 1 July 2017
Source: ASX 100 List, <https://www.asx100list.com/>

5.21

Walker & Simmons Ltd						
Statement of Profit or Loss for year ended						
	30 June 2020			30 June 2019		
	\$	\$	% of Sales	\$	\$	% of Sales
Sales						
Cash	110 000			90 000		
Credit	<u>250 000</u>	360 000	100	<u>190 000</u>	280 000	100
Less Cost of Sales						
Cost of Goods Sold		<u>185 000</u>	51.4		<u>150 000</u>	53.6
Gross profit		<u>175 000</u>	48.6		<u>130 000</u>	46.4
Less Other Operating Expenses						
<i>Selling Expenses</i>						
Advertising	8 000			4 000		
Cartage on Sales	12 000			6 000		
Depreciation on Delivery Vehicles	<u>4 000</u>	24 000	6.7	<u>4 000</u>	14 000	5.0
<i>Administrative Expenses</i>						
Office Salaries	31 000			21 000		
Depreciation on Fixtures and Fittings	8 000			5 000		
Insurance	20 000			15 000		
Audit Fees	<u>3 000</u>	62 000	17.2	<u>2 000</u>	43 000	15.4
<i>Finance Expenses</i>						
Bad and Doubtful Debts	6 000			3 000		
Interest Expense	<u>15 000</u>	<u>21 000</u>	5.8	<u>10 000</u>	<u>13 000</u>	4.6
Total Other Expenses		<u>107 000</u>	29.7		<u>70 000</u>	25.0
Net profit before tax		68 000	18.9		60 000	21.4
Less Income Tax		<u>21 000</u>	5.8		<u>18 000</u>	6.4
Net profit after tax		47 000	13.1		42 000	15.0
<i>Add Retained earnings from previous years</i>		<u>27 000</u>			<u>15 000</u>	
		74 000			57 000	
Less Dividends	20 000			20 000		
Transfer to Reserves	<u>15 000</u>	<u>35 000</u>		<u>10 000</u>	<u>30 000</u>	
Retained earnings at end of year		<u>\$39 000</u>			<u>\$27 000</u>	

Walker & Simmons Ltd
Statements of Financial Position as at

	30 June 2020			30 June 2019		
	\$	\$	% of total assets	\$	\$	% of total assets
Current Assets						
Cash at Bank	—			8 000		
Accounts Receivable (net)	36 000			40 000		
Inventories	60 000			65 000		
Prepaid Expenses	<u>4 000</u>	100 000	18.5	<u>3 000</u>	116 000	25.2
Non-Current Assets						
<i>Other Financial Assets</i>						
Shares in AS Co Ltd				50 000		10.9
<i>Property, Plant and Equipment</i>						
Fixtures and Fittings	40 000			30 000		
Delivery Vehicles	30 000			34 000		
Land	110 000			70 000		
Buildings	<u>200 000</u>	380 000	70.4	<u>100 000</u>	234 000	50.9
<i>Intangible Assets</i>						
Patent	<u>60 000</u>		<u>11.1</u>	<u>60 000</u>		<u>13.0</u>
Total assets		<u>\$540 000</u>	<u>100.0</u>		<u>\$460 000</u>	<u>100.0</u>
Current Liabilities						
Bank Overdraft	10 000					
Accounts Payable	38 000			19 000		
GST Payable	3 000			1 000		
Taxation Payable	21 000			18 000		
Dividends Payable	20 000			20 000		
Accrued Expenses	<u>2 000</u>	94 000	17.4	<u>3 000</u>	61 000	13.3
Non-Current Liabilities						
Debentures	<u>120 000</u>		22.2	<u>100 000</u>		21.7
Total liabilities		<u>214 000</u>	39.6		<u>161 000</u>	35.0
Net assets		<u>\$326 000</u>			<u>\$299 000</u>	
Shareholders' Equity						
<i>Share Capital</i>						
Paid-up Capital (234 000 shares paid to \$1)		234 000			234 000	
<i>Reserves</i>						
Reserves	53 000			38 000		
Retained Earnings	<u>39 000</u>	<u>92 000</u>		<u>27 000</u>	<u>65 000</u>	
Total shareholders' equity		<u>\$326 000</u>	60.4		<u>\$299 000</u>	65.0

Walker & Simmons Ltd Statements of Cash Flows					
	30 June 2020			30 June 2019	
	\$	\$	\$	\$	\$
Cash flows from operating activities					
<i>Inflows</i>					
Receipts from customers		358 000		250 000	
<i>Outflows</i>					
Payments to suppliers and employees	228 000		112 000		
Interest paid	15 000		10 000		
Income tax paid	<u>25 000</u>	<u>268 000</u>	<u>8 000</u>	<u>130 000</u>	
Net cash from operating activities		90 000		120 000	
Cash flows from investing activities					
<i>Inflows</i>					
Proceeds from sale of shares		50 000			
<i>Outflows</i>					
Fixtures and fittings	18 000				
Land	40 000				
Buildings	<u>100 000</u>	<u>158 000</u>		<u>79 000</u>	
Net cash used in investing activities		(108 000)		(79 000)	
Cash flows from financing activities					
<i>Inflows</i>					
Issue of debentures		20 000			
<i>Outflows</i>					
Repayment of borrowings			20 000		
Dividends paid	<u>20 000</u>		<u>15 000</u>	<u>35 000</u>	
Net cash from financing activities		<u>0</u>		<u>(35 000)</u>	
Net increase/decrease in cash held		(18 000)		6 000	
Cash at beginning of period		<u>8 000</u>		<u>2 000</u>	
Cash at end of period		<u><u>\$(10 000)</u></u>		<u><u>\$8 000</u></u>	

Additional information

At 1 July 2018, share capital and reserves were \$277 000, total assets were \$400 000, accounts receivable were \$44 000 and inventories were \$75 000. Market value of shares was \$1.20 on 30 June 2019 and \$1.25 on 30 June 2020.

The company offers 30-day credit and has instituted steps to reduce the inventory holding period to 90 days. Assume the current interest rate on deposits is 8 per cent and the industry average for return on assets is 25 per cent.

You are required to use these financial statements to carry out an analysis and interpret the results.

Spreadsheet application

5.22

In Chapter 2, Question 2.55, you built a spreadsheet model to calculate ratios for a sole trader. You can now amend this model to calculate the ratios for companies. Use the following as a guide to build the model. When completed, check your answers to the ratios calculated in Question 5.21.

	A	B	C	D	E	F	G
50	INPUT/ASSUMPTIONS						
51	Years		2020		2019		2018
52							
53	Name of Firm		Walker & Simmons Ltd				
54							
55	Revenues						
56	Cash Sales		110,000		90,000		
57	Credit Sales		250,000		190,000		
58	Other Revenue		0		0		
59							
60	Expenses						
61	Cost of Goods Sold		185,000		150,000		
62	Total Selling Expenses		24,000		14,000		
63	Total Administrative Expenses		62,000		43,000		
64	Total Finance Expenses		21,000		13,000		
65	Total Interest Expense		15,000		10,000		
66	Total Depreciation and Amortisation		12,000		9,000		
67	Income Tax		21,000		18,000		
68							
69	Retained Profits (Beginning)		27,000		15,000		
70	Dividends		20,000		20,000		
71	Transfers to Reserves		15,000		10,000		
72							
73	Current Assets						
74	Cash at Bank		0		8,000		
75	Accounts Receivable (Net)		36,000		40,000		44,000
76	Inventories		60,000		65,000		75,000
77	Accrued Revenues		0		0		
78	Prepaid Expenses		4,000		3,000		
79							
80	Non-Current Assets						
81	Other Financial Assets						
82	Shares in AS Co Ltd		0		50,000		
83							
84	Property Plant and Equipment						
85	Fixtures and Fittings		40,000		30,000		
86	Less Accum. Depreciation		0		0		
87	Equipment		0		0		
88	Less Accum. Depreciation		0		0		
89	Motor Vehicles		30,000		34,000		
90	Less Accum. Depreciation		0		0		
91	Building		200,000		100,000		
92	Less Accum. Depreciation		0		0		
93	Land		110,000		70,000		
94	Other		0		0		
95							
96	Intangible Assets						
97	Patent		60,000		60,000		
98							
99	Total Assets						400,000
100							

	A	B	C	D	E	F	G
101	Current Liabilities						
102	Bank Overdraft		10,000		0		
103	Accounts Payable		38,000		19,000		
104	GST Clearing (Payable)		3,000		1,000		
105	Taxation Payable		21,000		18,000		
106	Dividends Payable		20,000		20,000		
107	Accrued Expenses		2,000		3,000		
108	Unearned Revenues		0		0		
109	Other		0		0		
110							
111	Non-Current Liabilities						
112	Mortgage		0		0		
113	Debentures		120,000		100,000		
114							
115	Shareholders' Equity						
116	Share Capital		234,000		234,000		
117	Reserves		53,000		38,000		
118	Total Shareholders' Equity						277,000
119							
120	No of Shares		234000		234000		
121	Market Price per share		1.25		1.20		
122	Ordinary Dividends		20,000		20,000		
123							
124							
125	REPORT						
126							
127	Walker & Simmons Ltd						
128	Statement of Profit or Loss						
129	for year ended 30 June						
130							
131			2020		2019		
132			\$	%	\$	%	Difference
133	Cash Sales		110,000	30.6	90,000	32.1	
134	Credit Sales		250,000	69.4	190,000	67.9	
135	Total Sales		360,000	100.0	280,000	100.0	80,000
136							
137	Cost of Goods Sold		185,000	51.4	150,000	53.6	35,000
138	GROSS PROFIT		175,000	48.6	130,000	46.4	45,000
139	Other Revenue		0	0.0	0	0.0	0
140							
141	Selling Expenses		24,000	6.7	14,000	5.0	10,000
142	Administrative Expenses		62,000	17.2	43,000	15.4	19,000
143	Finance Expenses		21,000	5.8	13,000	4.6	8,000
144	Total Other Expenses		107,000	29.7	70,000	25.0	37,000
145	Net Profit Before Tax		68,000	18.9	60,000	21.4	8,000
146	Less Income Tax		21,000	5.8	18,000	6.4	3,000
147	Net Profit After Tax		47,000	13.1	42,000	15.0	5,000
148	Add Retained Profits (Beg)		27,000		15,000		12,000
149			74,000		57,000		17,000
150	Less Dividends		20,000		20,000		0
151	Less Transfer to Reserves		15,000		10,000		5,000
152	Retained Profit (End)		39,000		27,000		12,000
153							
154	Earnings Before Interest and Tax (EBIT)		83,000	23.1	70,000	25.0	13,000
155							
156	Earnings Before Interest, Depreciation						
157	and Amortisation (EBITDA)		95,000	26.4	79,000	28.2	16,000
158							

	A	B	C	D	E	F	G
159							
160	Walker & Simmons Ltd						
161	Statement of Financial Position						
162	as at 30 June						
163							
164			2020		2019		Difference
165			\$	%	\$	%	
166	ASSETS						
167	Current Assets						
168	Cash at Bank		0		8,000		
169	Accounts Receivable (Net)		36,000		40,000		
170	Inventories		60,000		65,000		
171	Accrued Revenues		0		0		
172	Prepaid Expenses		4,000		3,000		
173	Total Current Assets		100,000	18.5	116,000	25.2	-16,000
174							
175	Non-Current Assets						
176	Other Financial Assets						
177	Shares in AS Co Ltd		0	0.0	50,000	10.9	-50,000
178							
179	Property, Plant and Equipment						
180	Fixtures and Fittings		40,000		30,000		
181	Less Accum. Depreciation		0		0		
182	Equipment		0		0		
183	Less Accum. Depreciation		0		0		
184	Motor Vehicles		30,000		34,000		
185	Less Accum. Depreciation		0		0		
186	Building		200,000		100,000		
187	Less Accum. Depreciation		0		0		
188	Land		110,000		70,000		
189	Other		0		0		
190	Total Property, Plant and Equipment		380,000	70.4	234,000	50.9	146,000
191							
192	Intangible Assets						
193	Patent		60,000	11.1	60,000	13.0	0
194	Total Non-Current Assets		440,000	81.5	344,000	74.8	96,000
195	TOTAL ASSETS		540,000	100.0	460,000	100.0	80,000
196							
197	LIABILITIES						
198	Current Liabilities						
199	Bank Overdraft		10,000		0		
200	Accounts Payable		38,000		19,000		
201	GST Clearing (Payable)		3,000		1,000		
202	Taxation Payable		21,000		18,000		
203	Dividends Payable		20,000		20,000		
204	Accrued Expenses		2,000		3,000		
205	Unearned Revenues		0		0		
206	Other		0		0		
207	Total Current Liabilities		94,000	17.4	61,000	13.3	33,000
208							
209	Non-Current Liabilities						
210	Mortgage		0		0		
211	Debentures		120,000		100,000		
212	Total Non-Current Liabilities		120,000	22.2	100,000	21.7	20,000
213	TOTAL LIABILITIES		214,000	39.6	161,000	35.0	53,000
214							
215	NET ASSETS		326,000	60.4	299,000	65.0	27,000
216							

	A	B	C	D	E	F	G
217	SHAREHOLDERS' EQUITY						
218	Share Capital		234,000	43.3	234,000	50.9	0
219	Reserves		53,000	9.8	38,000	8.3	15,000
220	Retained Profits		39,000	7.2	27,000	5.9	12,000
221	TOTAL SHAREHOLDERS' EQUITY		326,000	60.4	299,000	65.0	27,000
222							
223	Proof A = L + OE		0		0		
224							
225	RATIOS						
226							
227	Profitability		2020		2019		
228							
229	Gross Profit			%		%	
230	Net Profit			%		%	
231	Return on Ordinary Shareholders' Equity			%		%	
232	Return on Total Assets			%		%	
233	Earnings Per Share			Cents		Cents	
234	Price Earnings Ratio			Times		Times	
235	Dividend Per Ordinary Share			Cents		Cents	
236	Dividend Yield			%		%	
237							
238	Liquidity						
239	Current			TO 1		TO 1	
240	Quick			TO 1		TO 1	
241	Turnover of Inventories			Times		Times	
242				Days		Days	
243	Turnover of Accounts Receivable			Times		Times	
244				Days		Days	
245							
246	Stability						
247	Equity			%		%	
248	Debt			%		%	
249	Debt/Equity			TO 1		TO 1	
250	Time Interest Earned			Times		Times	
251							

Woolworths Group Limited⁴

To date, much of the data you have been given has been provided from an internal source; that is, you have access to full information because you have access to the accounting system. However, for a public company, external stakeholders can only use the information presented to them in the published annual report for their analysis of both past and future performance of the company. The annual report contains the audited financial statements and a lot of supplementary information. Indeed, to analyse the financial information, you may need to look past the published financial reports themselves and look into the additional information presented in the Notes to the financial statements. This will contain more detailed financial information. In addition, the company itself may do some analysis of key ratios and other data and present these in the report to shareholders.

Woolworths Annual report has five sections:

- Section 1 – Performance Highlights
- Section 2 – Business Review
- Section 3 – Directors' Report
- Section 4 – Financial Report
- Section 5 – Other Information.

⁴ Woolworths Ltd changed its name to Woolworths Group Limited on 8 December 2017.

Consider the information provided by Woolworths.

The Group Financial Performance is presented in Section 1 of the Annual Report under 'Performance Highlights'. Note there are ratios already calculated; for example, gross profit ratio, earnings per share (EPS) and dividend per share.

You can see that the directors have made an attempt to 'tell the Woolworths story' for the year and to try to demystify the complex financial data.

Section 1 of the Woolworths Group Limited 2018 Annual Report – Performance Highlights (page 14)

Group Financial Performance

Sales \$56.7B ▲ 3.4% from 2017 Sales growth of 4.3% and 4.5% respectively in Australian Food and Endeavour Drinks was the major driver of the group's sales increase.	Gross profit as a % of sales 29.5% ▲ 41 bps from 2017 Driven primarily by the gross profit improvement in Australian Food.	Cost of doing business (CODB) as a % of sales 25.0% ▲ 16 bps from 2017 Primarily due to an increase in Australian Food investment in strategic initiatives and higher depreciation.
EBIT \$2,548M ▲ 9.5% from 2017 Largely driven by a 9.6% increase in Australian Food.	Net financing cost ▼ 20.6% From 2017 Due to the continued reduction in net debt.	NPAT attributable to equity holders of the parent entity \$1,605M ▲ 12.9% from 2017 With corresponding basic EPS up 11.4% to 123.4 cents.
All on a continuing operations basis.		

GROUP SALES – FULL YEAR

	FY18 52 WEEKS \$M	FY17 52 WEEKS \$M	CHANGE
Continuing operations			
Australian Food	37,379	35,836	4.3%
Endeavour Drinks	8,271	7,913	4.5%
New Zealand Food	5,898	5,843	0.9%
<i>New Zealand Food (NZD)</i>	6,396	6,188	3.4%
BIG W	3,566	3,542	0.7%
Hotels	1,612	1,553	3.7%
EziBuy	-	154	n.m.
Sales from continuing operations	56,726	54,841	3.4%
Discontinued operations			
Home Improvement	-	903	n.m.
Petrol	4,784	4,640	3.1%
Sales from discontinued operations	4,784	5,543	n.m.
Group sales continuing and discontinued operations	61,510	60,384	1.9%

Woolworths Group Limited 2018 Annual Report (page 15)

EARNINGS/(LOSS) BEFORE INTEREST AND TAX (EBIT/LBIT)

	FY18 (52 WEEKS) \$M	FY17 (52 WEEKS) \$M	CHANGE
Continuing operations			
Australian Food	1,757	1,603	9.6%
Endeavour Drinks	516	503	2.8%
New Zealand Food	262	292	(10.4)%
<i>New Zealand Food (NZD)</i>	284	309	(8.2)%
BIG W	(110)	(151)	(26.9)%
Hotels	259	233	11.1%
Central overheads	(136)	(154)	(11.7)%
EBIT continuing operations	2,548	2,326	9.5%
Discontinued operations			
Home Improvement	27	159	n.m.
Petrol	168	158	7.1%
EBIT discontinued operations	195	317	n.m.
Group EBIT continuing and discontinued operations	2,743	2,643	3.8%

GROUP PROFIT AND LOSS FOR THE 52 WEEKS ENDED 24 JUNE 2018

		FY18 52 WEEKS	FY17 52 WEEKS	CHANGE
Continuing operations				
Earnings before interest, tax, depreciation, amortisation and rent (EBITDAR)	(\$m)	5,712	5,398	5.8%
Rent	(\$m)	(2,061)	(2,034)	1.3%
Earnings before interest, tax, depreciation and amortisation (EBITDA)	(\$m)	3,651	3,364	8.6%
Depreciation and amortisation	(\$m)	(1,103)	(1,038)	6.4%
EBIT	(\$m)	2,548	2,326	9.5%
Net financing costs	(\$m)	(154)	(194)	(20.6)%
Income tax expense	(\$m)	(718)	(651)	10.4%
NPAT	(\$m)	1,676	1,481	13.1%
Non-controlling interests	(\$m)	(71)	(59)	17.9%
NPAT from continuing operations attributable to equity holders of the parent entity	(\$m)	1,605	1,422	12.9%
NPAT from discontinued operations attributable to equity holders of the parent entity	(\$m)	119	112	6.3%
NPAT attributable to equity holders of the parent entity		1,724	1,534	12.5%

MARGINS – continuing operations

Gross profit	(%)	29.5	29.0	41 bps
Cost of doing business	(%)	25.0	24.8	16 bps
EBIT	(%)	4.5	4.2	25 bps

EARNINGS PER SHARE (EPS) AND DIVIDENDS

Weighted average ordinary shares on issue (million)		1,300.5	1,283.9	1.3%
Total Group basic EPS (cents)		132.6	119.4	11.1%
Basic EPS (cents) – from continuing operations		123.4	110.8	11.4%
Diluted EPS (cents) – from continuing operations		123.1	110.5	11.4%
Interim dividend per share (cents)		43.0	34.0	26.5%
Final dividend per share (cents) ¹		50.0	50.0	–
Special dividend per share (cents) ¹		10.0	–	n.m.
Total dividend per share (cents)		103.0	84.0	22.6%

¹ Final 2018 dividend and special dividend payable on 12 October 2018 will be fully franked.

Certain comparatives in the above tables have been reclassified to conform to the current period's presentation to better reflect the nature of financial position and performance of the Group.

Published Financial Reports – Section 4 of the Annual Report

The published financial statements for Woolworths comprise:

- Consolidated Statement of Profit or Loss
- Consolidated Statement of Other Comprehensive Income
- Consolidated Statement of Financial Position
- Consolidated Statement of Changes in Equity
- Consolidated Statement of Cash Flows.

Have a discussion with your peers and consider how these reports differ from those you have seen prior to this. For example, the Statement of Profit or Loss does not contain a lot of detailed revenue and expense items. Have a look for other differences.

Woolworths Group Limited 2018 Annual Report (page 62)

Consolidated Statement of Profit or Loss

	NOTE	2018 \$M	2017 \$M
Continuing Operations			
Revenue from the sale of goods and services		56,726	54,841
Other operating revenue		239	193
Total operating revenue		56,965	55,034
Cost of sales		(40,256)	(39,105)
Gross profit		16,709	15,929
Other revenue		222	244
Branch expenses		(10,854)	(10,671)
Administration expenses		(3,529)	(3,176)
Earnings before interest and tax		2,548	2,326
Financing costs	2.2	(154)	(194)
Profit before income tax		2,394	2,132
Income tax expense	3.6.1	(718)	(651)
Profit for the period from continuing operations		1,676	1,481
Discontinued Operations			
Profit from discontinued operations, after tax	5.1	119	112
Profit for the period		1,795	1,593
Profit attributable to:			
Equity holders of the parent entity		1,724	1,534
Non-controlling interests		71	59
		1,795	1,593
Profit attributable to equity holders of the parent entity relates to:			
Profit from continuing operations		1,605	1,422
Profit from discontinued operations		119	112
		1,724	1,534
		CENTS	CENTS
Earnings Per Share (EPS) attributable to equity holders of the parent entity			
Basic EPS	4.1	132.6	119.4
Diluted EPS	4.1	132.3	119.1
EPS attributable to equity holders of the parent entity from continuing operations			
Basic EPS	4.1	123.4	110.8
Diluted EPS	4.1	123.1	110.5

The above Consolidated Statement of Profit or Loss should be read in conjunction with the accompanying Notes to the Consolidated Financial Statements.

Woolworths Group Limited 2018 Annual Report (page 63)

Consolidated Statement of Other Comprehensive Income

	2018 \$M	2017 \$M
Profit for the period	1,795	1,593
Other comprehensive income		
<i>Items that may be reclassified to profit or loss</i>		
<i>Hedging reserve</i>		
Movement in the fair value of cash flow hedges	34	4
Income tax effect	(11)	1
<i>Foreign currency translation reserve (FCTR)</i>		
Movement in translation of foreign operations taken to equity	(92)	(4)
Income tax effect	11	(3)
<i>Items that will not be reclassified to profit or loss</i>		
<i>Equity instrument reserve</i>		
Movement in the fair value of investments in equity securities	17	2
<i>Retained earnings</i>		
Actuarial gain/(loss) on defined benefit superannuation plans	(1)	3
Income tax effect	-	(1)
Other comprehensive (loss)/income (net of tax)	(42)	2
Total comprehensive income for the period	1,753	1,595
Total comprehensive income attributable to:		
Equity holders of the parent entity	1,682	1,536
Non-controlling interests	71	59
	1,753	1,595
Total comprehensive income from continuing operations attributable to:		
Equity holders of the parent entity	1,563	1,420
Non-controlling interests	71	59
	1,634	1,479

The above Consolidated Statement of Other Comprehensive Income should be read in conjunction with the accompanying Notes to the Consolidated Financial Statements.

Woolworths Group Limited 2018 Annual Report (page 64)

Consolidated Statement of Financial Position

	NOTE	2018 \$M	2017 \$M
Current assets			
Cash and cash equivalents	4.5	1,273	909
Trade and other receivables	3.1	801	745
Inventories		4,233	4,207
Other financial assets	3.2	53	16
		6,360	5,877
Assets held for sale	5.2	821	1,244
Total current assets		7,181	7,121
Non-current assets			
Trade and other receivables	3.1	93	72
Other financial assets	3.2	522	507
Property, plant and equipment	3.3	9,026	8,438
Intangible assets	3.4	6,465	6,533
Deferred tax assets	3.6.3	271	372
Total non-current assets		16,377	15,922
Total assets		23,558	23,043
Current liabilities			
Trade and other payables	3.7	6,960	6,812
Borrowings	4.6.3	604	254
Current tax payable		110	81
Other financial liabilities	3.8	50	314
Provisions	3.9	1,451	1,470
		9,175	8,931
Liabilities directly associated with assets held for sale	5.2	21	21
Total current liabilities		9,196	8,952
Non-current liabilities			
Borrowings	4.6.3	2,199	2,777
Other financial liabilities	3.8	61	116
Provisions	3.9	942	1,011
Other non-current liabilities	3.10	311	311
Total non-current liabilities		3,513	4,215
Total liabilities		12,709	13,167
Net assets		10,849	9,876
Equity			
Contributed equity	4.3	6,055	5,615
Reserves	4.4	353	357
Retained earnings		4,073	3,554
Equity attributable to equity holders of the parent entity		10,481	9,526
Non-controlling interests		368	350
Total equity		10,849	9,876

The above Consolidated Statement of Financial Position should be read in conjunction with the accompanying Notes to the Consolidated Financial Statements.

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Consolidated Statement of Changes in Equity

	ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT ENTITY					NON- CONTROLLING INTERESTS \$M	TOTAL EQUITY \$M
	SHARE CAPITAL \$M	SHARES HELD IN TRUST \$M	RESERVES \$M	RETAINED EARNINGS \$M	TOTAL \$M		
2018							
Balance at 25 June 2017	5,719	(104)	357	3,554	9,526	350	9,876
Profit after income tax expense	-	-	-	1,724	1,724	71	1,795
Other comprehensive income (net of tax)	-	-	(41)	(1)	(42)	-	(42)
Total comprehensive income (net of tax)	-	-	(41)	1,723	1,682	71	1,753
Dividends paid	-	-	-	(1,208)	(1,208)	(53)	(1,261)
Dividends received - Treasury shares	-	-	-	2	2	-	2
Issue of shares under employee long term incentive plans	-	21	(21)	-	-	-	-
Issue of shares under the dividend reinvestment plan (DRP)	482	(3)	-	-	479	-	479
Purchase of shares by the Woolworths Employee Share Trust	-	(60)	-	-	(60)	-	(60)
Share-based payments expense	-	-	58	-	58	-	58
Other	-	-	-	2	2	-	2
Balance at 24 June 2018	6,201	(146)	353	4,073	10,481	368	10,849

	ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT ENTITY					NON- CONTROLLING INTERESTS \$M	TOTAL EQUITY \$M
	SHARE CAPITAL \$M	SHARES HELD IN TRUST \$M	RESERVES \$M	RETAINED EARNINGS \$M	TOTAL \$M		
2017							
Balance at 26 June 2016	5,347	(95)	342	2,877	8,471	311	8,782
Profit after income tax expense	-	-	-	1,534	1,534	59	1,593
Other comprehensive income (net of tax)	-	-	-	2	2	-	2
Total comprehensive income (net of tax)	-	-	-	1,536	1,536	59	1,595
Dividends paid	-	-	-	(860)	(860)	(21)	(881)
Dividends received - Treasury shares	-	-	-	2	2	-	2
Issue of shares under employee long term incentive plans	-	37	(37)	-	-	-	-
Issue of shares under the dividend reinvestment plan (DRP)	317	-	-	-	317	-	317
Issue of shares from underwrite of DRP	55	-	-	-	55	-	55
Purchase of shares by the Woolworths Employee Share Trust	-	(46)	-	-	(46)	-	(46)
Share-based payments expense	-	-	52	-	52	-	52
Other	-	-	-	(1)	(1)	1	-
Balance at 25 June 2017	5,719	(104)	357	3,554	9,526	350	9,876

The above Consolidated Statement of Changes in Equity should be read in conjunction with the accompanying Notes to the Consolidated Financial Statements.

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Consolidated Statement of Cash Flows

	NOTE	2018 ¹ \$M	2017 ¹ \$M
Cash flows from operating activities			
Receipts from customers		66,899	65,746
Payments to suppliers and employees		(63,124)	(61,722)
Net financing costs paid		(184)	(234)
Income tax paid		(661)	(668)
Net cash provided by operating activities	4.5	2,930	3,122
Cash flows from investing activities			
Proceeds from the sale of property, plant and equipment and assets held for sale		85	280
Payments for property, plant and equipment and intangible assets		(1,848)	(1,910)
Proceeds from the sale of subsidiaries and investments, net of cash disposed		287	201
Payments for the purchase of businesses, net of cash acquired		(38)	(6)
Payment to Home Consortium acquisition trust		(251)	-
Repayment from Home Consortium acquisition trust		251	-
Dividends received		4	4
Net cash used in investing activities		(1,510)	(1,431)
Cash flows from financing activities			
Proceeds from issue of shares – underwrite of DRP		-	56
Proceeds from borrowings		4	184
Repayment of borrowings		(284)	(1,406)
Dividends paid	4.2	(724)	(541)
Dividends paid to non-controlling interests		(56)	(22)
Net cash used in financing activities		(1,060)	(1,729)
Net increase/(decrease) in cash and cash equivalents		360	(38)
Effects of exchange rate changes on foreign currency		-	(1)
Cash and cash equivalents at start of period		917	956
Cash and cash equivalents at end of period	4.5	1,277	917

¹ The above Consolidated Statement of Cash Flows includes both continuing and discontinued operations. Amounts related to discontinued operations are disclosed in Note 5.1.

The above Consolidated Statement of Cash Flows should be read in conjunction with the accompanying Notes to the Consolidated Financial Statements.

As we saw earlier, the published financial statements can be quite brief, with a lot of the detailed information available in the Notes to the accounts. Have a look at the Statement of Financial Position and in particular, the items called 'Trade and other receivables', 'Other financial assets', and 'Property, plant and equipment'. You can see that the Notes contain more information than is contained on the face of the published financial statements.

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3 ASSETS AND LIABILITIES

3.1 Trade and other receivables

	2018 \$M	2017 \$M
Current		
Trade receivables ¹	138	121
Provision for impairment	(9)	(15)
	129	106
Other receivables ¹	311	324
Provision for impairment	(20)	(19)
	291	305
Prepayments	381	334
Total current trade and other receivables	801	745
Non-current		
Prepayments	16	1
Other receivables	77	71
Total non-current trade and other receivables	93	72
Total	894	817

¹ Includes supplier rebates of \$100 million (2017: \$99 million).

Q SIGNIFICANT ACCOUNTING POLICIES

TRADE AND OTHER RECEIVABLES

Trade and other receivables are recognised initially at fair value and are subsequently measured at amortised cost using the effective interest method, less an allowance for impairment. They generally have terms of up to 30 days.

IMPAIRMENT OF TRADE AND OTHER RECEIVABLES

The Group assesses at the end of each reporting period whether there is objective evidence that the Group's receivables are impaired.

The recoverable amount of the Group's receivables is calculated as the present value of estimated future cash flows, discounted at the original effective interest rate (that is, the effective interest rate computed at initial recognition of these financial assets). Receivables with a short duration are not discounted. A provision for impairment of receivables is not recognised until objective evidence is available that a loss event has occurred.

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Notes to the Consolidated Financial Statements

3.2 Other financial assets

	2018 \$M	2017 \$M
Current		
Derivatives	53	16
	53	16
Non-current		
Derivatives	366	389
Listed equity securities	96	79
Investments in associates	57	38
Other	3	1
	522	507
Total	575	523



SIGNIFICANT ACCOUNTING POLICIES

DERIVATIVES

Refer to Note 4.7 for details of derivatives.

LISTED EQUITY SECURITIES

The Group's investments in listed equity securities are designated as financial assets at 'fair value through other comprehensive income'. Investments are initially measured at fair value net of transaction costs and in subsequent periods, are measured at fair value with any change recognised in other comprehensive income. Upon disposal, the cumulative gain or loss recognised in other comprehensive income is transferred within equity.

3.3 Property, plant and equipment

	DEVELOPMENT PROPERTIES \$M	FREEHOLD LAND, WAREHOUSE, RETAIL AND OTHER PROPERTIES \$M	LEASEHOLD IMPROVEMENTS \$M	PLANT AND EQUIPMENT \$M	TOTAL ² \$M
2018					
Cost	641	1,335	2,899	9,870	14,745
Less: accumulated depreciation/amortisation	(1)	(110)	(1,101)	(4,507)	(5,719)
Carrying amount at end of period	640	1,225	1,798	5,363	9,026
<i>Movement:</i>					
Carrying amount at start of period	518	1,318	1,696	4,906	8,438
Additions	217	19	277	1,437	1,950
Acquisition of businesses	-	-	-	1	1
Disposals ¹	(48)	(19)	(16)	(40)	(123)
Transfer from/(to) assets held for sale	(10)	(115)	8	(37)	(154)
Depreciation expense	-	(28)	-	(894)	(922)
Amortisation expense	-	-	(163)	-	(163)
Transfers and other	(35)	58	-	3	26
Effect of movements in foreign exchange rates	(2)	(8)	(4)	(13)	(27)
Carrying amount at end of period	640	1,225	1,798	5,363	9,026

1 Net loss on disposal and write off of property, plant and equipment during the year from continuing operations was \$31 million.

2 Includes an accumulated provision for impairment of \$212 million.

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ASSETS AND
LIABILITIES

3

3.3 Property, plant and equipment (continued)

2017	DEVELOPMENT PROPERTIES \$M	FREEHOLD LAND, WAREHOUSE, RETAIL AND OTHER PROPERTIES \$M	LEASEHOLD IMPROVEMENTS \$M	PLANT AND EQUIPMENT \$M	TOTAL ⁴ \$M
Cost	519	1,436	2,719	9,258	13,932
Less: accumulated depreciation/amortisation	(1)	(118)	(1,023)	(4,352)	(5,494)
Carrying amount at end of period	518	1,318	1,696	4,906	8,438
<i>Movement:</i>					
Carrying amount at start of period	357	1,319	1,796	4,791	8,263
Additions	198	114	229	1,322	1,863
Acquisition of businesses	-	3	-	-	3
Disposals ¹	(6)	(39)	(19)	(47)	(111)
Transfer from/(to) assets held for sale ²	51	(146)	(140)	(276)	(511)
Depreciation expense ³	-	(25)	-	(846)	(871)
Amortisation expense ³	-	-	(172)	-	(172)
Impairment expense	-	-	2	(23)	(21)
Transfers and other	(83)	89	(1)	(19)	(14)
Effect of movements in foreign exchange rates	1	3	1	4	9
Carrying amount at end of period	518	1,318	1,696	4,906	8,438

1 Net loss on disposal and write off of property, plant and equipment during the year from continuing operations was \$47 million.

2 Includes transfer of Home Improvement properties from assets held for sale.

3 Includes \$23 million relating to discontinued operations.

4 Includes an accumulated provision for impairment of \$259 million.

Q SIGNIFICANT ACCOUNTING POLICIES

CARRYING VALUE

The Group's property, plant and equipment are measured at cost less accumulated depreciation/amortisation and accumulated impairment losses. The cost of self-constructed assets includes the cost of materials, direct labour and a proportion of overheads. The cost of development properties (those being constructed or developed for future use) includes borrowing, holding and development costs until the asset is complete.

The cost and accumulated depreciation/amortisation excludes assets with a nil written down value (2017: \$5,173 million excluded to conform with the current period's presentation).

DEPRECIATION

Assets are depreciated on a straight-line basis over their estimated useful lives. Leasehold improvements are amortised over the shorter of the remaining period of the individual leases or the estimated useful life of the improvement to the Group. Useful lives are reassessed each period. Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate assets.

The expected useful lives are as follows:

Buildings	25 - 40 years
Plant and equipment	2.5 - 10 years
Leasehold improvements	Up to a maximum of 25 years (retail properties) or 40 years (hotels)

PROCEEDS FROM SALE OF ASSETS

The gross proceeds from asset sales are recognised at the date that an unconditional contract of sale is exchanged with the purchaser. The net gain/(net loss) is recognised in the Consolidated Statement of Profit or Loss.

IMPAIRMENT

Property, plant and equipment are tested for impairment in accordance with the policy for impairment of non-financial assets disclosed in Note 3.5.

See also Note 4, 'Capital Structure, Financing and Risk Management', and trace some of these figures back to the Statement of Financial Position (on page 387).

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Notes to the Consolidated Financial Statements

4 CAPITAL STRUCTURE, FINANCING AND RISK MANAGEMENT

4.1 Earnings per share

	2018	2017
Profit for the period attributable to equity holders of the parent entity used in earnings per share (\$m)		
Continuing operations	1,605	1,422
Discontinued operations	119	112
	1,724	1,534
Weighted average number of shares used in earnings per share (shares, millions)¹		
Basic earnings per share	1,300.5	1,283.9
Diluted earnings per share ²	1,303.9	1,287.3
Basic earnings per share (cents per share)¹		
Continuing operations	123.4	110.8
Discontinued operations	9.2	8.6
	132.6	119.4
Diluted earnings per share (cents per share)^{1,2}		
Continuing operations	123.1	110.5
Discontinued operations	9.2	8.6
	132.3	119.1

1 Weighted average number of shares has been adjusted to remove Treasury shares held by Woolworths Custodian Pty Ltd (as trustee of various employee share trusts).

2 Includes 3.4 million (2017: 3.4 million) shares deemed to be issued for no consideration in respect of employee options and performance rights.

4.2 Dividends

	2018			2017		
	CENTS PER SHARE	TOTAL AMOUNT \$M	DATE OF PAYMENT	CENTS PER SHARE	TOTAL AMOUNT \$M	DATE OF PAYMENT
Current year interim	43	561	6 April 2018	34	438	7 April 2017
Prior year final	50	647	6 October 2017	33	422	7 October 2016
Dividends paid during the year	93	1,208		67	860	
Issue of shares under the DRP		(482)			(317)	
Dividends received on Treasury shares		(2)			(2)	
Net cash outflow		724			541	

All dividends are fully franked at a 30% tax rate.

On 20 August 2018, the board of directors declared a final dividend in respect of the 2018 year of 50 cents per share and a special dividend of 10 cents per share, both fully franked at a 30% tax rate. The amounts will be paid on 12 October 2018 and are expected to be \$657 million and \$131 million respectively. As the dividends were declared subsequent to 24 June 2018, no provision had been made as at 24 June 2018.

Dividend Reinvestment Plan (DRP)

The DRP remains active. Eligible shareholders may participate in the DRP in respect of all or part of their shareholding. There is currently no limit on the number of shares that can participate in the DRP.

The Directors determined that there will be no DRP discount applied to the October 2018 final and special dividends, and for the foreseeable future. A 1.5% discount was applied to the 2018 interim dividend. Shares will be allocated to shareholders under the DRP for the 2018 final dividend at an amount equal to the average of the daily volume weighted average market price of ordinary shares of the Company traded on the ASX over the period of 10 trading days commencing on 18 September 2018. The last date for receipt of election notices for the DRP is 17 September 2018.

During the year, 40% (2017: 37%) of the dividends paid were reinvested in the shares of the Company.

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4.2 Dividends (continued)

Franking credit balance

	2018 \$M	2017 \$M
Franking credits available for future financial years (tax paid basis, 30% tax rate)	2,610	2,577

The above amount represents the balance of the franking accounts as at the end of the period, adjusted for:

- Franking credits that will arise from the payment of income tax payable at the end of the period; and
- Franking debits that will arise from the payment of dividends provided at the end of the period.

The above franking credit balance excludes \$134 million (2017: \$134 million) attributable to non-controlling interests.

4.3 Contributed equity

	2018		2017	
	NUMBER (M)	\$M	NUMBER (M)	\$M
SHARE CAPITAL				
1,313,323,941 fully paid ordinary shares (2017: 1,294,416,480)				
<i>Movement:</i>				
Balance at start of period	1,294.4	5,719	1,278.8	5,347
Issue of shares as a result of the Dividend Reinvestment Plan ¹	18.9	482	15.6	372
Balance at end of period	1,313.3	6,201	1,294.4	5,719
SHARES HELD IN TRUST				
<i>Movement:</i>				
Balance at start of period	(3.4)	(104)	(2.7)	(95)
Issue of shares under employee long-term incentive plans	0.5	18	1.1	37
Shares acquired by share trust	(2.0)	(60)	(1.8)	(46)
Balance at end of period	(4.9)	(146)	(3.4)	(104)
Contributed equity at end of period	1,308.4	6,055	1,291.0	5,615

¹ A net increase in the issued share capital of the Company of 18,907,461 fully paid ordinary shares (2017: 15,657,755) occurred as a result of the dividend issue on 6 October 2017 of 10,333,713 fully paid ordinary shares and the dividend issue on 6 April 2018 of 8,573,748 fully paid ordinary shares pursuant to the Dividend Reinvestment Plan (DRP).

Share capital

Holders of ordinary shares are entitled to receive dividends as declared and are entitled to one vote per share at shareholders' meetings. In the event of winding up of the Company, ordinary shareholders rank after all other shareholders and creditors and are fully entitled to any proceeds of liquidation.

Share options and performance rights

Refer to Note 6.2 for further details of outstanding options and performance rights. Options and performance rights carry no rights to dividends and no voting rights.

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Notes to the Consolidated Financial Statements

4.4 Reserves

	2018 \$M	2017 \$M
Hedging reserve	(43)	(66)
Foreign currency translation reserve	58	139
Remuneration reserve	279	242
Asset revaluation reserve	17	17
Equity instrument reserve	42	25
	353	357



SIGNIFICANT ACCOUNTING POLICIES

The nature and purpose of each reserve account is outlined as follows:

HEDGING RESERVE

The hedging reserve comprises the effective portion of the cumulative net change in the fair value of cash flow hedging instruments related to hedged transactions that have not yet occurred. The cumulative deferred gain or loss on the hedge is recognised in the Consolidated Statement of Profit or Loss when the hedged transaction impacts the profit or loss, consistent with the applicable accounting policy. Refer to Note 4.7 for details of hedging.

FOREIGN CURRENCY TRANSLATION RESERVE (FCTR)

FCTR comprises all foreign exchange differences arising from the translation of the financial statements of foreign operations where their functional currency is different to the Group's presentation currency. Gains and losses on hedging instruments that are designated as hedging instruments for hedges of net investments in foreign operations are also included in the FCTR. Refer to Note 4.7 for details of hedging.

REMUNERATION RESERVE

The employee remuneration reserve comprises the fair value of share based payment plans recognised as an expense in the Consolidated Statement of Profit or Loss. Refer to Note 6.2 for details of share based payments. Shares issued by the Woolworths Employee Share Trust are charged against the reserve.

ASSET REVALUATION RESERVE

The asset revaluation reserve arose on acquisition of the previously equity accounted investment in MGW Hotels Pty Ltd and relates to the change in fair value of the Group's interest in non-current assets from the date of acquisition of the initial investment to the date control was achieved.

EQUITY INSTRUMENT RESERVE

The equity instrument reserve arises on the revaluation of investments in equity securities. Subsequent to initial recognition, they are measured at fair value with any changes recognised in other comprehensive income. Upon disposal, the cumulative gain or loss recognised in other comprehensive income is transferred within equity. Refer to Note 3.2 for details of listed equity securities.

Section 5 of the Annual Report – Other information

In Section 5, 'Other Information', a 'Condensed five year summary' is given to assist shareholders with analysing the results of the company. You can see that it is a horizontal analysis over five years, but also that key ratios we have examined are shown with additional information.

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Condensed five year summary*

PROFIT OR LOSS

		2018 ³ 52 WEEKS	2017 ³ 52 WEEKS	2016 ³ 52 WEEKS	2015 ³ 52 WEEKS	2014 52 WEEKS
Continuing operations before significant items¹						
Sales ²	(\$m)	56,726	54,841	52,883	58,240	60,213
Cost of goods sold ²	(\$m)	(40,017)	(38,912)	(37,718)	(42,025)	(43,735)
Gross profit	(\$m)	16,709	15,929	15,165	16,215	16,478
Gross profit margin ²	(%)	29.5	29.0	28.7	27.8	27.4
Cost of doing business (CODB)	(\$m)	(14,161)	(13,603)	(12,719)	(12,242)	(12,703)
CODB margin ²	(%)	25.0	24.8	24.1	21.0	21.1
Selling, general and administration expenses (excluding, rent, depreciation and amortisation)	(\$m)	(10,997)	(10,531)	(9,770)	(9,316)	(9,807)
EBITDAR	(\$m)	5,712	5,398	5,395	6,899	6,671
EBITDAR margin ²	(%)	10.1	9.8	10.2	11.8	11.1
Rent (including fitout rent)	(\$m)	(2,061)	(2,034)	(1,964)	(1,951)	(1,899)
EBITDA	(\$m)	3,651	3,364	3,431	4,948	4,772
EBITDA margin ²	(%)	6.4	6.1	6.5	8.5	7.9
Depreciation and amortisation	(\$m)	(1,103)	(1,038)	(985)	(975)	(997)
EBIT	(\$m)	2,548	2,326	2,446	3,973	3,775
EBIT margin ²	(%)	4.5	4.2	4.6	6.8	6.3
Net financing costs	(\$m)	(154)	(179)	(208)	(213)	(219)
Woolworths Notes interest	(\$m)	-	(15)	(38)	(40)	(41)
Profit before tax and significant items ¹	(\$m)	2,394	2,132	2,200	3,720	3,515
Taxation	(\$m)	(718)	(651)	(677)	(1,113)	(1,057)
Profit after tax and before significant items ¹	(\$m)	1,676	1,481	1,523	2,607	2,458
Discontinued operations before significant items^{1,3}						
Profit/(Loss) after tax and before significant items ^{1,3}	(\$m)	119	112	(117)	(162)	-
Group net profit after tax before significant items¹	(\$m)	1,795	1,593	1,406	2,445	2,458
Significant items after tax ¹	(\$m)	-	-	(3,754)	(308)	-
Group net profit/(loss) after tax	(\$m)	1,795	1,593	(2,348)	2,137	2,458
Non-controlling interests	(\$m)	(71)	(59)	1,113	9	(6)
Profit/(Loss) attributable to equity holders of the parent entity after tax	(\$m)	1,724	1,534	(1,235)	2,146	2,452

* The five year summary has been condensed to include financial information and metrics considered key to the Annual Report. The full version of the five year summary can be found on the Woolworths Group website. Visit www.woolworthsgroup.com.au

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Condensed five year summary*

BALANCE SHEET

		2018 ³ 52 WEEKS	2017 ³ 52 WEEKS	2016 ³ 52 WEEKS	2015 ³ 52 WEEKS	2014 52 WEEKS
Inventory	(\$m)	4,233	4,207	4,558	4,872	4,693
Accounts payable	(\$m)	(5,316)	(5,195)	(4,809)	(5,040)	(4,588)
Net investment in inventory	(\$m)	(1,083)	(988)	(251)	(168)	105
Receivables	(\$m)	894	817	850	1,002	965
Other creditors	(\$m)	(4,348)	(4,409)	(5,029)	(3,124)	(3,185)
Fixed assets and investments	(\$m)	9,179	8,556	8,371	10,164	9,774
Net assets held for sale ³	(\$m)	800	1,223	898	382	621
Intangible assets	(\$m)	6,465	6,533	6,591	6,245	6,335
Total funds employed⁴	(\$m)	11,907	11,732	11,430	14,501	14,615
Net tax balances	(\$m)	161	291	458	654	523
Net assets employed	(\$m)	12,068	12,023	11,888	15,155	15,138
Cash and borrowings ⁵	(\$m)	(1,530)	(2,122)	(3,414)	(3,391)	(3,433)
Other financial assets and liabilities	(\$m)	311	(25)	308	(632)	(1,179)
Total net assets	(\$m)	10,849	9,876	8,782	11,132	10,526
Non-controlling interests	(\$m)	368	350	311	298	273
Shareholders' equity	(\$m)	10,481	9,526	8,471	10,834	10,253
Total equity	(\$m)	10,849	9,876	8,782	11,132	10,526
ROFE – Group before significant items ^{1,6}	(%)	25.0	25.0	19.1	–	–
ROFE – Continuing operations ⁶	(%)	24.1	22.3	–	–	–
Return on Equity – Continuing and discontinued operations before significant items ⁷	(%)	17.2	17.0	14.4	23.3	25.4

* The five year summary has been condensed to include financial information and metrics considered key to the Annual Report. The full version of the five year summary can be found on the Woolworths Group website. Visit www.woolworthsgroup.com.au

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Condensed five year summary*

CASH FLOW

	2018 ³ 52 WEEKS \$M	2017 ³ 52 WEEKS \$M	2016 ³ 52 WEEKS \$M	2015 ³ 52 WEEKS \$M	2014 52 WEEKS \$M
Continuing and discontinued operations³					
EBITDA	3,846	3,704	(593)	4,465	4,772
Movement in net investment in inventory	69	628	32	246	103
Other operating cash flows and other non cash ⁸	(140)	(308)	4,056	-	99
Net interest paid	(184)	(234)	(289)	(310)	(338)
Tax paid	(661)	(668)	(848)	(1,056)	(1,163)
Operating cash flow	2,930	3,122	2,358	3,345	3,473
Payments for property, plant, equipment and intangible assets	(1,848)	(1,910)	(1,983)	(2,173)	(1,899)
Proceeds on disposal of property, plant and equipment, subsidiaries and investments	372	481	737	926	231
Other investing cash flows	(34)	(2)	(21)	(87)	(364)
Cash flow from operations after investing activities	1,420	1,691	1,091	2,011	1,441
New shares issued	-	56	-	6	35
Issue of subsidiary shares to non-controlling interests	-	-	120	170	183
Movement in gross debt	(280)	(1,222)	(366)	(206)	(67)
Dividends paid	(724)	(541)	(1,185)	(1,539)	(1,491)
Dividends paid to non-controlling interests	(56)	(22)	(32)	(29)	(32)
Transactions with non-controlling interests	-	-	(12)	(13)	-
Effects of exchange rate changes on balance of cash held in foreign currencies	-	(1)	7	11	4
Net cash flow	360	(39)	(377)	411	73

SHAREHOLDER VALUE AND FINANCIAL STRENGTH

	2018 ³ 52 WEEKS	2017 ³ 52 WEEKS	2016 ³ 52 WEEKS	2015 ³ 52 WEEKS	2014 52 WEEKS
Shareholder Value					
Ordinary share price closing (\$)	29.96	25.36	20.56	27.39	35.66
Market capitalisation (\$bn)	39.2	32.8	26.3	34.7	44.9
Weighted average shares on issue (m)	1,300.5	1,283.9	1,263.5	1,256.6	1,248.0
Basic EPS continuing operations before significant items ¹ (cents per share)	123.4	110.8	116.8	203.9	196.5
Total dividend ⁹ (cents per share)	93.0	84.0	77.0	139.0	137.0
Payout ratio before significant items ¹ (%)	70.7	70.7	70.4	71.7	70.3
Financial Strength					
Fixed charges cover ¹⁰ (times)	2.6	2.5	2.3	2.9	3.0

* The five year summary has been condensed to include financial information and metrics considered key to the Annual Report. The full version of the five year summary can be found on the Woolworths Group website. Visit www.woolworthsgroup.com.au

Analysis and interpretation

You will have seen that there is a great deal of data in the Woolworths Group Limited report. It may be useful to summarise this in a meaningful way by creating a table similar to Table 5.4. Building a spreadsheet may also be very helpful in this regard.

Table 5.4 Analysis of data collected

Woolworths Group Limited							
Data Analysis							
			Annual Report				
			2018	2017	2016	2015	2014
Profitability							
Sales	\$m	Given	\$56,726	\$54,841	\$52,883	\$58,240	\$60,213
Cost of Goods Sold	\$m	Given	\$40,017	\$38,912	\$37,718	\$42,025	\$43,735
Gross Profit	\$m	Given	\$16,709	\$15,929	\$15,165	\$16,215	\$16,478
Gross Profit Margin/Ratio	%	Given	29.5%	29.0%	28.7%	27.8%	27.4%
EBITDA	\$m	Given	\$3,651	\$3,364	\$3,431	\$4,948	\$4,772
EBITDA Margin	%	Given	6.4%	6.1%	6.5%	8.5%	7.9%
EBIT	\$m	Given	\$2,548	\$2,326	\$2,446	\$3,973	\$3,775
EBIT Margin	%	Given	4.5%	4.2%	4.6%	6.8%	6.3%
Net Profit After Tax	\$m	Given	\$1,724	\$1,534	-\$1,235	\$2,146	\$2,452
Net Profit Margin/Ratio	%	Calculated	3.04%	2.80%	-2.34%	3.68%	4.07%
Shareholders' Equity	\$m	Given	\$10,481	\$9,526	\$8,471	\$10,834	\$10,253
Average Shareholders' Equity	\$m	Calculated	\$10,004	\$8,999	\$9,653	\$10,544	
Total Assets	\$m	Given	\$23,558	\$23,043			
Return on Shareholders' Equity	%	Calculated	17.23%	17.05%	-12.79%	20.35%	
Return on Total Assets	%	Calculated	10.94%				
Av Number of Ord Shares	m	Given	1300.5	1283.9	1263.5	1256.6	1248.0
Ord Share Price Closing	\$	Given	\$29.96	\$25.36	\$20.56	\$27.39	\$35.66
Dividend Per Share	\$	Given	\$0.93	\$0.84	\$0.77	\$1.39	\$1.37
Earnings Per Share	\$	Calculated	\$1.33	\$1.19	-\$0.98	\$1.71	\$1.96
Price Earnings Ratio	Times	Calculated	22.53	21.31	-20.98	16.02	18.19
Dividend Yield	%	Calculated	3.10%	3.31%	3.75%	5.07%	3.84%

Woolworths Group Limited						
Data Analysis						
			Annual Report			
			2018	2017	2016	2015
Liquidity						
Current Assets	\$m	Given	\$7,181	\$7,121		
Current Liabilities	\$m	Given	\$9,196	\$8,952		
Cash	\$m	Given	\$1,273	\$909		
Receivables	\$m	Given	\$801	\$745		
Inventories	\$m	Given	\$4,233	\$4,207		
Credit Sales	\$m	Not Given				
Working Capital	\$m	Calculated	−\$2,015	−\$1,831		
Current Ratio	: 1	Calculated	0.78	0.80		
Quick Asset Ratio	: 1	Calculated	0.23	0.18		
Turnover of Inventories	Times	Calculated	9.48			
Turnover of Inventories	Days	Calculated	38.49			
Turnover of Accounts Receivable		Not Calculated				
Stability						
Total Equity	\$m	Given	\$10,849	\$9,876		
Total Debt	\$m	Given	\$12,709	\$13,161		
Financing Costs	\$m	Given	\$154	\$194		
Equity Ratio	%	Calculated	46.05%	42.86%		
Debt Ratio	%	Calculated	53.95%	57.11%		
Debt/Equity	Times	Calculated	1.17	1.33		
Times Interest Earned	Times	Calculated	16.55	11.99		

Having obtained various pieces of data from the Woolworths annual report, let us now interpret this to see what tentative conclusions we can draw from these ratios to give us an indication of the financial performance and position.

Profitability

The profitability of the business appears to have improved in 2018, as the gross profit margin of 29.5 per cent, the EBIT margin of 4.5 per cent and the net profit after tax margin of 3.04 per cent have all increased from the previous year. However, if you look back to 2014 you will see that the gross profit margin was lower and the net profit margin was higher. This could indicate that expenses have increased. It is also true that the supermarket landscape has changed over the last four years with the introduction of new players into the field. This is borne out by the EBIT margin, which has decreased steadily over the period. Return on shareholders' equity and return on assets are healthy. On the whole, the figures show that Woolworths appears to be turning around the previous few years of less than favourable results.

Liquidity

Measures of financial liquidity are showing a mixed picture, and with only two years of figures, it is difficult to draw conclusions. The current ratio is declining, whereas the quick ratio is increasing. This could indicate better use of cash. With a turnover of inventories of 9.48 times a year (38.49 days), consideration needs to be given to the type of inventories. While this may be slow for a supermarket, you would need to consider what other inventories are in the mix from the other companies in the group.

Stability

Management has also decreased its reliance on debt over the period, and increased its reliance on shareholders' equity. This will help the company to achieve a more stable footing and is showing an increase in the times interest earned from 11.99 times in 2017 to 16.55 times in 2018.

Cash flow

The cash flow for the company, as shown in the Statement of Cash Flows, is improving as well. The increase in the cash and cash equivalents at the end of the period (from -\$38 million to \$360 million) has been achieved in spite of less net cash being provided by operating activities over the year. More cash has been used in investments but less cash in financing activities primarily because less money was borrowed.

While these tentative conclusions can be drawn from the figures, it is important that you look behind the figures and take a more holistic view of the company. Such factors include the following questions. What market are they in? What are the trends occurring in the market? What are the competitors doing? (The competitors are Coles [previously owned by Wesfarmers], Aldi, Metcash [IGA, Foodland and Friendly Grocer], Costco and FoodWorks, with potential competitors being AmazonFresh, Kaufland and Lidl.) Has the discontinuation of the petrol business in 2017 and of the home improvements business (Masters) in 2016 been beneficial? Is the company positioning itself for the longer term? Answers are required to carry out a full assessment of the financial performance and position of the company.

Interesting accounting fact

Did you know?

Sharemarket tables

The *Australian Financial Review* provides daily sharemarket tables for the 300 Leaders, Industrials, Mining & Oil and a range of other financial products on the Australian Stock Exchange (ASX).

Follow the weblink or type 'Australian Financial Review Share Tables' into a search engine. By clicking on the Download for the Daily Edition, you will see something similar to this:



ASX 300 Leaders

52-Week High	Low	Day's High	Low	ASX Code	Company Name	Last Sale	+ or -	Vol 100s	Quotes Buy	Sell	Dividend c per Share	Times Cov	NTA	Div Yield (%)	EPS (¢)	P/E Ratio
4.26	2.92	3.83	3.78	ABP	Abacus Prop Grp	3.82	-1	6622	3.81	3.83	17.75	2.06	3.13	4.65	36.52	10.5
1.635	.60	1.63	1.575	AX1	Accent Grp	1.61	+3	16123	1.61	1.62	6.00 f	1.04	.07	3.73	6.22	25.9
7.05	5.47	6.71	6.61	ABC	Adelaide Brighton.....	6.70	+8	9998	6.69	6.70	20.50 f	1.36	1.46	3.06	27.90	24.0
8.78	2.65	8.62	7.74	APT	Afterpay Touch.....	8.15	-39	37337	8.15	8.17	-	-	-	-	-.35	-
26.74	20.16	21.13	20.84	AGL	AGL Energy.....	20.99	+15	21562	20.99	21.00	104.00 p	1.22	6.95	4.95	127.10	16.5
2.79	1.125	1.19	1.15	AGI	Ainsworth Game Tech.....	1.15	-3.5	5810	1.15	1.16	1.50 f	6.00	.86	1.30	9.00	12.8
8.50	6.31	7.81	7.56	ALQ	ALS.....	7.75	+3	23216	7.75	7.76	17.00 p	.61	.29	2.19	10.34	75.0
23.28	8.07	22.90	22.30	ALU	Altium.....	22.81	+38	19053	22.81	22.82	25.00	1.29	.95	1.10	32.37	70.5
.505	.125	.37	.365	AJM	Altura Min.....	.365	-5	18122	.365	.37	-	-	-	-	-.49	-
2.96	1.842	2.71	2.66	AWC	Alumina.....	2.70	+5	91566	2.69	2.70	17.20 f	.88	.90	6.37	15.13	17.8
1.235	.835	.965	.945	AMA	AMA Grp.....	.95	-1	3066	.945	.95	2.50 f	1.24	-.01	2.63	3.09	30.7
2.25	.70	.74	.705	AYS	Amaysim Au.....	.71	-1.5	23740	.71	.72	9.10 f	.04	-.73	12.82	.40	177.5
16.78	13.12	13.83	13.64	AMC	Ampcor.....	13.83	+19	28087	13.82	13.83	56.02	1.24	-1.78	4.05	69.35	19.9
5.49	3.69	3.81	3.73	AMP	AMP.....	3.73	-6	176710	3.73	3.74	29.00 p	1.01	1.38	7.77	29.30	12.7
27.44	20.30	26.75	26.21	ANN	Ansell.....	26.67	+45	7817	26.67	26.68	55.86 p	7.94	4.53	2.09	443.64	6.0
30.80	26.11	26.75	26.46	ANZ	ANZ Banking Grp	26.52	-14	54706	26.52	26.54	160.00 f	1.46	18.27	6.03	234.10	11.3

Source: 300 leaders on ASX Sharemarket, *Australian Financial Review*

Not only does it show the price of the shares but also the ratios for dividend per share, times cover, dividend yield, earnings per share (EPS) and price earnings (P/E) ratios which are available daily for these companies.

Similar daily information is available from newspapers such as the *Courier Mail*:

	Last Sale	Move	12 month High	Low	Sales 100	Div Yield	P/E
Qube Hold	2.45	-.01	2.83	2.15	30235	2.24f	52.34
QV Equ	1.145		1.39	1.105	2944	3.58f	33.58
Ramellus	.57		.645	.32	9271		16.43
Ramsay	53.78	-.22	76.18	53.40	7257	2.57f	23.29
RCTTomlin	2.98		4.74	2.855	7129	2.85u	16.65
Rea Group	90.89	-1.31	93.70	62.00	1859	1.06f	62.68
Redbubble	1.57	-.01	2.07	.635	529		
ReeceAus	12.55	+10	12.83	7.952	612	1.62f	28.04
ReefCino us	2.98	-.14	3.42	2.41	5	7.33u	13.77
REG	3.23	-.10	4.20	3.20	7867	5.80f	17.24
Regis	5.14	+07	5.23	3.54	17172	3.16f	15.51
RelianceW	5.34	-.05	5.99	3.123	12912	1.21f	29.06
Resmed	14.13	-.16	14.62	8.935	16915	.89u	37.91
Resolute	1.275	+02	1.35	.945	20436	1.59u	8.08
Rest. Brd	8.05		8.05	6.61			
Ridley	1.37	-.01	1.62	1.245	275	3.08f	17.47
Rio Tinto	83.07	+99	87.09	58.79	17867	4.46f	13.06
Ruralco	3.06		3.31	2.70	604	4.90f	12.49
RuralFund	2.15	-.02	2.45	1.80	1925	4.62u	11.3

ST	Last Sale	Move	12 month High	Low	Sales 100	Div Yield	P/E
Sandfire	9.33	-.01	10.04	5.38	7918	2.25f	14.58
Santos	6.28	+16	6.46	2.87	52365		100
Saracen	2.13	-.07	2.31	1.10	52850		30.01
Scentre sp	4.39	+02	4.445	3.70	160769	4.97p	5.5
ScotPacif	3.15	-.04	3.46	2.395	1142	100	14.99

Top 10 by value			
Stock	Value	Price	Change
Wesfarmers	235,626,748	49.35	-0.09
BHP Billiton	226,862,884	33.82	+0.59
Macquarie	195,493,795	126.7	+4.49
CBA	187,225,383	73.23	+0.62
ANZ Bank	172,685,234	28.66	+0.18
WestpacB	164,464,405	29.23	+0.16
CSL Ltd	163,397,171	194.84	-0.16
NAB	156,069,606	27.5	+0.21
Rio Tinto	148,748,605	83.07	+0.99
Woolworths	146,131,882	30.63	-0.33

Top 10 by volume			
Stock	Volume	Price	Change
SundanceF	73,880,793	0.073	+0.003
AVZ Min	53,070,980	0.11	+0.01
ClancyExp	50,082,094	0.004	0.00
TelstraCo	44,275,748	2.62	0.00
Caesneus	36,548,306	0.001	-0.001
AustMines	31,938,564	0.09	-0.013
BarakaE&R	29,899,189	0.005	-0.001
MaximusRe	18,956,570	0.001	0.00
ReachEngy	18,385,456	1.79	+0.09
MirvacGrp	18,319,593	2.15	-0.05

Source: Daily share market information, *Courier Mail*

Other sources of data

Trend analysis can be obtained from sites such as Morningstar. The Morningstar data for Woolworths in Figures 5.2 and 5.3 is available by following the weblink.



Morningstar
data

Woolworths Group Ltd WOLWF

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Quote Chart Stock Analysis Performance **Key Ratios** Financials Valuation Insiders Ownership Filings Bonds

Financials Export Ascending

	2009-06	2010-06	2011-06	2012-06	2013-06	2014-06	2015-06	2016-06	2017-06	2018-06	TTM
Revenue AUD Mil	49,698	51,918	54,280	55,441	58,674	60,952	60,868	58,276	55,668	56,965	56,965
Gross Margin %	25.6	26.1	26.0	26.4	26.9	27.0	27.1	26.8	28.6	29.3	29.3
Operating Income AUD Mil	-5,196	-5,208	-5,617	-5,561	-6,384	-6,656	-7,554	-9,398	-8,890	-9,052	-9,052
Operating Margin %	-10.5	-10.0	-10.3	-10.0	-10.9	-10.9	-12.4	-16.1	-16.0	-15.9	-15.9
Net Income AUD Mil	1,836	2,020	2,124	1,817	2,259	2,451	2,146	-1,234	1,534	1,724	1,724
Earnings Per Share AUD	1.50	1.63	1.73	1.48	1.82	1.95	1.70	-0.98	1.19	1.32	1.32
Dividends AUD	—	—	1.19	1.24	0.62	1.36	1.70	1.66	0.96	0.93	0.93
Payout Ratio % *	—	—	68.5	69.4	32.9	70.6	87.5	—	37.4	84.4	75.5
Shares Mil	1,226	1,238	1,216	1,228	1,243	1,253	1,260	1,264	1,288	1,303	1,303
Book Value Per Share * USD	—	5.23	6.67	6.49	6.19	7.34	6.59	5.31	5.46	5.61	5.64
Operating Cash Flow AUD Mil	—	—	—	—	—	—	—	—	—	—	—
Cap Spending AUD Mil	-1,678	-1,818	-2,125	-2,140	-1,970	-1,882	-2,172	-1,983	-1,909	-1,848	-1,848
Free Cash Flow AUD Mil	926	942	866	733	749	1,590	1,172	375	1,212	1,082	1,082
Free Cash Flow Per Share * USD	—	0.65	0.76	0.35	1.18	0.52	0.60	0.58	0.86	0.49	—
Working Capital AUD Mil	-1,555	-1,954	-1,695	-964	-639	-383	-1,508	-1,566	-1,830	-2,015	—

* Indicates calendar year-end data information

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Figure 5.2 Morningstar trend analysis for Key Ratios, Financials for Woolworths

TTM in the last column is Trailing Twelve Months. It is the figures for the latest 12 months rather than the fiscal year ending in June (06).

Quote	Chart	Stock Analysis	Performance	Key Ratios	Financials	Valuation	Insiders	Ownership	Filings	Bonds
Income Statement Balance Sheet Cash Flow										
Statement Type: Annual Data Type: As of Reported Period: 5 Years Show Report Dates: Ascending Data Scroll: View: \$ % 1.0 Rounding: .0 .0 Export:										
Fiscal year ends in June										
AUD in Million except per share data										
		2014-06	2015-06	2016-06	2017-06	2018-06	TTM			
Revenue		60,952	60,868	58,276	55,669	56,965	56,965			
Cost of revenue		44,475	44,345	42,677	39,740	40,256	40,256			
Gross profit		16,478	16,524	15,599	15,929	16,709	16,709			
▼ Operating expenses										
Sales, General and adm...		11,962	5,511	12,964	13,134	13,804	13,804			
Other operating expens...		11,172	18,567	12,033	11,686	11,957	11,957			
Total operating expens...		23,134	24,079	24,997	24,820	25,761	25,761			
Operating income		(6,656)	(7,555)	(9,398)	(8,891)	(9,052)	(9,052)			
Interest Expense		278	255	246	194	154	154			
Other income (expense)		10,449	10,877	11,004	11,217	11,600	11,600			
Income before income t...		3,515	3,068	1,360	2,132	2,394	2,394			
Provision for income t...		1,057	930	520	650	718	718			
Minority interest		7	(9)	(1,113)	60	71	71			
Other income		7	(9)	(1,113)	60	71	71			
Net income from contin...		2,458	2,137	840	1,482	1,676	1,676			
Net income from discon...		—	—	(3,188)	111	119	119			
Other		(7)	9	1,113	(60)	(71)	(71)			
Net income		2,452	2,146	(1,235)	1,534	1,724	1,724			
Net income available t...		2,452	2,146	(1,235)	1,534	1,724	1,724			
Earnings per share										
Basic		1.97	1.71	(0.98)	1.19	1.33	1.33			
Diluted		1.96	1.70	(0.98)	1.19	1.32	1.32			
Weighted average share...										
Basic		1,248	1,257	1,264	1,284	1,301	1,301			
Diluted		1,253	1,260	1,264	1,288	1,303	1,303			
EBITDA		4,789	4,465	2,628	3,340	3,651	3,651			

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Figure 5.3 Morningstar trend analysis for Woolworths in Financials

Don't be put off by this data. Just look for the important items about the calculation of profit. Three points to note:

- Net income is used instead of net profit after tax.
- Operating expenses are not the same set-out as we are accustomed to. Look where they have interest and other income. Operating income is therefore not what you would expect and comprises negative figures.
- When interpreting these figures, you are using them to predict what will happen in the future. The last three years are the significant years.

The important figures are therefore gross profit, income before income tax (net profit before tax), net income (net profit after tax) and EBITDA.

Other important trend analysis of ratios can be found under:

- Key ratios, Profitability – gross margin, EBT (earnings before tax) margin, return on assets, return on equity and interest coverage.
- Key ratios, Financial Health – notice in the Balance Sheet items that all these % figures are a percentage of total assets. This is vertical analysis. The other important figures are current, quick and debt/equity.
- Key ratios, Efficiency Ratios – days sales outstanding, days inventory, receivables turnover and inventory turnover.

Note that the calculations and data used by Morningstar may not always be the same as what you obtained in your analysis in Table 5.4. For example, in Table 5.4, the items for sales, cost of goods sold and gross profit come from the Condensed Five Year Summary shown on page 396. However, if you look at the Statement of Profit or Loss on page 385, the statement shows other operating revenue is added to sales to get total operating revenue. Cost of sales is then subtracted to get to the same gross profit figure. Even in the same published annual report, the figures are presented differently so you must be careful in carrying out any analysis. These revenue and cost of sales figures are the ones used by Morningstar and are not the same as shown in the Five Year Summary. This is just one example of the problems that analysts face in the analysis of financial reports. The important thing is to obtain consistent data in any trend analysis, but be aware of how the data is obtained and how it is calculated. Regardless of other sources of data, we will continue to use the concepts and ratio calculations you have learnt so far in this book.

The Morningstar links for **5 and 10-year trend analysis** of the other major companies that have been studied can be found by following the weblinks.

Industry benchmarks can also be obtained from sites such as Reuters. Follow the weblink to obtain the information for Woolworths. A typical report appears in Figure 5.4.

GROWTH RATES

	Company	industry	sector
Sales (MRQ) vs Qtr. 1 Yr. Ago	3.19	6.84	8.91
Sales (TTM) vs TTM 1 Yr. Ago	3.51	6.79	4.85
Sales - 5 Yr. Growth Rate	-0.59	10.81	8.37
EPS (MRQ) vs Qtr. 1 Yr. Ago	12.34	16.78	6.07
EPS (TTM) vs TTM 1 Yr. Ago	10.89	--	--
EPS - 5 Yr. Growth Rate	-7.42	8.10	7.01
Capital Spending - 5 Yr. Growth Rate	-1.27	6.36	6.25

FINANCIAL STRENGTH

	Company	industry	sector
Quick Ratio (MRQ)	0.32	0.91	0.87
Current Ratio (MRQ)	0.78	1.15	1.47
LT Debt to Equity (MRQ)	20.98	54.29	5.51
Total Debt to Equity (MRQ)	26.74	71.24	50.36
Interest Coverage (TTM)	11.99	93.23	34.04

Figure 5.4 Reuters Financials for Woolworths Group Ltd (WOW.AX), accessed 15 October 2018

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Morningstar –
JB Hi-Fi

Morningstar –
Qantas

Morningstar –
Flight Centre



Reuters –
Woolworths

The company is Woolworths, the industry (global) is Food and Drug Retailing and the sector is Non-Cyclical Consumer Goods. The most relevant benchmark is the industry. Comparison can therefore be made between Woolworths (the company) and the industry. Data for this global industry available at 15 October 2018 relates to:

• P/E ratio	60.86	• Net profit margin	4.02
• Quick ratio	0.91	• EBITD margin	—
• Current ratio	1.15	• Inventory turnover	15.07
• Debt to equity	71.24	• Return on assets	3.68
• Interest coverage	93.23	• Return on equity	11.2
• Gross margin	35.66	• Dividend yield	1.57



Reuters – JB
Hi-Fi

Reuters –
Qantas

Reuters – Flight
Centre

This Reuters data is shown here to give you an idea of what type of benchmark data is available. These are global industry benchmarks and this has to be borne in mind when making comparisons. Better Australian industry benchmarks may be available from industry associations and groups, and IBISWorld. However, this data is not freely available.

Other Reuters sites include JB Hi-Fi, Qantas and Flight Centre. Follow the weblinks to view the information.

Given the extra trend analysis by Morningstar and the industry benchmark data by Reuters for Woolworths, you could now add these pieces of data to the interpretation on pages 400–1. In all the exercises given, applicable trends and benchmarks will be included, so you will use those in your written report. Morningstar and Reuters were included so that you may become aware of the types of information available and the inherent issues you need to be aware of when using this type of data for analysis.

Real-world application



Do financial statements still matter?

Jan McCallum

Two US academics caused a stir in 2016 when they published *The End of Accounting and the Path Forward for Investors and Managers*, a book arguing that financial statements are no longer useful for investors. Australian researchers have tested the theory and the results are surprising.

NASDAQ-listed Tesla has never reported a profit but for a while in 2017 investors who bought its futuristic electric car and battery vision pushed the company's market capitalisation above that of General Motors.

Tesla sold about 76 000 cars in 2016 and expects to deliver 100 000 cars in 2017; General Motors sold 10 million cars in 2016, and pays a dividend.

The stratospheric valuations given to companies such as Tesla, Amazon and Google support the argument of US academics Baruch Lev and Feng Gu that information such as balance sheets, income and cash flow statements have 'fading usefulness' when investors have access to information from other sources that can quickly move share prices.

The increasing value the market assigns to knowledge-based intangible assets also means that traditional accounting does not always capture true company value, they argue in their book *The End of Accounting and the Path Forward for Investors and Managers*.

Financial statements still matter in Australia

Three Australian academics have tested the Lev/Gu arguments, however, and say financial statements are still relevant to Australian investors.

Nikole Gyles, Dr Dean Hanlon and Professor Matthew Pinnuck followed Lev and Gu's research approach to discover that reported net profit and shareholders' equity are still relevant for investment decisions, 'and remain so over time'.

Their research, funded by CPA Australia, used the annual reports of Australian Securities Exchange-listed companies over a 24-year period, from 1992 to 2015 and resulted in 29 838 observations, an average of 1243 listed firms a year.

'Reported net profit and shareholders' equity are consistently incorporated into companies' share prices over the time period examined with, on average, 64 per cent of share prices comprising information contained within reported net profit and shareholders' equity,' they say.

How to value companies

Lev and Gu argue a company's value lies in its strategic, value-enhancing resources and more value should be placed on non-accounting information, such as:

- enterprise strategy, or business model, and its execution
- fundamental indicators such as number of new customers, churn rate, proven oil reserves or insurance policy renewal rates.

Non-transactional events such as the failure or success of a drug test, a competitor's new product, or regulatory action can quickly affect a share price, they note. Even the result of a company's own action will take time to be reported in financial statements.

A major part of Lev and Gu's argument, which the Tesla example illustrates, is that investors are placing increased value on intangible assets.

They say intangible capital 'is becoming the leading corporate value creator' but intangible values are often understated while profitability measures such as return on equity and return on assets are overstated.

Why the difference between the US and Australia?

Gyles, Hanlon and Pinnuck say their findings might relate to the differences between Australian and US accounting standards and the countries' markets.

'In the US, reported net profit and shareholders' equity are calculated using US GAAP, which are often referred to as "rules-based" standards. In Australia, however, net profit and shareholders' equity are calculated using IFRS-based accounting standards, which are often referred to as "principles-based" standards and have a primary focus of capturing a transaction's substance over form,' they say.

US markets are more liquid than Australia's, with more frequent trading based on information, some of which is non-accounting.

Australian investors may still rely on reported net profit and shareholders' equity to make investment decisions, while US investors consider other firm fundamentals including cash- and intangibles-related amounts.

The Australian researchers tested whether there was divergence between US and Australian investors on intangibles, Dr Hanlon told INTHEBLACK.

For industries such as telecoms with high intangible asset valuations, they still found financial reports were valuable to Australian investors.

Hanlon said financial statements often fulfil a 'confirmatory role'. The information might not be new but confirms investors' expectations.

'While we are not suggesting there is no room for improvement, our findings do not mark the end of accounting as we know it, as has been the call from some industry and academic writers,' says the report, first presented at the Australian Accounting Standards Board research forum on November 24, 2017.

Source: From 'Do financial statements still matter?' by Jan McCallum, intheblack.com, 19 December 2017. Copyright © 2017 CPA Australia Ltd. Used by permission.



Do financial
statements still
matter?

5.23

You have been approached by S Dunford, a client of yours, who presents you with the following information.

Nelson Ltd				
Statement of Profit or Loss for year ended				
	30 June 2020		30 June 2019	
	\$	\$	\$	\$
Sales				
Cash	120 000		100 000	
Credit	<u>600 000</u>	720 000	<u>420 000</u>	520 000
Less Cost of Goods Sold		<u>310 000</u>		<u>210 000</u>
Gross profit		<u>410 000</u>		<u>310 000</u>
Less Other Operating Expenses				
<i>Selling Expenses</i>				
Advertising	14 000		10 000	
Delivery Expenses	38 000		28 000	
Depreciation on Delivery Vehicles	<u>24 000</u>	76 000	<u>20 000</u>	58 000
<i>Administrative Expenses</i>				
Insurance	36 000		16 000	
Audit Fees	6 000		6 000	
Directors' Fees	10 000		10 000	
Office Expenses	<u>66 000</u>	118 000	<u>48 000</u>	80 000
<i>Finance Expenses</i>				
Bad Debts	16 000		12 000	
Interest on Debentures	<u>20 000</u>	<u>36 000</u>	<u>14 000</u>	<u>26 000</u>
Total Other Expenses		<u>230 000</u>		<u>164 000</u>
Net profit before tax		180 000		146 000
 <i>Less Income Tax</i>		<u>59 000</u>		<u>42 000</u>
Net profit after tax		121 000		104 000
<i>Add Retained earnings from previous years</i>		<u>40 000</u>		<u>24 000</u>
		161 000		128 000
 <i>Less Dividends</i>	83 000		68 000	
Transfer to General Reserve	<u>40 000</u>	<u>123 000</u>	<u>20 000</u>	<u>88 000</u>
Retained earnings at end of year		<u>\$38 000</u>		<u>\$40 000</u>

Nelson Ltd
Statement of Financial Position as at

	30 June 2020		30 June 2019	
	\$	\$	\$	\$
Current Assets				
Accounts Receivable	130 000		110 000	
Inventories	200 000		160 000	
Prepaid Expenses	<u>20 000</u>	350 000	<u>10 000</u>	280 000
Non-Current Assets				
Delivery Vehicles	120 000		100 000	
Land	200 000		100 000	
Buildings	<u>200 000</u>	<u>520 000</u>	<u>100 000</u>	<u>300 000</u>
		<u>\$870 000</u>		<u>\$580 000</u>
Current Liabilities				
Bank Overdraft	72 000		40 000	
Accounts Payable	87 000		78 000	
GST Payable	3 000		2 000	
Tax Payable	59 000		42 000	
Dividends Payable	83 000		68 000	
Accrued Expenses	<u>8 000</u>	312 000	<u>10 000</u>	240 000
Non-Current Liabilities				
Debentures		<u>160 000</u>		<u>80 000</u>
		472 000		320 000
Shareholders' Equity				
Share Capital	300 000		200 000	
Reserves	60 000		20 000	
Retained Earnings	<u>38 000</u>	<u>398 000</u>	<u>40 000</u>	<u>260 000</u>
		<u>\$870 000</u>		<u>\$580 000</u>

Additional information

From the previous records of Nelson Ltd it was found that:

- shareholders' equity at 1 July 2018 was \$200 000
- total assets were \$500 000 at 1 July 2018
- inventories were \$140 000 at 1 July 2018
- accounts receivable were \$100 000 at 1 July 2018
- share prices were \$1.40 on 30 June 2019 and \$1.75 on 30 June 2020
- the company has a 30-day credit policy
- share capital is \$1 fully paid shares.

Nelson Ltd Statement of Cash Flows for year ended 30 June		
	2020 \$	2019 \$
Cash flows from operating activities		
Net cash from operating activities	100 000	98 000
Cash flows from investing activities		
Net cash used in investing activities	(244 000)	(54 000)
Cash flows from financing activities		
Net cash from financing activities	<u>112 000</u>	<u>(50 000)</u>
Net increase (decrease) in cash held	(32 000)	(6 000)
Cash at beginning of reporting period	<u>(40 000)</u>	<u>(34 000)</u>
Cash at end of reporting period	<u><u>\$(72 000)</u></u>	<u><u>\$(40 000)</u></u>

The following industry averages were available from industry publications.

	2020 %	2019 %
Gross profit ratio	64%	65%
Net profit ratio	19%	21%
Return on ordinary shareholders' equity	28%	30%
Return on total assets	16%	16%
Current ratio	0.98 : 1	1.02 : 1
Quick asset ratio	0.58 : 1	0.55 : 1
Equity ratio	40%	43%
Debt ratio	60%	57%
Turnover of inventories	2.1 times	1.9 times
Turnover of accounts receivable	6 times	6 times
Earnings per share	35c	36c
Price earnings ratio	3.3 times	3.4 times
Dividend yield	14%	14%

S Dunford is considering investing money in the firm and has asked you for advice. Analyse the above and write a report to S Dunford on your findings.

5.24

The comparative financial statements of Polikas Ltd are as follows:

Statement of Cash Flows for year ended 30 June

	2020	2019
	\$	\$
Cash flows from operating activities		
Net cash from operating activities	20 000	30 000
Cash flows from investing activities		
Net cash used in investing activities	2 550	(3 000)
Cash flows from financing activities		
Net cash from financing activities	<u>(20 000)</u>	<u>10 000</u>
Net increase (decrease) in cash held	2 550	37 000
Cash at beginning of reporting period	<u>22 450</u>	<u>(14 550)</u>
Cash at end of reporting period	<u><u>\$25 000</u></u>	<u><u>\$22 450</u></u>

Statement of Profit or Loss for year ended 30 June

	2020	2019
	\$	\$
Sales Revenue	812 000	780 000
<i>Less</i> Cost of Goods Sold	<u>520 000</u>	<u>500 000</u>
Gross profit	<u>292 000</u>	<u>280 000</u>
Operating Expenses	245 000	229 000
Interest Expense	<u>10 000</u>	<u>15 000</u>
	<u>255 000</u>	<u>244 000</u>
Net profit before income tax	37 000	36 000
<i>Less</i> Income Tax	<u>11 050</u>	<u>11 000</u>
Net profit after income tax	<u><u>\$25 950</u></u>	<u><u>\$25 000</u></u>

Statement of Financial Position as at 30 June		
	2020	2019
	\$	\$
Assets		
Current Assets		
Cash at Bank	25 000	22 450
Short Term Fixed Deposits	26 000	30 000
Accounts Receivable (net)	83 000	79 000
Inventory	215 000	207 400
Prepaid Expenses	8 800	9 900
	<u>357 800</u>	<u>348 750</u>
Non-Current Assets		
Plant and Equipment	<u>170 000</u>	<u>151 000</u>
Total assets	<u>\$527 800</u>	<u>\$499 750</u>
Liabilities		
Current Liabilities		
Accounts Payable	82 000	69 000
Other Payables	<u>44 600</u>	<u>35 000</u>
	126 600	104 000
Non-Current Liabilities		
Debentures	<u>135 000</u>	<u>140 000</u>
Total liabilities	<u>261 600</u>	<u>244 000</u>
Net assets	<u>\$266 200</u>	<u>\$255 750</u>
Shareholders' Equity		
Paid-up Ordinary Capital (100 000 shares)	100 000	100 000
Retained Earnings	<u>166 200</u>	<u>155 750</u>
Total shareholders' equity	<u>\$266 200</u>	<u>\$255 750</u>

During both years, Polikas Ltd declared and paid dividends of \$15 500. On 30 June 2020, the market price per ordinary share was \$3.20 and at 30 June 2019 \$3.10. On 1 July 2018, inventories were \$205 000, net accounts receivables were \$80 500, total assets were \$458 250 and total shareholders' equity was \$246 250. All sales are on credit.

You are required to calculate the following ratios and prepare a written report to management:

a gross profit ratio	h current ratio
b net profit ratio	i quick asset ratio
c return on total assets	j debt ratio
d earnings per share	k equity ratio
e price earnings ratio	l rate of turnover of accounts receivable
f dividend yield	m turnover of inventories
g return on ordinary shareholders' equity	n times interest earned.

5.25

Read the newspaper article and answer the following questions.

- a What does the author mean by the 'opportunity cost' to Wesfarmers of buying Coles?
- b What was Wesfarmers' return on equity in 2006 and then in 2017?
- c Who are some of the competitors to Coles in the grocery market?
- d The author refers to the returns of another company – CSL. What has been their yearly returns?
- e At the time of writing, what stores are in the Wesfarmers group?

Buying Coles seemed like a good idea at time

Alan Kohler

The supermarket chain has been a drag every year

Wesfarmers' acquisition of Coles in 2007, now to be undone, is one of the great illustrations of opportunity cost in history. There should be an MBA unit built around it.

It's true that Wesfarmers' share price has outperformed the ASX 200 since then (+21 per cent versus -3 per cent) and it's also true that, at \$19 billion [bn] or so, Coles on its own now appears to be worth what Wesfarmers paid for Coles plus Target, Kmart and Officeworks (\$19.3bn).

But that's not saying much. I'd say Target and Kmart pretty much cancel each other out (Kmart's a success, Target a disaster), and what's Officeworks worth? Wesfarmers tried to float it last year for \$1.5bn and that failed: so, \$1bn?

Let's be generous and say the combination of Target and Kmart is not zero but \$1bn. That means the Coles investment has produced a total capital return in 10 years of 10 per cent, or 1 per cent per annum.

But that's not the worst of it. In 2006, Wesfarmers' return on equity was 27.7 per cent. In 2017 it was 12.4 per cent.

Apart from Coles it was 26.6 per cent; the retailer's 9.7 per cent ROE dragged the total down, as it has done every year since 2008.

Before 2007, Wesfarmers prided itself on its consistent ROE of 20 per cent-plus. After 2007, not so much: return on equity suddenly wasn't that important any more. Fair enough — ideas change, as the CEO over those 10 years, Richard Goyder, has always argued.

But that's not the worst of it. In 2006 Wesfarmers had roughly the same market cap as Amazon, about \$40bn. Now Amazon is worth \$947bn; Wesfarmers, \$50bn.

The year 2006 was when Amazon started a business called Amazon Web Services, as an experiment, renting out computing power to other companies that needed it.

In April 2015 Amazon disclosed the profitability of AWS for the first time: it then represented two-thirds of the company's total profits; last year it was more than 100 per cent.

That's what is meant by opportunity cost. Buying Coles in 2007 for \$19.3bn has basically meant that Wesfarmers couldn't do anything else for a decade.

No wonder getting rid of it is new CEO Rob Scott's first act. Not that Rich Goyder's Wesfarmers could possibly have produced the 40 per cent per annum compound capital growth that Jeff Bezos has done at Amazon since 2007, but what about CSL's 17 per cent per annum?

That was Wesfarmers' capital growth in the decade before the Coles acquisition — 17 per cent per annum compound.

In the decade after it: 1.8 per cent.

Before 2007, Wesfarmers was a true conglomerate that bought businesses and applied its unique brand of capital discipline and management culture forged by Trevor Eastwood and Michael Chaney.

Those things continued under Richard Goyder, who is rightly regarded as one of the country's finest executives, it's just that they were applied to the wrong business.

The turnaround at Coles under the first CEO that Goyder appointed, Ian McLeod, was remarkable, and put Woolworths under such pressure that it became rattled and made the terrible mistake of throwing \$3bn at a hardware venture that was poorly executed and a bad idea to begin with.

But then Aldi launched in Australia in 2013 and transformed supermarket margins. Then came Amazon and soon Amazon Fresh and then the German hypermarket group Kaufman.

Could all this competition have been predicted? Of course. Ten years before Wesfarmers bought Coles, discount stores had close to 30 per cent of the Australian grocery market, until they were either bought by Coles and Woolies or went bust.

It was only a matter of time before the duopoly was challenged again. That's being done by challengers that can't be bought and definitely aren't going broke.

Source: 'What Coles has cost Wesfarmers', *The Australian*, 19 March 2018. The use of this work has been licensed by Copyright Agency except as permitted by the Copyright Act, you must not re-use this work without the permission of the copyright owner or Copyright Agency.

REVIEW AND REFLECT

This chapter was concerned with the performance analysis of companies. An introduction to companies and the final financial reports for public companies were examined. In addition, the tools of analysis – including vertical, horizontal, trend and ratio analyses – were extended and applied to companies.

5.26 Chapter summary

Complete the following questions and you will have a brief summary of the work on the performance of companies covered in this chapter.

- a What is a company?
- b What are the different types of companies?
- c What are the advantages of companies?
- d What are the different types of shares?
- e What are the three components of shareholders' equity for companies?
- f What are some of the additional company expenses that sole traders and partnerships do not have?
- g How are dividends usually calculated?
- h What are reserves?
- i What are the differences in form between a sole trader and a company?
- j What are the interrelationships between the Statement of Profit or Loss, the Statement of Financial Position and the Statement of Cash Flows?
- k What is the difference between the internal reports and external reports?
- l What is horizontal analysis?
- m What is vertical analysis?
- n What does 'earnings per share' mean?
- o What does the price earnings ratio measure?
- p What does dividend yield measure?
- q Which ratio shows how long it takes for customers to pay their accounts?
- r Which ratios show how liquid a company is?

5.27 Analytical reasoning case

Indicate whether each of the following changes generally signals good or bad news about an entity.

- a Increase in return on assets
- b Decrease in quick ratio
- c Decrease in inventory turnover
- d Decrease in earnings per share
- e Decrease in dividend yield

5.28 Problem-solving case

The following information is available for Gymmart Ltd.

Current ratio	2 : 1
Equity ratio	80%
Issued capital	\$150 000
Retained earnings	\$50 000
Long-term assets	\$180 000
There were no reserves	

What is the value of current liabilities?



5.29 Analytical reasoning case

Xeon Ltd reported net sales of \$300 000, \$330 000 and \$360 000 in the years 2017, 2018 and 2019. If 2017 is the base year, what is the trend percentage for 2019?

5.30 Financial reporting case and group work – Qantas

- a Examine the Qantas Airways Limited annual report; in particular, the five-year history section (e.g. in the 2018 annual report, it is shown on page 3). Form groups and discuss Qantas's performance. Use the following headings: profitability, liquidity and stability.
- b Find data or a graph that shows the return on investment (in the 2018 annual report, it is shown on page 43). Imagine you had \$10 000 to invest in a public company. Would you invest in Qantas? To make this decision you will need to gather additional information, such as the current share price. You may have an opinion on the future of the airline industry. An investment in a particular company is a personal decision, and the members of the group may have different priorities.



Qantas annual
reports



Extra Questions
and Activities

Extra questions and activities

Refer to NelsonNet for extra questions on Chapter 5. These questions include multiple choice, true/false, and a selection of other questions and activities.

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Individual accounts receivable and accounts payable are differentiated by adding extra digits after the main account number – that is, 3104 and 4101, respectively. Where A appears after an account number, this indicates a negative item.

OVERVIEW

- Fully updated for the QCAA Accounting General Senior Syllabus implemented at Units 1 & 2 in 2019 and Units 3 & 4 in 2020
- Comprehensively covers the syllabus and unit objectives using the problem-solving approach valued in the syllabus, with integration of the underpinning factors throughout
- Reflects changing terminology, as well as current practices, extensive use of technology (accounting packages, spreadsheets including business graphics, and the Internet) and real-world applications
- Review and reflect activities at the end of each chapter and numerous questions throughout ensure a steady development of knowledge and understanding
- Questions and activities support the new assessment model and provide opportunities for revision and practice
- Numerous illustrative examples and diagrams to assist learning
- A customisable, interactive NelsonNetBook for digital learning
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