# NEVILLE BOX

# MACMILLAN ACCOUNTING FOR VCE



# ACCOUNTING >> FOR VCE

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## INTRODUCTION

Macmillan Accounting for VCE Units 1 & 2 is your introduction to the concepts of single entry accounting as applied to small business. This textbook deals with all areas of study, outcomes, key knowledge and key skills for Units 1 & 2 of the VCE Accounting Study Design 2019–23.

#### Key features

Your textbook contains a number of important features that are designed to support your learning and prepare you for your assessments.

- Every chapter starts with a list of learning objectives, so that you understand the topics you're about to study. The unit progress bar and chapter outline help you track how far you've progressed in the course.
- Key terms are highlighted in the text, with definitions in the margin nearby.
- The margins also contain study tips, pointing out the do's and don'ts and best practice. Keep these tips in mind when it's time to revise for your SACs.
- At the end of each numbered section of a chapter is a short set of Check Your Understanding questions, which focus on the major concepts introduced in that section. These include icons directing you to the corresponding page of the student workbook.
- Every chapter ends with a review of its key information and a series of practical exam-style exercises. These can be completed in the student workbook; use the icon to find the correct workbook page.
- The final page of each chapter is a checklist of the chapter's core concepts and tasks.
- Many chapters also include case studies, ethical considerations for discussion, or research activities about accounting in the real world.

#### BEST PRACTICE

If accounts payable turnover increases, you may be asked to state one positive and one negative in relation to this change. Revise answers for both possibilities.



When recording a sales return, do not debit the sales account. Make sure that you use the sales returns account.

## Online support

- Use the code on the inside front cover of your textbook to access the digital version of the text.
- Your online resources also include additional support materials.
- Short, interactive review quizzes are provided for each chapter, to help you revise key concepts.
- The spreadsheet icon in the margin shows when a blank Microsoft Excel template is available for use with practical exercises.
- The QR code and weblink located at the end of each chapter link to a Mr Box on Demand video. These short tutorial videos featuring the textbook author will help you achieve maximum success in your studies.



## **ABOUT THE AUTHOR**

#### **Neville Box**

Neville Box is an experienced and highly esteemed educator who has been teaching VCE Accounting since 1981. He has been involved in the development of Accounting Study Designs since 2008, including the new Study Design to be implemented in 2019. His depth and breadth of knowledge, combined with his accessible presentation style, makes him a sought-after presenter for teaching professional development events. Neville currently teaches at St Bernard's College in Essendon.

#### From the author

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# ROLE OF ACCOUNTING IN BUSINESS

Whether large or small,
Australian businesses need
accountants. The success or
failure of almost any business
depends on accounting
information, and the decisions
made on the basis of that
information. Whether you
plan to become a professional
accountant, establish a small
business or just manage
your own finances, it pays to
understand the role accounting
will play in your life.

In this unit, you will learn about:

- different types of financial information
- how to interpret and evaluate the performance of a business
- the suitability of different businesses as investments
- how to record financial data and prepare financial reports.

# Area of Study 1: The role of accounting

On completion of this unit the student should be able to describe the resources required to establish and operate a business, and select and use accounting reports and other information to discuss the success or otherwise of the business.

#### Area of Study 2:

Recording financial data and reporting accounting information for a service business

On completion of this unit the student should be able to identify and record financial data, report and explain accounting information for a service business, and suggest and apply appropriate financial and non-financial indicators to measure business performance.

CHAPTERS



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# LET'S GO ACCOUNTING!

It's Week 1 of VCE and you're opening your Accounting textbook for the first time. Before we address the full details of the subject, let's start with an overview of what accounting is for and get some hands-on experience of real-world accounting and reports.

In this chapter, you will learn about the basic concepts and purposes of accounting. You will also be introduced to some key accounting terms and examine how financial reports present accounting information.

#### **LEARNING OBJECTIVES**

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

- describe what is involved in accounting [1.1]
- explain what the terms 'assets', 'liabilities' and 'owner's equity' mean [1.2]
- define the terms 'revenue', 'expenses' and 'profit' [1.2]
- complete a basic analysis of a financial report [1.3].



# 1.1 WHAT IS ACCOUNTING?

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

Who benefits from accounting information?

- During their lives, most Australians will earn a salary or a wage; they will save, invest and borrow money; and they will pay taxes.
- Managers of businesses, both large and small, make financial decisions on a daily basis.
- Government departments, and the government itself, have to prepare budgets, record costs and keep them under control, and collect taxes.

In other words, accounting is relevant to everyone and everything. Understanding the world of finance and accounting can benefit both individuals and businesses as they strive for financial independence and success.

Some accounting procedures can become complex but, in simple terms, accounting involves:

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

#### **ACCOUNTING AS A CAREER**

Accounting qualifications can open doors to a variety of industries, because all businesses must report on their financial events regularly. Accountants can also specialise in a variety of areas.

Common types of accounting include:

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

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

You'll explore these topics in further detail as you work through this unit – so let's get started!

#### 1.1 CHECK YOUR UNDERSTANDING



- 1 Explain how you think accounting will be relevant to your own life in the future.
- 2 Describe the basic steps involved in the accounting process.
- 3 Explain why accounting information is important for good decision-making.

## 1.2

#### ACCOUNTING IN THE REAL WORLD

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

Individuals invest in companies via the Australian Securities Exchange (ASX). As its name suggests, the ASX is a marketplace for buying and selling shares. Many individuals own shares in companies such as BHP, Telstra and the Commonwealth Bank. They therefore have a need for accounting information that indicates how their investments are performing.

#### **KEY ACCOUNTING TERMS**

Accounting uses some technical language, and you'll learn key terms throughout this text. The following terms are a starting point and an introduction to your first financial report. You'll learn more in later chapters.

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

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

**Profit** is how much money a business earns, and is simply revenue minus expenses. So, if our total sales for a year were \$100 000 and our expenses were \$40 000, the business made a profit of \$60 000 (\$100 000 - \$40 000 = \$60 000). Once all expenses have been accounted for, the final result is known as net profit.

**Assets** are present economic resources controlled by a business as a result of past events. These resources are expected to produce economic benefits for the business in the future. As well as the examples mentioned earlier, assets can include computers, shop fittings, and land and buildings.

**Liabilities** are the present obligations of the business to transfer economic resources as a result of past events. If a business takes out a loan, it has a liability, because it is obliged to pay that money back. If it purchases something on credit, it also has a liability.

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

#### revenue

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

#### expenses

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

#### profit

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

#### assets

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

#### liabilities

present obligations of an entity to transfer economic resources to another entity to produce economic benefits

#### owner's equity

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

#### 1.2 CHECK YOUR UNDERSTANDING

- 1 Define the terms 'revenue' and 'expenses' and list one example of each.
- 2 Explain how profit is calculated for a business.
- 3 List three examples of possible assets for a business that sells mobile phones.



# 1.3 EXAMINING AN ACCOUNTING REPORT

BEST PRACTICE

Remember: Owner's equity = assets – liabilities

JB Hi-Fi is an amazing success story in Australian retail. Starting out in 1974 as a single store selling CDs in East Keilor, JB Hi-Fi has grown to more than 300 stores in Australia and New Zealand. It has witnessed and flourished through significant technological change, having sold vinyl records, CDs, DVDs, Blu-Ray discs and online music downloads.

In recent years, the company has expanded its range to include home appliances, as well as mobile phones, video games, security cameras, computers, kitchen appliances, washing machines and many other items.

What's interesting for our purposes is that JB Hi-Fi is also a public company. This means that it must produce annual reports that summarise and explain its finances and business records. Let's consider JB Hi-Fi as an example of how financial information is shown in an accounting report.

As a public company, JB Hi-Fi must produce annual reports accessible to investors to summarise its finances and business records



The following data is from JB Hi-Fi's 2017 Annual Report. You can find that report by visiting the JB Hi-Fi link at the right.



*Note:* Some accounting terms used by 'big business' are slightly different from those introduced earlier.

From Page 2 of the report (financial summary):

|   |                        | \$            |
|---|------------------------|---------------|
| 1 | Sales                  | 5 630 000 000 |
| 2 | Net profit before tax* | 268 200 000   |
| 3 | Net profit after tax+  | 172 400 000   |

<sup>\*</sup>Shown as EBIT (earnings before interest and tax)

#### From Page 70 of the report:

| Total assets      | 2 452 300 000 |
|-------------------|---------------|
| Total liabilities | 1 598 800 000 |

#### 1.3 CHECK YOUR UNDERSTANDING



- 1 Using the information provided for JB Hi-Fi, calculate the dollar value of expenses for the business in the financial year ending 2017.
- 2 What was the value of owner's equity in JB Hi-Fi in 2017?
- 3 JB Hi-Fi is viewed as a highly successful business. Why do you think it has been so successful over so many years? Explain your answer fully.

<sup>\*</sup>Shown as NPAT (net profit after tax)

# 1 CHAPTER REVIEW

#### **KEY CONTENT**

- [1.1] Accounting is the process of recording financial events, reporting on these events, and providing accurate information to support sound financial decisions. It is relevant to everyone. Accounting is a dynamic profession, and accountants may specialise in a variety of areas.
- Assets are resources with the potential to produce economic benefits for a business, while liabilities are obligations to pay or transfer resources to another entity. The owner's equity is the owner's financial interest in their business after liabilities are deducted from assets.
- [1.2] A business's revenues are its increases in assets, including money, by providing goods or services to customers. Its expenses are decreases in assets that are used up to produce revenue. Its overall profit is its revenues minus its expenses.
- Public companies such as JB Hi-Fi publish regular financial reports. These allow investors to stay informed about the company's finances. Reports usually include information on assets, liabilities, profits, revenues and expenses.

#### **CHAPTER 1 EXERCISES**



#### 1 COMPANY RESEARCH



Access the JB Hi-Fi website to locate the latest annual report.

a Construct the following table using a spreadsheet, for both the current year and the previous year, based on the information in the JB Hi-Fi financial reports.

|                        | Year 20 | Year 20       |
|------------------------|---------|---------------|
| Total assets           | \$      | \$            |
| Total liabilities      | \$      | \$            |
| Owner's equity         | \$      | \$ WB PAGE XX |
| Total sales            | \$      | \$            |
| Net profit before tax  | \$      | \$            |
| Net profit after tax   | \$      | \$            |
| Total number of stores | stores  | stores        |

#### Things to bear in mind:

- Owner's equity may be referred to as Shareholders' equity.
- Total sales may be listed as Annual turnover or Turnover.
- Net profit before tax may be labelled EBIT.
- Net profit after tax may be labelled NPAT.
- The number of stores isn't always stated in annual reports. If it's not stated, search online to see if you can find the answer.



**b** Compare the results you recorded for JB Hi-Fi with the data in this chapter from 2017. Write a brief report on the performance of the business compared with 2017, highlighting any significant changes (both positive and negative).

#### **2 RESEARCHING THE BANKING SECTOR**





Australia's 'big four' banks are National Australia Bank (NAB), Commonwealth Bank of Australia (CBA), Australia & New Zealand Banking Group (ANZ) and Westpac Banking Corporation (Westpac).



Westpac is bank as well as one of its 'big four' banks.

Using a spreadsheet and the websites of the various banks, prepare a summary of your findings for the following financial data. Use the latest annual report available for each bank.

|                       | NAB (\$) | CBA (\$) | ANZ (\$) | WESTPAC (\$) |
|-----------------------|----------|----------|----------|--------------|
| Total assets          |          |          |          |              |
| Total liabilities     |          |          |          |              |
| Owner's equity        |          |          |          |              |
| Net profit before tax |          |          |          |              |
| Net profit after tax  |          |          |          |              |

- a Which bank has the greatest value for total assets?
- **b** Which bank has the greatest amount of debts to others?
- c Rank the banks, in order of profit, from highest to lowest.
- d Prepare a brief report on your findings. Identify any significant differences in the performance between the banks.

#### **CHAPTER CHECKLIST**

Now that you've finished Chapter 1, double-check your progress.

Are you ready for your Unit 1 assessment?

#### I have ...

- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- Manded in my workbook for marking.

#### I understand ...

- the role of professionals such as accountants, business advisors and professional organisations in providing advice to achieve business success
- of the accounting elements: assets, liabilities, owner's equity, revenues and expenses
- accounting reports and information used to assist in judging the success or failure of a business.

#### I can ...

- use correct accounting terminology
- or research information from a range of sources.

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# 2 ACCOUNTING FOR SMALL BUSINESS

Roughly 95% of Australian businesses are small businesses, rather than publicly traded companies or large multinationals. Each small business is different, but all need effective accounting information to continue functioning.

In this chapter, you will learn about the role of accounting and accountants in the small business sector. You'll also explore the characteristics of effective accounting reports, the assumptions that underpin accounting, and the ethical issues that businesses must consider.

#### **LEARNING OBJECTIVES**

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

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



# 2.1

#### THE CONCEPT OF 'SMALL BUSINESS'

Small businesses can be found in every Australian city, suburb and country town. They strive to satisfy a demand by consumers for goods and/or services in a specific area. These small businesses play an important role in both the Australian and Victorian economies; Victoria has almost 600 000 small businesses.

But what exactly is a small business?

A strict definition is almost impossible. However, a small business usually has some of these distinguishing features:

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

There's no clear point at which a 'small business' becomes a 'big business'. Some small businesses employ as many as 20 people, and may be financed by loans from banks or other financial institutions. A small business may be registered as a company, rather than a sole proprietorship or partnership. Many small businesses operate entirely online, catering to the needs of customers around the country (or even further). But still, this list provides a description of a 'typical' small business.

VCE Accounting concentrates on accounting for small businesses, such as local cafes, plumbers, clothing stores, dentists and so on. There's enormous scope for accounting beyond the small business sector, of course, but the focus for your studies will primarily be local and small.

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



#### 2.1 CHECK YOUR UNDERSTANDING

WB PAGE 6

- 1 Explain what the term 'small business' means.
- 2 List four features that distinguish a small business from other forms of business.
- 3 Name four businesses in your local area that you'd describe as small businesses.

accounting period the period of time

over which revenues are compared with

expenses in order to

determine profit

### THE ROLE OF ACCOUNTING IN SMALL BUSINESS

The typical small business doesn't employ a financial expert on a full-time basis because of its limited resources. Some business owners have the skills to manage their own finances – possibly because they studied Accounting in high school.

However, not all business owners can handle such financial matters as the goods and services tax (GST), income tax deductions, cash management, and the recording of business transactions without help. Small business owners often seek outside assistance from qualified accountants.

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

- future prospects for a potential business
- designing an accounting system for a small business
- computerised accounting packages
- taxation, including payroll tax, income tax, the GST and business activity statements (BAS)
- how to determine the selling prices of goods
- how to control transactions made on credit
- how to manage inventory (goods being sold)
- the types of financial records a business should keep
- sources of finance
- investment opportunities
- planning for the future of the business.

#### OTHER FINANCIAL ADVISORS

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

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

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



#### CHECK YOUR UNDERSTANDING



- 1 'I don't need to see an accountant. I know my business better than any outsider could!' Do you agree with this business owner? Give reasons for your answer.
- 2 List five reasons why a small business owner should consult a qualified accountant.
- 3 Name an industry that you believe has experienced a growth in small businesses in recent years. Explain why you think this has happened.

# 2.3 FINANCIAL DATA VERSUS FINANCIAL INFORMATION

data a collection of raw facts

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

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

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

#### FIGURE 2.1 Cash receipt

| CENTRAL SPORTS     |                 | TAX INVOICE    |
|--------------------|-----------------|----------------|
| ABN 212 191 922 22 |                 | Date: 02/02/23 |
| Received from:     | David Semini    |                |
| The sum of:        | \$80            |                |
| Plus GST:          | \$ 8            |                |
| Total received     | \$88            |                |
| For:               | 2 cricket balls |                |

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

When these facts have been processed and entered into an accounting record, they become more meaningful. For example, at the end of a week's trading, the manager of Central Sports can determine the total of such receipts and come up with a weekly summary of the business's cash sales. This is a simple example of financial information that originates from raw data on business documents.

#### FINANCIAL INFORMATION AND ACCOUNTING

A well-designed accounting system provides a business owner with information about things such as sales levels, profit margins, debts owed to the business and debts the business owes.

To make effective decisions, the owner must be able to collect the required data, sort and classify it, and summarise it into a useful form. These steps make up the basic accounting process, and are shown in Figure 2.2.

FIGURE 2.2 The accounting process

| BUSINESS  | DATA INPUT  | BUSINESS   | BUSINESS   |
|---|---|--|--|
| DOCUMENTS   |   | REPORTS  | DECISION-MAKING  |
| Source of raw financial data – receipts, invoices, EFT documents etc. | Data is sorted into groups and then noted in financial records. | Financial reports provide useful information in summarised form. | Management makes decisions based on the financial information in the business reports. |

Figure 2.2 shows the importance of having accurate financial information when making decisions. These decisions will often be made as the end product of the accounting process, so they can only be as good as the information provided. If the financial information is inaccurate, or if it's not available when required, management decisions may have a drastic impact on the performance of the business. If the information is always accurate and produced on time, managers are more likely to make sound decisions.

#### **USERS OF FINANCIAL INFORMATION**

In addition to the owner of the business, other parties may be interested in the financial information generated by an accounting system. They include:

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

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

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

#### 2.3 **CHECK YOUR UNDERSTANDING**



- 1 Explain the difference between financial data and financial information.
- 2 Comment on the following statement: 'Management decision-making can only be as good as the information on which it is based."
- 3 a Make a list of the main users of accounting information.
  - b Do all of these users have the same needs? Explain your answer fully, using examples.

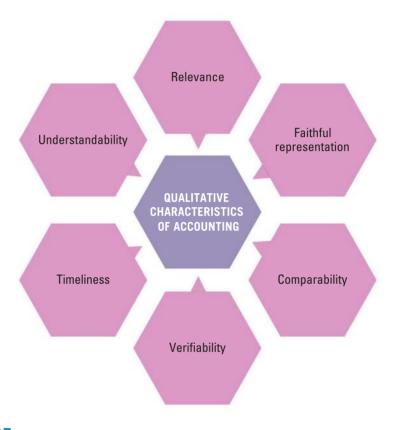
# 2.4 QUALITATIVE CHARACTERISTICS OF ACCOUNTING

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

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

The six qualitative characteristics are an attempt by the accounting profession to make sure that the reports prepared by accountants are useful to a range of users.

#### FIGURE 2.3 The six qualitative characteristics of accounting reports



#### relevance

accounting standards

that provide a framework of acceptable accounting

procedures

rules and regulations

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

## faithful representation

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

#### RELEVANCE

Relevant information can make a difference to the decisions made by users. **Relevance** requires financial information to relate to an economic decision. Information is relevant if it helps users make predictions about the outcomes of events or gives them feedback on their previous evaluations.

If an item is omitted from a report, and this influences a person's decision-making in relation to the business, it is considered relevant. Given that one accounting report may have several users, it's up to the accountant to make sure that all relevant information is available to all users.

#### **FAITHFUL REPRESENTATION**

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

#### COMPARABILITY

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

#### **VERIFIABILITY**

**Verifiability** means that the information can be confirmed as correct. Financial information should be supported by evidence, which individuals can check to verify that the information is actually faithfully represented. Such evidence is often in the form of business documents that provide the details of financial transactions.

#### **TIMELINESS**

Information should be available to decision-makers in time to influence their decisions. Having relevant information available sooner rather than later means it's better able to influence decisions. A lack of **timeliness** can reduce the potential usefulness; the older the information, the less useful it is.

#### **UNDERSTANDABILITY**

Financial information should be **understandable** to users with a reasonable knowledge of business and economics. To be understandable, information should be presented clearly and concisely. Accounting reports are often complex and contain specialised terms. It's important to prepare reports so that as many users as possible can have a basic understanding of what the report is trying to show.

#### comparability

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

#### verifiability

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

#### timeliness

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

#### understandability

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



#### BEST PRACTICE

Always remember there are six QCs and you should be able to describe all six.

#### 2.4 CHECK YOUR UNDERSTANDING

- 1 Justify the need for accountants to follow the qualitative characteristic of *understandability*.
- 2 Explain what the term 'faithful representation' means.
- 3 Describe the link between the qualitative characteristics of *faithful representation* and *verifiability*.
- 4 'Accounting information is useless unless it is timely.' Do you agree? Discuss.



# 2.5

#### **ACCOUNTING ASSUMPTIONS**

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

FIGURE 2.4 The four accounting assumptions



## accounting entity assumption

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

#### entity

any business, organisation or individual that conducts financial transactions

#### **ACCOUNTING ENTITY ASSUMPTION**

One of the most important assumptions in accounting is the **accounting entity assumption**. This assumption states that the records of assets, liabilities and business activities of the **entity** are kept separate from those of the owner, as well as from those of other entities. A separate set of accounting records is kept for each entity, and its financial statements provide information on that entity only.

This is done so that the performance of the actual business is evaluated, distinct from the owner's personal income or wealth. When a small business is created, a new body or entity comes into existence.

#### **EXAMPLE 2.1**

A sports store owner has the following financial transactions.

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

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

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

#### **ACCRUAL BASIS ASSUMPTION**

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

The characteristic of *relevance* is important here, because the accountant should only recognise revenues and expenses relevant to that particular period.

### accrual basis assumption

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

#### **GOING CONCERN ASSUMPTION**

Financial reports are prepared on the assumption that the business entity will continue to operate in the future. The **going concern assumption** is that the entity won't be wound up in the near future but will continue its business activities. This allows for the reporting of assets and liabilities on a balance sheet, because they often continue on to the next accounting period.

Depending on the business, a distinction can be made between assets that provide benefit to future accounting periods, and expenses that are fully consumed within one accounting period.

### going concern assumption

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

#### PERIOD ASSUMPTION

The **period assumption** is that reports are prepared for a particular period of time, such as a month or a year. Profit determination involves recognising the revenue for a period and deducting the expenses incurred in that same period.

There is no minimum period over which profit is measured, but the maximum is one year, due to the demands of the Australian Taxation Office (ATO) to assess all businesses or their owners for income tax.

The period assumption helps to obtain *comparability* of results. The characteristic of *relevance* plays a part again, because only information relevant to that one period should be reported at that time. Items not relevant to that period should be entered in other reports for other accounting periods.

#### period assumption

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

#### DON'T!

Make sure you don't mix up assumptions and QCs. These terms are not interchangeable.

#### 2.5 CHECK YOUR UNDERSTANDING

- 1 What is the 'accounting entity assumption'?
- 2 Shane Clarke earns income from three sources. He receives a salary as a full-time teacher, and owns a clothing store and a furniture shop. Explain how the entity assumption affects Shane's situation.
- 3 Explain how the entity assumption ties in with the qualitative characteristic of relevance.
- 4 What is an accounting period? What is its purpose?
- 5 What do accountants assume about the life of a business? Explain why they do this.

#### WB PAGE 9

# 2.6 ETHICS AND BUSINESS DECISION-MAKING

ethics a set of moral principles All business owners, whether they're operating large companies or small local businesses, should have a sense of **ethics** when making their day-to-day decisions. In addition to the financial needs of their business, owners should also be interested in the social and/or environmental impact of their financial decisions.

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

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

- Costs of a decision to a business
- Potential benefits to a business
- Effect on the reputation of a business
- Potential environmental damage of business decisions
- Financial and emotional effect on individuals, including owners, managers and consumers

Ethical considerations are an important part of the VCE Accounting course, and it is important that you consider issues like these during your studies.

Throughout this textbook you'll be presented with scenarios and questions that highlight social, environmental and ethical issues relating to business decisions. (The first one is at the end of this chapter.) There aren't necessarily right or wrong answers when addressing these scenarios, but you should be ready to justify your opinions and explain your reasons.



# 2

## CHAPTER REVIEW

#### **KEY CONTENT**

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

#### **CHAPTER 2 EXERCISES**

#### 1 QUALITATIVE CHARACTERISTICS



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

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

#### **2 QUALITATIVE CHARACTERISTICS**



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

| Item             | Value  |  |
|------------------|--|--|
| Holden Commodore | \$30 000 – the cost paid for the car in 2021                       |  |
|                  | \$20 000 – estimated current market value in 2023                  |  |
|                  | \$22 000 – the amount a friend has offered for the vehicle in 2023 |  |

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

#### **3 ACCOUNTING ASSUMPTIONS**



Phil Horner has been concerned about the future of his business for a few years. As he isn't sure that he will keep trading in the future, he has valued his assets based on what he thinks he could get for them if the business closed today.

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

# 4 QUALITATIVE CHARACTERISTICS AND ACCOUNTING ASSUMPTIONS



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

- a The owner of Coburg Art Supplies, Michelle Humphries, has been operating her business for seven years. During this time, she has determined the profit of the business on only two occasions. She justifies this by saying that she runs the business by herself and doesn't have time to get around to it.
- **b** Michael Cao, the owner of Bayside Beds, doesn't enjoy keeping records for his business. He has just prepared a profit report based on his own personal estimates of the year's transactions.
- c Robert Peluso has owned Peluso's Pet Paradise for the past 10 years. Over this time he hasn't always determined his annual profit or loss immediately at the end of the accounting period. In fact, sometimes he doesn't finalise his profit result until six months after the period has ended.
- d Liz Costa is the owner/proprietor of two businesses: Metro Music and Trendy Tables. To keep things simple, she only operates one bank account. She uses this account for her personal banking, and for the receipts and payments for the two businesses.
- e Ben Stern has had trouble keeping track of all his business documents. In order to prepare financial reports, he sometimes states an item's original cost based on what he thinks he paid for it. At other times, he simply states the cost of the same item if he bought it new today.
- f Cathy Tran owns Frankston Toys and Models. During a recent lunch break, she found a dress on sale for \$100 that she just had to have. She was short on cash, so she took \$100 from her shop's cash register. She doesn't see any need to record this amount after all, she says, the money in the till is really her money.

#### **ETHICAL CONSIDERATIONS**



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

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

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



Are all customers concerned with the ethics of how the products they purchase are made?

#### **CHAPTER CHECKLIST**

Now that you've finished Chapter 2, double-check your progress.

Are you ready for your Unit 1 assessment?

#### I have ...

- ompleted all 'Check Your Understanding' questions
- completed all exercises
- completed the end-of-chapter activities
- Manded in my workbook for marking.

#### I understand ...

- the role of professionals such as accountants, business advisors and professional organisations in providing advice to achieve business success
- dethical considerations when making decisions in relation to establishing or operating a business.

#### I can ...

- use correct accounting terminology
- or research information from a range of sources
- discuss ethical considerations faced by business owners when making business decisions.

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# PREPARE Read back over the chapter now, then complete the online

revision activity



#### WATCH

Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



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# BALANCE SHEETS FOR A SMALL BUSINESS

There are three major considerations for any business: the economic resources under the entity's control, the entity's present obligations, and the net worth of the business to the owner. These three elements are recorded in the balance sheet of the business.

In Chapter 2, you considered accounting reports and how they help management to make decisions. In this chapter, you will examine one of the most important reports – the balance sheet, which shows a business's financial position.

# **LEARNING OBJECTIVES**

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

- describe the purpose of a balance sheet [3.1]
- prepare T-form and narrative-form balance sheets [3.2]
- prepare a classified balance sheet for a small business [3.3]
- explain the concept of liquidity [3.3]
- explain the two-fold effect of a transaction on a balance sheet [3.4].



# 3.1 THE ROLE OF THE BALANCE SHEET

### balance sheet

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

### assets

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

### liabilities

present obligations of an entity to transfer economic resources to another entity to produce economic henefits

# owner's equity

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

### accounting equation

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

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

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

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

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

Owner's equity is the residual interest in the assets of an entity after its liabilities are deducted. An owner's equity in a business is equal to the total value of its assets less any obligations it may have regarding liabilities. The owner's equity is the 'net worth' of the business to the owner.

Keeping in mind the accounting entity assumption and the qualitative characteristic of relevance, only assets and liabilities that are relevant to the business should be included in the balance sheet. The personal assets of an owner are not relevant.

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

Assets = liabilities + owner's equity

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

Owner's equity = assets - liabilities

The accounting equation holds true in every balance sheet, whether it's a statement for a private individual, a small business, or a large company such as Woolworths, National Australia Bank or BHP Billiton.

# **CHECK YOUR UNDERSTANDING**



- 1 What is the purpose of a balance sheet?
- 2 Define the terms 'assets' and 'liabilities'.
- 3 State the accounting equation in two different forms.

# 3.2 FORMAT OF A BALANCE SHEET

The purpose of a balance sheet is to report on and summarise the three key areas: assets, liabilities and owner's equity. The balance sheet's format isn't as important; what matters is that those three elements are clearly displayed.

In theory, the balance sheet could have any format; in reality, two main formats are used by accountants.

# THE T-FORM BALANCE SHEET

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

# T-form balance sheet

an accounting report showing assets on one side and liabilities and owner's equity on the other

# **EXAMPLE 3.1**

The Williamstown Wool Shop is owned by Rae Gibbs. On 30 June 2023, the business has the following economic resources:

- Cash at bank \$4000
- Inventory of wool \$30 000
- Amounts owing by customers (accounts receivable) \$5200
- Shop fittings \$18 000
- Knitting machine \$2800.

The business also has the following obligations:

- Amounts owing to wool suppliers (accounts payable) \$3000
- Loan from bank (due for repayment 1 July 2025) \$20 000.

Using this data, a T-form balance sheet is prepared as shown in Figure 3.1.

FIGURE 3.1 T-form balance sheet

| Assets              | \$     | Liabilities            | \$     | \$     |
|---------------------|--------|------------------------|--------|--------|
| Cash at bank        | 4 000  | Accounts payable       | 3 000  |        |
| Accounts receivable | 5 200  | Bank loan (due 1/7/25) | 20 000 | 23 000 |
| Inventory           | 30 000 |                        |        |        |
| Shop fittings       | 18 000 | Owner's equity         |        |        |
| Knitting machine    | 2 800  | Capital                |        | 37 000 |
| Total assets        | 60 000 | Total equities         |        | 60 000 |

This balance sheet shows the economic resources under the control of Williamstown Wool Shop (a total of \$60 000), the obligations or debts owed by the shop (totalling \$23 000) and the net worth of the business to the owner (\$37 000) on 30 June 2023.

The accounting equation for the Williamstown Wool Shop is therefore:

Assets = liabilities + owner's equity \$60 000 = \$23 000 + \$37 000

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

### ITE NAKKATI

# narrative form

an accounting report prepared in a vertical fashion down the page, highlighting the owner's equity in the business

# THE NARRATIVE-FORM BALANCE SHEET

Some balance sheet users prefer the information to be set out in a **narrative form**. This format emphasises owner's equity (i.e. net worth) as the key figure in the report. Narrative forms are prepared vertically, as opposed to the horizontal T-form report.

# **EXAMPLE 3.2**

Using the data in Example 3.1 for Williamstown Wool Shop, the statement can be rewritten in the narrative form as shown in Figure 3.2.

FIGURE 3.2 Narrative-form balance sheet

| Owner's equity         | \$     | \$     |
|------------------------|--------|--------|
| Capital                |        | 37 000 |
| Is represented by:     |        |        |
| Assets                 |        |        |
| Cash at bank           | 4 000  |        |
| Accounts receivable    | 5 200  |        |
| Inventory              | 30 000 |        |
| Shop fittings          | 18 000 |        |
| Knitting machine       | 2 800  | 60 000 |
| Less: Liabilities      |        |        |
| Accounts payable       | 3 000  |        |
| Bank loan (due 1/7/25) | 20 000 | 23 000 |
| Net assets             |        | 37 000 |

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

Owner's equity = assets – liabilities  $$37\ 000 = $60\ 000 - $23\ 000$ 

# 3.2 CHECK YOUR UNDERSTANDING



- 1 Define the term 'owner's equity'.
- 2 List three assets that are likely to be reported in a balance sheet for an accountant.
- 3 Compare the T-form balance sheet with the narrative form. Which format do you think shows financial information more clearly? Explain your answer fully.

# 3.3

# CLASSIFIED BALANCE SHEETS

It's normal practice to classify the items shown in a balance sheet. This allows more information to be shown about the business. A classified balance sheet also helps to meet the demands of the qualitative characteristic of *understandability*. It breaks down a complicated report into segments and makes it easier to read.

# **ASSETS**

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

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

Businesses usually have both current and non-current assets.

## current assets

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

### non-current assets

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

# **LIABILITIES**

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

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

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

Liabilities listed as non-current can be broken down into two parts. The portion of the debt due for repayment within the next year (if known) can be listed under current liabilities. The remainder of the debt would then be shown as a non-current liability.

# current liabilities

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

# non-current liabilities

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

# **EXAMPLE 3.3**

The classified balance sheet for the Williamstown Wool Shop is shown in Figure 3.3.

FIGURE 3.3 Classified balance sheet

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

<sup>\*</sup>Assuming loan repayments are equal over the next two years

# LIQUIDITY AND WORKING CAPITAL

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

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

Williamstown Wool Shop's working capital would be calculated as follows:

Working capital = current assets – current liabilities  
= 
$$$39 200 - $13 000 = $26 200$$

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

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

Working capital can also be expressed as a ratio:

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

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

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

# working capital

capital available for use in day-to-day operations of a business

# liquidity

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

# working capital ratio

3.3

a financial indicator comparing current assets to current liabilities

# CHECK YOUR UNDERSTANDING



- 1 Explain the advantages of preparing a classified balance sheet.
- 2 Distinguish between:
  - a current assets and non-current assets.
  - **b** current liabilities and non-current liabilities.
- 3 The owner of a hardware store has a loan from the National Bank. The total amount outstanding is \$32 000. The owner expects to repay \$18 000 within the next year, and the remainder in the following 12 months. How should this loan be treated in a classified balance sheet?
- 4 What does working capital measure?

# 3.4

# FINANCIAL TRANSACTIONS AND THE BALANCE SHEET

Each time a business transacts with another entity, there is a two-fold effect on the balance sheet. That is, two items in the report will change in value.

To demonstrate this, here's what happens when a new statement is prepared to show the changes that occur after each transaction.

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



The first requirement of the balance sheet is to show the economic resources controlled by the firm. 'Cash at Bank' is listed as \$30 000 under the 'Assets' heading.

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

| Assets       | \$     | Owner's equity   | \$     |
|--------------|--------|------------------|--------|
| Cash at Bank | 30 000 | Capital – Barker | 30 000 |
|              | 30 000 |                  | 30 000 |

# Jul 3 Bought office furniture for \$5000 cash



This causes a reduction in 'Cash at Bank', with a corresponding increase in the asset 'Office furniture'.

| Assets           | \$     | Owner's equity   | \$     |
|------------------|--------|------------------|--------|
| Cash at Bank     | 25 000 | Capital – Barker | 30 000 |
| Office furniture | 5 000  |                  |        |
|                  | 30 000 |                  | 30 000 |

# Jul 3 Purchased a delivery van on credit from Top Autos for \$30 000



The asset 'Delivery van' increases but, as it was purchased on credit, the future obligation to Top Autos must be created as a liability.

| Assets           | \$     | Liabilities      | \$     |
|------------------|--------|------------------|--------|
| Cash at Bank     | 25 000 | Accounts payable | 30 000 |
| Office furniture | 5 000  | Owner's equity   |        |
| Delivery van     | 30 000 | Capital – Barker | 30 000 |
|                  | 60 000 |                  | 60 000 |

# Jul 4 Barker made a cash payment of \$1000 to Top Autos



The asset 'Cash at Bank' must be decreased by \$1000. The obligation to Top Autos will also decrease by \$1000.

| Assets           | \$     | Liabilities      | \$     |
|------------------|--------|------------------|--------|
| Cash at Bank     | 24 000 | Accounts payable | 29 000 |
| Office furniture | 5 000  | Owner's equity   |        |
| Delivery van     | 30 000 | Capital – Barker | 30 000 |
|                  | 59 000 |                  | 59 000 |

Some businesses have numerous suppliers, and the title 'Accounts payable' is often used in balance sheets to show the total amount owing to these suppliers. In smaller businesses, it's acceptable to name the individual suppliers if this is seen as useful. So, in the Perfect Printers balance sheet, rather than simply stating 'Accounts payable', the owner may decide to list the obligation as 'Accounts payable – Top Autos'. Make sure that you are familiar with both approaches.

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

Although a business won't prepare a new balance sheet after every transaction, it is important to understand how a transaction can affect the report. As you study further topics in your Accounting course, keep in mind the two-fold effect on the balance sheet of *all* business transactions. This rule is true for all business entities, from the smallest to the largest.

# QUALITATIVE CHARACTERISTICS AND THE BALANCE SHEET

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

Adjustments aren't usually made to a balance sheet for inflation, so the original cost of an asset is kept on the books until the asset is sold. This original cost also satisfies the demands of *faithful representation*.

The real-world economic event is the buying of an asset, and supporting documents should always be available. For example, if an asset is purchased on credit for \$10 000, an invoice would be received for that amount. Therefore, \$10 000 would be shown in the balance sheet for this asset. The *relevant* amount to be reported is \$10 000, and this satisfies both the *faithful representation* and *verifiability* qualitative characteristics of accounting.

# 3.4 CHECK YOUR UNDERSTANDING



- 1 'Every transaction has a two-fold effect on a balance sheet.' What does this statement mean? Use an example to help explain your answer.
- 2 A balance sheet should faithfully represent the cost of assets. Explain how accountants ensure that this is achieved.
- 3 Explain why a delivery van should be reported as an asset. Refer to the definition of an asset in your answer.

# 3 CHAPTER REVIEW

# KEY CONTENT

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

# **CHAPTER 3 EXERCISES**

# 1 ACCOUNTING EQUATION



Calculate the missing information in each of the following situations.

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

# **2 SIMPLE BALANCE SHEET**





The following information relates to McColgan's Meats, a small business owned by Ken McColgan, as at 31 July 2023.

- Inventory of meat \$28 000
- Accounts payable \$1500
- Family home \$540 000
- Accounts receivable \$1400
- Cash at bank \$1200
- Refrigeration equipment \$22 000
- Shop equipment \$18 000
- Business loan from bank \$30 000
- Cash on hand \$200

- a Calculate the owner's equity for McColgan, using the accounting equation.
- b Prepare a T-form balance sheet as at 31 July 2023.
- c Redraft the balance sheet in narrative form.
- **d** Explain your treatment of the item 'Family home', with reference to both a qualitative characteristic and an accounting assumption.



# **3 CLASSIFIED BALANCE SHEET**



Annie Healy, the proprietor of Accurate Editorial, supplies the following information concerning her business as at 31 August 2023.

- Business bank account \$1200
- Personal bank account \$12 000
- Accounts payable Ace Stationery \$1230
- Computer equipment \$7000
- Accounts receivable \$1320
- Loan from bank (due 31/12/2024) \$5000
- Loan from parents (due 1/6/2024) \$1000
- Photocopier \$16 000
- Office furniture \$5200
- a Calculate Healy's capital using the accounting equation.
- **b** Explain your application of the accounting entity assumption in your answer to part **a**.
- c Prepare a classified balance sheet as at 31 August 2023.

# **4 EVALUATION OF LIQUIDITY**



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

- a Calculate the firm's working capital.
- b Define 'liquidity'.
- c Describe this firm's liquidity, with reference to part a above.

# **5 EVALUATION OF LIQUIDITY**



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



# **6 BALANCE SHEET AND LIQUIDITY**



Nick Papadopoulos, owner of Nick's Pizza Supreme, supplies the following information regarding his business as at 30 September 2023.

- Premises \$820 000
- Mortgage loan from bank \$480 000
- Inventory of food and drinks \$12 500
- Accounts payable \$11 500
- Bank overdraft \$1200
- Cash on hand \$100
- Furniture \$4900
- Fittings \$16 500
- Refrigeration equipment \$18 000
- Capital \$379 300

- a Prepare a classified balance sheet as at 30 September 2023.
- **b** Calculate the firm's working capital and its working capital ratio, and write a brief comment on its liquidity.

# 7 BALANCE SHEET AND LIQUIDITY





Orla McLynskey owns and operates Suburban Lawn Sculptors. The following information is available regarding her business as at 31 October 2023.

- Vehicle \$38 000
- Mowing equipment \$5200
- Trailer \$2600
- Cash on hand \$100
- Cash at bank \$2600
- Loan from Easy Finance Co. \$12 000 (repayable at \$2000 per year)
- Accounts payable Mobil \$300
- Computer \$2100
- Accounts receivable K Wilson \$750
- a Prepare a classified balance sheet as at 31 October 2023.
- **b** Explain your treatment of the loan from Easy Finance Co.
- c Calculate the firm's working capital and working capital ratio.
- d Comment on the firm's liquidity by referring to your calculations in part c.

# 8 TRANSACTIONS AND THE BALANCE SHEET





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

2023

Aug 1 Banked \$30 000 to commence business



- 3 Bought a truck from Geelong Ford for \$25 000 cash
- 4 Bought plumbing materials on credit from General Plumbing for \$1200
- a Prepare a balance sheet after each of the above transactions has occurred; that is, four separate balance sheets.
- **b** State the accounting equation for each of the statements prepared in part **a**.

# 9 TRANSACTIONS AND THE BALANCE SHEET





Michelle Clarke has started a small business under the name of Suburban Steam Cleaning. The transactions below occur in her first week's trading in 2023.

Sep 1 Deposited \$10 000 in a separate bank account in the firm's name



- 3 Purchased an office desk on credit from Rose Office Furniture for \$500
- 4 Borrowed \$5000 from ELC Finance Co.
- 5 Withdrew \$1000 from the business for personal use

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



# 10 TRANSACTIONS WITH OPENING BALANCES



The following report is prepared for an existing business.

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

The following transactions occurred during October 2023.



- Oct 1 Purchased new equipment for cash at a cost of \$1500
  - 2 Accounts receivable paid \$1000 of the amounts owing
  - 3 Bought supplies on credit for \$400
  - 4 Paid \$2000 off the loan from EZ Finance
  - 5 Owner contributed an additional \$5000 as capital

Prepare a new balance sheet after each transaction.



# 11 TRANSACTIONS WITH OPENING BALANCES



E Truong, the proprietor of Glenroy Gifts, has provided the following statement.

| Assets              | \$     | \$     | Liabilities         | \$    | \$     |
|---------------------|--------|--------|---------------------|-------|--------|
| Current assets      |        |        | Current liabilities |       |        |
| Cash at bank        | 6 000  |        | Accounts payable    | 3 400 |        |
| Accounts receivable | 4 000  |        | Loan                | 6 000 | 9 400  |
| Inventory           | 35 000 | 45 000 |                     |       |        |
| Non-current assets  |        |        |                     |       |        |
| Display equipment   | 14 000 |        | Owner's equity      |       |        |
| Computer            | 6 000  | 20 000 | Capital – Truong    |       | 55 600 |
|                     |        | 65 000 |                     |       | 65 000 |

The following transactions occurred during April 2023.



- Apr 1 Purchased an additional computer on credit from Ace Computers for \$950
  - 2 Paid accounts payable \$400
  - 3 Bought inventory for cash \$800
  - 4 Paid \$500 to Ace Computers
  - 5 The owner withdrew \$1000 for personal use

Prepare a new balance sheet after each transaction. (The owner wants the total amount owing to accounts payable to be shown in the balance sheet as one figure.)

# **ACCOUNTING IN THE REAL WORLD**





This question can be answered using either a spreadsheet or a manually prepared table. Visit the websites of the following public companies. Locate the balance sheet from the latest annual report of each company and extract the information stated below.

Woolworths **Harvey Norman**  mea.digital/woolworths mea.digital/harveynorman

Mver Wesfarmers mea.digital/myer mea.digital/wesfarmers

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



Australian Securities Exchange

mea.digital/asx

### Part 1:

- a For each company, state the date on which its accounting period ends each year.
- **b** From the balance sheets, state the total assets figure for each business.
- List the four companies in order, according to the value of their total assets.
- d Comment briefly on your findings.

### Part 2:

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



Public companies such as Wesfarmers often of well-known brands.

# **CHAPTER CHECKLIST**

Now that you've finished Chapter 3, double-check your progress.

Are you ready for your Unit 1 assessment?

# I have ...

- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- ompleted all end-of-chapter activities
- Manded in my workbook for marking.

# I understand ...

- the accounting elements: assets, liabilities, owner's equity, revenues and expenses
- current and non-current assets, and current and non-current liabilities
- old classified accounting reports for a service business: Balance Sheet.

# I can ...

- use correct accounting terminology
- distinguish between current and non-current assets, and current and non-current liabilities
- analyse the effect of financial transactions on the accounting equation.

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### RFAC

Make sure you skim this chapter one more time when preparing for the exam.



# **PREPARE**

Read back over the chapter now, then complete the online revision activity.



### WATCH

Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



mea.digital/vceacc12\_3



# SINGLE ENTRY ACCOUNTING FOR A SMALL BUSINESS

The typical small business is unlikely to employ a full-time accountant. It's also unlikely that every small business owner or manager will have an accounting background or qualifications. Most small businesses thus need a simple, effective accounting system that will provide the financial information they need.

In this chapter, you will explore single entry accounting, a simple accounting system suitable for many small businesses. You will also examine the documents relevant to such a system, and consider what other elements a small business might require from its accounting system.

# **LEARNING OBJECTIVES**

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

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



# 4.1

# SINGLE ENTRY ACCOUNTING

# single entry accounting

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

# cash journal

a multi-column record used to record the daily receipts or payments of cash **Single entry accounting** is used by many small businesses to satisfy their accounting needs. As its name implies, one entry is made in the accounting records for each transaction that occurs. Single entry accounting is a relatively simple process that doesn't require an accounting background and can be maintained at very little cost. Importantly, a single entry accounting system will also supply the information the government requires for taxation purposes.

# **CASH JOURNALS**

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

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

FIGURE 4.1 Cash receipts journal

| Date  | Details           | Receipt<br>number | Bank<br>\$ | Sales –<br>car wash<br>\$ | Sales –<br>detailing<br>\$ | Sundries<br>\$ | GST<br>\$ |
|-------|-------------------|-------------------|------------|---------------------------|----------------------------|----------------|-----------|
| Jan 2 | Cash sales        | 651               | 33         | 30                        |                            |                | 3         |
| 3     | Cash sales        | 652               | 33         | 30                        |                            |                | 3         |
| 4     | Cash sales        | 653–4             | 66         | 60                        |                            |                | 6         |
| 4     | Interest received | _                 | 50         |                           |                            | 50             |           |
| 5     | Cash sales        | 655–6             | 99         | 30                        | 60                         |                | 9         |
| 6     | Capital           | _                 | 5000       |                           |                            | 5000           |           |
| 7     | Cash sales        | 657               | 66         |                           | 60                         |                | 6         |
|       | Totals            |                   | 5 347      | 150                       | 120                        | 5 0 5 0        | 27        |

The columns used in a cash receipts journal depend on the needs of the individual business. What's suitable for a car wash probably won't be suitable for a pharmacy. The columns should be used for items that occur regularly or frequently. Coburg Car Wash receives cash for washing cars and detailing vehicles. Such events are expected to occur frequently (possibly daily), so special columns are provided for them.

However, interest received (see 4 January) and the receipt of capital from the owner (6 January) are infrequent events and don't require a special column. Such items are included in the 'Sundries' column, which is used to record details of the business's less frequent receipts. As a total is easily calculated for a given period, a summary of frequent receipts or payments (e.g. sales from washing cars) is readily available at the bottom of the record.

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

A second cash journal may be designed to record the cash payments of a small business. Figure 4.2 shows a multi-column *cash payments journal* designed to meet the needs of Coburg Car Wash.

FIGURE 4.2 Cash payments journal

|       |             | Chq | Bank | Wages | Drawings | Advertising | Sundries | GST |
|-------|-------------|-----|------|-------|----------|-------------|----------|-----|
| Date  | Details     | no. | \$   | \$    | \$       | \$          | \$       | \$  |
| Jan 2 | Drawings    | EFT | 500  |       | 500      |             |          |     |
| 4     | Advertising | 101 | 440  |       |          | 400         |          | 40  |
| 5     | Wages       | 102 | 100  | 100   |          |             |          |     |
| 6     | Insurance   | EFT | 880  |       |          |             | 800      | 80  |
| 6     | Stationery  | 103 | 55   |       |          |             | 50       | 5   |
| 7     | Drawings    | EFT | 600  |       | 600      |             |          |     |
| 7     | Wages       | 104 | 120  | 120   |          |             |          |     |
|       | Totals      |     | 2695 | 220   | 1100     | 400         | 850      | 125 |

Special columns may be used for cash payments, similar to those used for cash receipts. For Coburg Car Wash, wages, drawings and advertising columns appear, indicating that the owner expects these payments to occur regularly. If the owner makes any other types of payment, they will be recorded in the 'Sundries' column. (Refer to 6 January, showing both insurance and stationery payments.)

Note that some of the cash payments have been made by cheque (cheque numbers have been listed), while other payments have been completed by electronic funds transfer (EFT). Today, small businesses rarely use cheques, except perhaps for some large payments. In both cases, the bank provides a checking mechanism, as all cash payments by cheque or EFT will appear on the bank statement at the end of the month.

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

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

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

# 4.1 CHECK YOUR UNDERSTANDING



- 1 Describe what is involved in a single entry accounting system.
- 2 What is the purpose of a cash journal?
- 3 List and describe the two ways of making cash payments for a business.

# 4.2 SOURCE DOCUMENTS

### source documents

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

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

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

- Cheque butts
- EFT payment records
- Receipts
- Invoices
- Credit notes

# **CHEQUE BUTTS**

Until recently, it was common business practice to make payments by cheque. The cheque butt provides all the details required about cash payments and is completed at the same time as the cheque is written out. Figure 4.3 illustrates a typical cheque butt.

# FIGURE 4.3 Cheque butt

| Date:     | 05/1/2023 |  |
|-----------|-----------|--|
| Payee:    | Don Pell  |  |
| For:      | Wages     |  |
| Bal b/f:  |           |  |
| This chq: | \$300     |  |
| No. 8910  | 02        |  |

This cheque butt provides all the necessary details to make an entry in the cash payments journal. The reason for the payment can be entered in the 'Details' column (in this case, wages) and the amount entered in either a 'Wages' column or the 'Sundries' column. The document number (89102) should always be noted for future reference in case of any queries.

# **EFT PAYMENTS**

Electronic funds transfers have eliminated the need for cheques for many small business owners. EFT payments are much quicker and can be processed online at any time during the business day or after hours.

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

To make an EFT to an employee or supplier, their details must first be made available to the business. Both their BSB (Bank-State-Branch) and bank account numbers are required before an EFT payment can be completed. The BSB number is a six-digit number that identifies the bank and the branch that an individual or business uses for their banking (see Figure 4.4).

a document used to verify the details of cash payments made by cheque

cheque butt

**EFT** payment

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

# FIGURE 4.4 Confirmation of payment by EFT

**ACME BANK** 

**CONFIRMATION OF PAYMENT** 

Transfer to: A/c number: BSB 007-910 8188-919-900

Date/time: Authorisation: 05/01/23, 9.57.30

81822

TOTAL: AUD

\$300.00

Reference: D Pell Wages

# **RECEIPTS**

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

In either case, it's important to have a copy of the document once a receipt is given to the customer, to ensure that cash received ends up in the till at the end of the day. Always check the takings and the total receipts issued, to reduce the likelihood of fraud or theft. Figure 4.5 shows two common forms of receipt.

# FIGURE 4.5 Receipts

# Handwritten receipt

|              | Coburg Car Wash<br>707 Sydney Road<br>Coburg VIC 3058 | ABN 74 548 860 008 |                 |    | eceipt No: 657<br>XX INVOICE |
|--------------|---|--------------------|-----------------|----|------------------------------|
|              |   |                    |                 | Da | ate: 7/1/23                  |
| Received fro | om: <i>S Earle</i>                                    |                    |                 |    |                              |
| The amoun    | t of: <u>Sixty-six dollars</u>                        |                    |                 | \$ | 60.00                        |
| For:         | Car detailing   |                    | GST             | \$ | 6.00                         |
|              |   |                    | TOTAL RECEIVED: | \$ | 66.00                        |
| Signed:      | <u>N Kokinos</u>                                      |                    |                 |    |                              |
|              |   |                    |                 |    |                              |

# Computer-generated receipt

# **Coburg Car Wash** ABN 74 548 860 008 Date: 7/1/23 **TAX INVOICE** 1 car – full detailing Wash & wax \$60.00 + GST \$6.00 Total payable \$66.00 Cash received \$70.00 \$4.00 Change RECEIPT 657 With thanks

receipt a document used to verify the receipt of cash by a business Whichever type of receipt is used, the following key pieces of data need to be accurately recorded.

- Receipt number
- Date of the receipt
- Amount received
- What the cash was received for
- The amount of GST received from the customer

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

Both receipts in Figure 4.5 include an ABN, or 'Australian Business Number'. The ABN is an official number that a business needs for various purposes, including GST registration. A unique ABN is issued to each registered business in Australia. Using the ABN, the taxation office can keep track of all GST transactions. A business should print its ABN on any document it issues.

# **EFTPOS RECEIPTS**

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

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

The EFTPOS terminal produces a 'customer copy' and a 'merchant copy' of the **EFTPOS receipt**. The business owner should keep the merchant copy until the money is confirmed in its bank account the next day. Figure 4.6 shows a typical merchant copy of an EFTPOS receipt.

# FIGURE 4.6 Receipt from a sale using EFTPOS

ACME BANK Coburg Car Wash 707 Sydney Road Coburg VIC 3058

CUSTOMER COPY
Merchant number: 450900
Terminal number: AW693

PURCHASE
DEBIT MasterCard ......2544
Date/time: 07/01/23, 9.30.30
Authorisation: 1828366

\$66.00

TOTAL: AUD

**EFTPOS** terminal

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

# **EFTPOS** receipt

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

# **INVOICES**

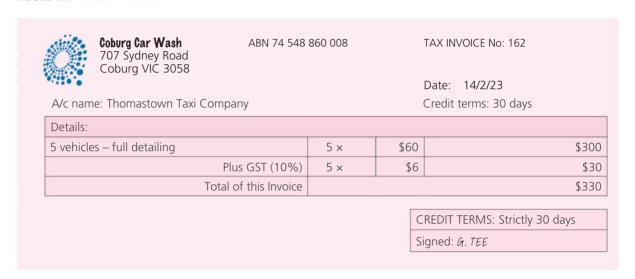
An **invoice** is used to verify that either a credit sale or a credit purchase has taken place. A sales invoice is issued to a customer when a credit sale is made, while a business owner receives a purchase invoice when a credit purchase is made from a supplier.

As the invoice is the evidence of a sale with a promise to pay at a later date, the details are vital. There is always some risk of slow payers or non-payers, so it is important to have a record of all details in case of queries about the amount owing. Figure 4.7 shows a typical sales invoice.

### invoice

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

# FIGURE 4.7 Sales invoice



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

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

# **CREDIT NOTES**

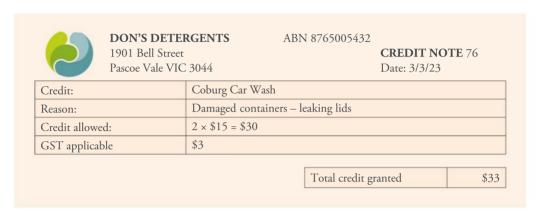
A **credit note** is issued when goods are returned because they are either faulty or damaged, the wrong size, the wrong brand or even the wrong colour. A credit note has a negative effect against an invoiced amount owing. That is, if we sold \$100 worth of goods to a customer and, due to a faulty product,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

Figure 4.8 shows a credit note received from Don's Detergents, a supplier of cleaning products to Coburg Car Wash.

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

Like the other documents, the credit note has a number for future reference. Details of claims should be kept, as they may indicate customer dissatisfaction with a particular brand or product.

FIGURE 4.8 Credit note





# 4.2 CHECK YOUR UNDERSTANDING



- 1 Why are business documents referred to as source documents?
- 2 Name three common business documents and describe the purpose of each.
- 3 Name the two source documents used for entries in the cash journals.

# 4.3

# OTHER BUSINESS DOCUMENTS

The main business documents described so far are used by almost every small business. There are several other documents that businesses may use, but any given business might only use a certain number of them. Most of these are not considered source documents, because they are not records of transactions.

# **PURCHASE ORDERS**

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

Purchase orders don't result in an entry in accounting records, because they may be altered or the order may not be fulfilled by the supplier.

# **DELIVERY DOCKETS**

Goods delivered by a supplier will usually be accompanied by a **delivery docket**. The purchaser is normally required to sign one copy to acknowledge that the delivery has occurred. The details of a delivery docket will include a description of the goods and the quantity supplied. Delivery dockets can be checked against an order form (if used).

Delivery dockets aren't recorded in the accounting system, because the dollar amount of the transaction isn't usually shown.

# STATEMENTS OF ACCOUNT

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

Figure 4.9 shows a typical monthly statement of account, issued by Don's Detergents to Coburg Car Wash.

### purchase order

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

# delivery docket

a document that may come with goods when they are delivered

# statement of account

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

### FIGURE 4.9 Statement of account

DON'S DETERGENTS
1901 Bell Street
Pascoe Vale VIC 3044

ABN 8765005432

Date: 31/3/23

Statement of Account for

Coburg Car Wash, 707 Sydney Road, Coburg VIC 3058

| Date  | Details                 | Debit \$ | Credit \$ | Balance \$ |
|-------|-------------------------|----------|-----------|------------|
| Mar 1 | Previous balance owing  |          |           | 1 200      |
| 2     | Sale – Invoice 1512     | 303      |           | 1 503      |
| 3     | Return – Credit note 76 |          | 33        | 1 470      |
| 11    | Sale – Invoice 1522     | 330      |           | 1 800      |
| 21    | EFT Payment – thank you |          | 1 200     | 600        |
| 28    | Sale – Invoice 1534     | 400      |           | 1 000      |

| edit terms: Strictly 30 days |
|------------------------------|
| re                           |

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

When Coburg Car Wash receives this document, it should check all entries to ensure that they are accurate before making a payment to Don's Detergents.

# **BANK STATEMENTS**

Most businesses have multiple transactions with their bank throughout any given period. The sales made by a business should be banked every day so that money isn't left on the business premises overnight. Cheques may be written out on a regular basis, and EFT transactions will occur daily. Therefore, there will be dozens (if not hundreds) of cash transactions in any given month.

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

# bank statement

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

# 4.3 CHECK YOUR UNDERSTANDING



- 1 Explain the circumstances under which a credit note would be issued.
- 2 Describe the role of a delivery docket and explain why it doesn't usually include cost prices.
- 3 What is the purpose of a statement of account?

# DESIGNING A SMALL BUSINESS **ACCOUNTING SYSTEM**

The role of an accounting system is to cater for the flow of information and produce the required reports for management and/or the owner. The business documents and multi-column cash journals shown in this chapter make up the basic accounting system used by many small businesses.

A flowchart is useful for demonstrating the flow of information through the accounting system. Figure 4.10 represents a typical accounting system for a small business, based on single entry accounting.



FIGURE 4.10 Flowchart: single entry accounting system

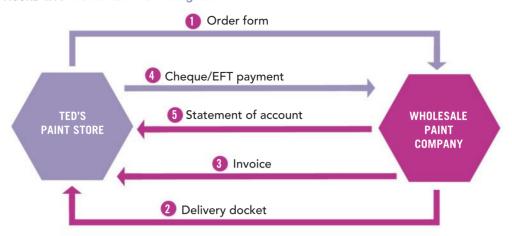
As specialist topics are introduced in later chapters, you should be able to see how they fit into the overall scheme of things.

# FLOWS OF INFORMATION

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

Figure 4.11 shows the exchange of documents between two businesses, one selling goods to the other.

FIGURE 4.11 Document flow diagram



The information flows in this order:

- 1 Ted's Paint Store sends an order form to the Wholesale Paint Company providing details of goods required.
- 2 With the delivery of the goods ordered, a delivery docket is given to Ted's Paint Store for signing.
- 3 After it confirms the delivery of the goods, the Wholesale Paint Company sends an invoice giving details of prices of the goods supplied.
- 4 After it checks the details of the invoice, Ted's Paint Store makes an EFT payment to the supplier.
- **(5)** The supplier issues a statement of account showing a summary of all the transactions for the current month.

Note: flows 4 and 5 may often occur in reverse order.

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

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

# COMPUTERISED ACCOUNTING SYSTEMS

The most important thing for an accounting system is that it tracks information flows accurately. A secondary priority is that the business owner can use the system without difficulty – and for many owners, this means using a computerised system.

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

Many software packages are used in small business, including:

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

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

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

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

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

### 4.4 **CHECK YOUR UNDERSTANDING**



- 1 'Computers are a vital part of accounting.' Do you agree? Discuss.
- 2 Identify two advantages of using Excel to keep accounting records for a small business.
- 3 List the following processes in their correct order within an accounting system: documents, decision-making, accounting records, business transactions, analysis of reports, accounting reports.

# **CHAPTER REVIEW**

# **KEY CONTENT**

[4.1]

Single entry accounting is an accounting system used by many small businesses. The system consists of two multi-column cash journals that record relevant transactions for a period. The cash receipts journal records money coming in, while the cash payments journal records money going out.

[4.2]

Source documents provide evidence of financial transactions and are used to create business records. The most common source documents for a small business are cheque butts, EFT payment records, receipts, invoices and credit notes.

[4.3]

Businesses may also use other types of business documents, such as purchase orders, delivery dockets, statements of account and bank statements. Most of these are not considered source documents, but some may be used to verify transactions.

[4.4]

The purpose of an accounting system is to track the flow of information and produce financial reports for management. Some small businesses use manual accounting systems, but many now use simple, affordable software packages and resources.

# **CHAPTER 4 EXERCISES**

# 1 BUSINESS DOCUMENTS: CREDIT



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



No. 1897

ABN: 78 463 529 976

Sold to: Mal's Mowing

Date: 1/4/23

| Quantity | Description        | Per unit | Total    |
|----------|--------------------|----------|----------|
| 20       | 15 cm mower blades | \$5.00   | \$100.00 |
|          | GST (10%)          |          | \$10.00  |
|          | Total              |          | \$110.00 |

CREDIT TERMS: Strictly 30 days

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

# **2 BUSINESS DOCUMENTS: CREDIT**



The following document was found in the offices of Mal's Mowing.

Mal's Mowing
Central Avenue
Caulfield VIC 3162

ABN: 83 128 473 008

No. AB7223

Account name: Barry & Morello – CPAs 15 Dandenong Road Malvern VIC 3144 Date: 31/5/23

| Description of services provided    | Charge   |  |  |
|-------------------------------------|----------|--|--|
| Maintenance of grounds – March 2023 | \$200.00 |  |  |
| GST (10%)                           | \$20.00  |  |  |
| Total Charge                        | \$220.00 |  |  |

TERMS: Strictly 14 days

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

# **3 BUSINESS DOCUMENTS: RETURNS**



The owner of Complete Computer Solutions received the following document.



ABC COMPUTERS 100 Mullers Road Doncaster VIC 3108

ABN 15 369 192 816

NO. B7543 Date: 23/3/23

| Credit: | Complete Computer Solutions, 1040 Royal Parade, Carlton VIC 3053 |
|---------|--|
| Reason: | Incorrect specification – 8 gb ordered                           |

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

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

# 4 BUSINESS DOCUMENT FLOWS



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

**ACE MACHINERY REPAIRS & PARTS** 

ABN 57 673 246 434

25 Main Road Kew VIC 3101

Date of issue: 31/3/23

To: Domestic Steam Cleaning,

2 Fairway Drive, North Parkville VIC 3052

| Date  | Details             | Debit \$ | Credit \$ | Balance \$ |
|-------|---------------------|----------|-----------|------------|
| Mar 1 | Balance past due    |          |           | 500        |
| 6     | Invoice 32765       | 80       |           | 580        |
| 10    | Invoice 32772       | 200      |           | 780        |
| 12    | Credit note 534     |          | 50        | 730        |
| 21    | Payment – thank you |          | 500       | 230        |
| 30    | Invoice 32781       | 120      |           | 350        |

- State the name of the supplier of goods involved in this document.
- **b** What is the name of this business document?
- Explain the purpose of this document.
- d Explain the transactions that occurred on 10 March, 12 March and 21 March.
- Refer to Figure 4.11, on page 48. Prepare a similar diagram that shows the flow of documents between the two businesses named above. Your diagram should include all the documents listed above, plus any others that may have been used.

# **5 BUSINESS DOCUMENTS: CASH**



Robina Welsford is the owner of ACHIEVE Tutoring Services. She has the following document in her possession.

ACHIEVE Tutoring Services ABN 22 223 128 607 No: 194 747 Airport Drive Flemington VIC 3031 Received from: B. Kirkwood

Date: 24/2/23

The amount of: <u>Seventy-seven dollars</u>

\$ 70.00 GST \$ 7.00

Double lesson

TOTAL RECEIVED: \$ 77.00

Robina Welsford Signed:

- a What is the name of this business document?
- **b** Describe the transaction that has been evidenced by this document.
- Would Welsford have a copy of this document or the original? Explain your answer
- d Explain the role that documents play in relation to satisfying the qualitative characteristics of accounting.
- e What is an ABN? Explain why a business owner should register for an ABN.

# **6 BUSINESS DOCUMENTS: EFT**



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

CBC BANK MALVERN MENSWEAR 554 High Street Malvern VIC 3144

MERCHANT COPY
Merchant number: 3122
Terminal number: XY1420

PURCHASE
DEBIT VISA .......1300
Date/time: 14/02/23, 14.20
Authorisation: 910299
TOTAL: AUD \$143.00

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

# **7 BUSINESS DOCUMENTS: EFT**



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



# **CBC BANK**

# **CONFIRMATION OF PAYMENT**

 Transfer to:
 BSB 155-550

 A/c number:
 213-438-002

 Date/time:
 25/02/23, 11.24

 Authorisation:
 42556

 TOTAL: AUD
 \$660.00

 Reference:
 AAMI Insurance

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

# **CASE STUDY**



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

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

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

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



# **ETHICAL CONSIDERATIONS**



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

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

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

# **CHAPTER CHECKLIST**

Now that you've finished Chapter 4, double-check your progress.

Are you ready for your Unit 1 assessment?

# I have ...

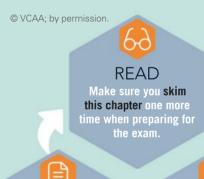
- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- ompleted all end-of-chapter activities
- Manded in my workbook for marking.

## I understand ...

- accounting reports and information used to assist in judging the success or failure of a business
- dethical considerations when making decisions in relation to establishing or operating a business
- discription of classified accounting reports for a service business: Balance Sheet.

### I can ...

- use correct accounting terminology
- describe and use accounting information presented in written reports and graphical representations to make a judgment on the success or failure of a business.
- of apply theoretical knowledge to actual and simulated situations.





# **PREPARE**

Read back over the chapter now, then complete the online revision activity.



### WATCH

Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



mea.digital/vceacc12\_4



# ESTABLISHING A SMALL BUSINESS

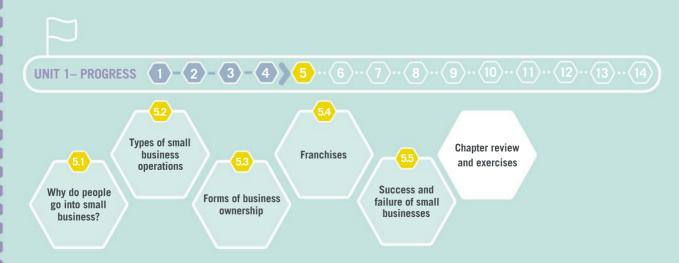
Every year, thousands of Australians decide to start their own small business. That decision is the first step on a long process of late nights, hard work and financial sacrifice. For some entrepreneurs it's the beginning of a financial and personally successful business; for others, it's a process that ends in failure and financial disaster.

In this chapter, you'll consider the process of establishing a small business, including the different ownership structures such businesses can have. You'll also consider the reasons why small businesses succeed or fail, and what entrepreneurs can do to help minimise the risks.

# **LEARNING OBJECTIVES**

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

- list various reasons why people go into business [5.1]
- classify small businesses according to the nature of their operation [5.2]
- outline the advantages and disadvantages of the various forms of ownership [5.3]
- describe the advantages and disadvantages of operating a franchise [5.4]
- describe the reasons for success and failure of small businesses [5.5].



# 5.1

# WHY DO PEOPLE GO INTO SMALL BUSINESS?

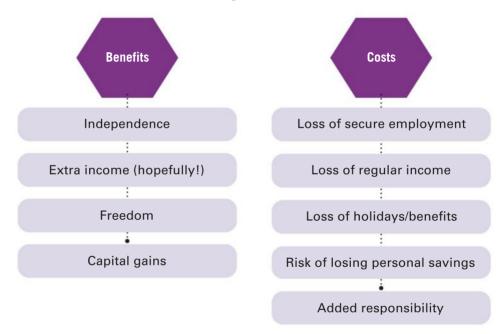
There is no single reason why someone might decide to set up their own business. However, many business owners cite:

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

The chance to create a profitable business tends to drive the decision to go into business. This dream is vital in keeping the small business sector alive. There will always be people willing to take a risk and invest their personal savings for the chance to earn large profits.

Unfortunately, for many business owners, being self-employed seems so attractive that they ignore the risks. For this reason, it's important to do a cost-benefit analysis before commencing a business. Figure 5.1 shows costs and benefits of owning a business, rather than working for an employer.

FIGURE 5.1 Costs and benefits of owning a business



You need a strong desire to be a small business owner to ignore the benefits of being an employee. Ultimately, it is a basic personal choice: to take a risk and possibly earn more money, or accept employment and earn a regular but possibly lower income.

# 5.1 CHECK YOUR UNDERSTANDING



- 1 List what you think are the main reasons why people go into small business.
- 2 Comment on the following statement made by a prospective small business owner: 'I'm going to invest in a mobile phone shop. Then I'll be able to sit back and rake in the profits!'
- 3 When individuals go into business, they often make sacrifices. Identify and describe some of these sacrifices.

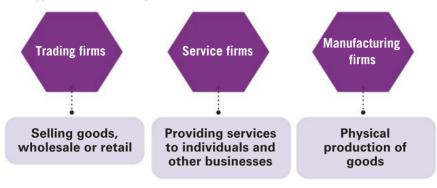
# 5.2

# TYPES OF SMALL BUSINESS OPERATIONS

Small businesses can be classified by either the nature of their operation or their ownership structure.

'Nature of operation' refers to the type of business activity a firm carries out. Figure 5.2 shows three broad classifications of small business operation.

FIGURE 5.2 Types of business operations



**Trading firms** include businesses that buy goods and resell them, usually at a higher price; for example, convenience stores, clothing boutiques and supermarkets. JB Hi-Fi, which you examined in Chapter 1, is a trading firm.

**Service firms** don't sell goods. They provide a service to their customers, for which they charge a fee; for example, businesses such as accountants, plumbers, lawyers and textbook editors.

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

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

#### trading firm

a business that earns its revenue from buying and selling goods

#### service firm

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

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

## 5.2 CHECK YOUR UNDERSTANDING



- 1 a Explain what the terms 'trading firm', 'service firm' and 'manufacturing firm' mean.
  - **b** List four examples of each type of business.
- 2 Name two types of businesses that could be referred to as both trading and service firms. Explain your answer.

# FORMS OF BUSINESS OWNERSHIP

Businesses can also be classified according to their type of ownership structure. Three basic forms exist: sole proprietorship, partnership and company.

FIGURE 5.3 Forms of business ownership



#### **SOLE PROPRIETORSHIPS**

**sole proprietorship** a business owned by a single person

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

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

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

Being a sole proprietor also has disadvantages.

- Starting capital is limited. Initial business funding must come from the owner's personal funds, which are usually limited.
- Borrowing opportunities are limited. Sole proprietors are not separate legal entities, and financial institutions will only lend limited amounts to a single individual.
- There are limited skills. Many small businesses have few, if any, employees, so the owner must have the skills needed to manage the business on a day-to-day basis.
- The workload is heavy. A single owner often makes a time commitment well beyond the 'normal' working week.
- Holidays may be minimal or not possible. Some sole proprietors have to shut their business to take a holiday. This may cost the business customers and reduce profits.

- All losses are suffered by the one person. Just as all profits go to one person, that same person must carry all the business losses.
- Liability is unlimited. If a sole proprietor suffers heavy losses and has outstanding debts, the owner is held liable for all such debts. The business isn't a separate legal entity, which means the owner can be forced to liquidate personal assets (such as their private home, car and personal bank accounts) until all the business debts are repaid.

#### **PARTNERSHIPS**

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

Partnerships have several advantages as a form of business ownership.

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



partnerships, skills, workloads and decisionshared.

partnership a business co-owned by several individuals Partnerships also have some major disadvantages.

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

#### **COMPANIES**

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

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

Public companies have a minimum of five shareholders and are only limited by how many shares were registered when the company was formed.



#### company

a business owned by shareholders that is a distinct legal entity

#### incorporation

the process of constituting a company as a legal corporation

#### private company

a business owned by 2–50 shareholders, which is registered with 'Proprietary Limited' at the end of its name

#### public company

a business with at least 5 shareholders and 'Limited' (Ltd) in its name, which is limited only by the number of shares registered during the company's creation There are many advantages of forming a company.

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

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

#### 5.3 **CHECK YOUR UNDERSTANDING**

WB PAGE 44

- 1 Name the three main forms of business ownership.
- 2 Describe two advantages and two disadvantages of each form of ownership.
- 3 For each of the following businesses, which form of business ownership would you recommend as the most suitable? Give reasons for your answers.
  - a Lawn-mowing service
  - b Take-away food shop
  - c Restaurant
  - d House builder
  - e Vehicle manufacturer

# 5.4 FRANCHISES

An individual thinking of starting a small business will typically consider which type of business to establish and which form of business ownership to adopt. One further decision must be made: whether to operate as an independent business or as part of a franchise.

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

Consider these well-known franchises.

- Bakers Delight
- Donut King
- Gloria Jean's
- Jim's Mowing
- McDonald's
- Red Rooster
- Subway

These popular business organisations are instantly recognisable. McDonald's is the classic case of franchising in Australia, and indeed the world. Its restaurants are basically the same across the country, selling the same range of products at the same prices. The same can be said about most other franchise operations.

franchise

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

#### franchisee

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

#### franchisor

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

Australian and New Zealand take-away food franchise Red Rooster was established in 1972.



Small business owners are often keen to join a franchise group because of the benefits to franchise owners.

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

Operating a business as a franchise also has disadvantages.

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

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

# 5.4 CHECK YOUR UNDERSTANDING



- 1 What is a franchise business? Explain this term fully.
- 2 Describe three advantages and three disadvantages of operating a business as part of a franchise operation.
- 3 You've just inherited \$500 000 and decide to buy into a franchise in your local area. Which would you choose? Discuss fully, giving reasons for your decision.

# 5.5 SUCCESS AND FAILURE OF SMALL BUSINESSES

No single reason explains why some business owners are highly successful while others go bankrupt. Yet the following attributes are often seen in successful business owners:

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

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

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

#### WHY BUSINESSES FAIL

When a small business fails to achieve the owner's dream of being successful, it can have one or more causes.

A common cause of failure is insufficient starting capital. Many owners put in enough cash to buy the assets required to start the business, but they underestimate how long it takes for a business to establish itself. Most new businesses fail to make a profit in the first year of trading, and they often run out of cash while trying to get established.

Poor management skills are another common cause of failure. Not everyone knows how to control inventory, accounts receivable and employees. These specialist skills must be learned, and not every owner adjusts to their demands. Added to this is the general problem of controlling the firm's running costs. All this must happen when the owner is busy trying to generate income for the business!

Another cause of business failure is insufficient professional advice. Some people consult accountants or other advisers when they start a business, but then develop a feeling of independence. 'I know what I'm doing' is a common claim. Unfortunately, it isn't always true.

Unrealistic predictions have led to many business failures. People see an opportunity to start a business and get carried away with the possibilities. They may not even consider the possibility of failure. Often, it's a case of trying to cash in on a booming market – unfortunately, it sometimes seems that everyone has the same idea! In the early 1980s, video hire shops were opening every week. It was a new and exciting market, but technology changed; virtually all those businesses have now closed. The same thing happened with computer shops in the 1990s: many of the new firms that started then have now disappeared.

Potential owners must try to remain realistic in their predictions for their business. Gathering opinions from professionals, as well as friends and family, should help in being both realistic and informed.

#### **FEASIBILITY STUDIES**

Before making a commitment to own and manage a business, it's a good idea to carry out a feasibility study to evaluate all the possibilities of the business proposal. The objective of a feasibility study is to produce a report that informs the potential business owner of all the items they need to consider before making a final decision. It doesn't guarantee success, but a well-informed individual is likely to make a good decision.

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

- Business type
  - Service
  - Tradina
  - Combination of service and trading
- 2 Form of ownership
  - Sole trader
  - Partnership
  - Company
- 3 Nature of business
  - Franchise member
  - Independent business
- 4 Legal requirements
  - State government regulations
  - Local council laws
  - Others (e.g. Department of Health)
- 5 Building requirements
  - Location
  - Competition
  - Single shop or regional centre?
  - Lease or buy?

- 6 Inventory requirements (if a trading firm)
  - Suppliers
  - Local or imported products?
  - Make goods or buy them?
  - Complementary products (e.g. shirts, ties)
  - Product range (e.g. quantity, variety)
- **7** Finance requirements
  - Capital required
  - Loans required
  - Sources of finance
- 8 Accounting requirements
  - Record keeping
  - Computer requirements
  - Professional advice
  - GST requirements
- 9 Future possibilities
  - Future demand for product or service
  - Likelihood of a profitable venture

#### an investigation into the potential problems and the probability

feasibility study

of success or failure of a project such as establishing a small husiness

#### 5.5 CHECK YOUR UNDERSTANDING



- 1 What are the three most important characteristics of a successful business owner, in your opinion?
- 2 List and describe the most common causes of business failure.
- 3 What is a feasibility study? What is its purpose?
- Referring to your local area, identify a business or industry that has closed down in recent years. Name the business that was affected and outline why you think it or its industry collapsed.

# 5 CHAPTER REVIEW

# **KEY CONTENT**

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

## **CHAPTER 5 EXERCISES**

#### 1 LOCAL BUSINESSES



Visit your local shopping centre and identify three small businesses. Interview the business owner (or manager) of each and construct a table to show your answers to the following questions.

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

#### SPREADSHEET

#### **2 FEASIBILITY STUDY**



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

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

#### **3 SETTING UP A BUSINESS**



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

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

#### **4 BUYING A SMALL BUSINESS**



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

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

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

# **ACCOUNTING IN THE REAL WORLD**



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

The Franchise Business website provides a wealth of interesting material in relation to franchises in Australia.



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

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

# **CHAPTER CHECKLIST**

Now that you've finished Chapter 5, double-check your progress.

Are you ready for your Unit 1 assessment?

#### I have ...

- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- ompleted the end-of-chapter activities
- Manded in my workbook for marking.

#### I understand ...

- reasons for establishing a business
- of factors that lead to the success or failure of a business.
- types of ownership structures such as sole proprietor, partnership, private company and public company.

#### I can ...

- use correct accounting terminology
- discuss factors affecting the level of success or failure of a business
- research information from a range of sources.

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this chapter one more time when preparing for the exam.



#### **PREPARE**

Read back over the chapter now, then complete the online revision activity.



#### WATCH

Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



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# 6

# **INVESTMENT OPPORTUNITIES**

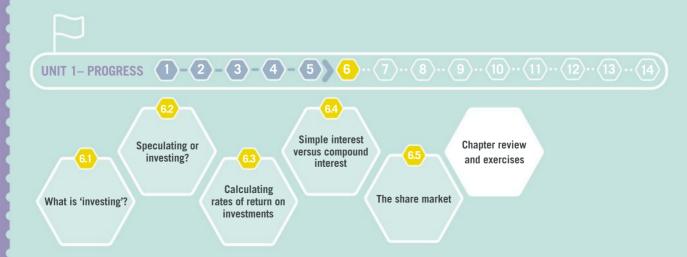
Sole proprietors are not a separate legal entity, so the owner and the business are the same for the purposes of investment. Many business owners invest money to secure their long-term future. In fact, their actual business represents the most significant investment for many sole proprietors.

This chapter describes some of the other investment opportunities that are popular with small business owners. It also looks at the share market, which is now easily accessible to both small business owners and private individuals.

#### **LEARNING OBJECTIVES**

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

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



# 6.1 WHAT IS 'INVESTING'?

#### investing

contributing economic resources with the intention of making a monetary gain

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

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

- The first objective is to earn a cash return that is, to be paid money directly from the investment. Some investments generate a cash return monthly, quarterly or even yearly.
- The second objective is to make a capital gain. That is, the investment gains in value over time, so when the investor resells it for more than they paid for it, they earn a net profit.

The type of investment undertaken depends on the investor's objectives. Some seek a steady cash return; others prefer a capital gain. Some investments generate both types of gains for the investor.

#### TYPES OF INVESTMENT OPPORTUNITIES

Individuals wanting to invest in the money market need to be aware of the different types of investments available if they're to have a chance of getting the best possible returns from their investments.

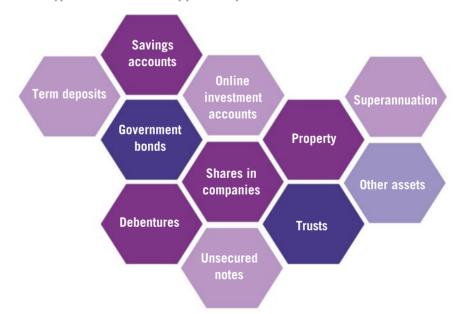


FIGURE 6.1 Types of investment opportunity

#### Savings accounts

Many people start investing money at a young age through a personal savings account with a bank. Most wage and salary earners have their income deposited directly into such accounts.

The advantage of basic savings accounts at a bank is that they're very secure investments with little, if any, risk. The disadvantage is that they tend to earn a very low rate of interest, or no interest at all.

Savings accounts are also available from other financial institutions such as building societies, friendly societies and credit cooperatives. These institutions compete with banks, and many offer higher interest rates or other benefits to appeal to customers.

Savings accounts are usually 'at call', meaning that the investor can withdraw money from the account whenever it's required.

# **Term deposits**

An individual with cash available to invest for an extended period of time may prefer a **term deposit**. With this investment, the cash is deposited for a specific period, such as three months, six months or perhaps a year.

Under normal circumstances, the investor may not withdraw any of the money invested during this time. Because of this, the investment attracts a higher interest rate than a savings account. To take advantage of the higher interest, the investor must ensure that they won't need the cash during the term of the deposit.

#### Online investment accounts

In recent times, online banking has become very popular among bank customers because of its convenience. **Online investment accounts** are attractive to the banks as well, because their costs are reduced. (If fewer customers visit branches, or they visit them less often, they don't require as many staff to assist them.)

Interest rates for online investment accounts are often comparable with term deposit rates, with the added advantage that cash is available at call via online transfer. The disadvantage for some individuals is simply the fact of using the internet for their banking transactions. Computer fraud is an ongoing issue, and some people are still reluctant to use online banking for this reason.

#### **Government bonds**

The Federal and State Governments, and government utilities, often borrow money from the public through the issue of 'bonds'. As the resources of the general public are accessible, this is an ideal way for such bodies to raise funds. The bonds are government guaranteed, so they represent a secure, long-term investment for both individuals and companies.

**Government bonds** are generally taken over several years at a set rate of interest, with the interest paid periodically. They're usually advertised in newspapers, and a formal application form is provided for interested investors.

#### Shares in companies

Some people may like to consider an investment in the **share market** (also known as the stock market). Compared with investing money with a bank, buying **shares** (also known as stocks) involves much more risk, but the rewards may also be higher. Shares can be purchased in a public company through a stockbroker, who acts as the investor's agent.

By buying shares in a company, the investor becomes a part-owner of the business and may be entitled to a share of any profit. However, it is also possible that the company will make losses and the investor may receive a zero return.

The other reason people buy shares is to make a capital gain. This can occur if the market price of the shares increases over time and the investor sells them at the higher price. Of course, the price may instead fall over time. In fact, shares can become worthless and the investor may lose all the money they invested.

#### term deposit

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

# online investment account

a bank account accessible online that earns a higher rate of interest compared to a basic savings account

#### BEST PRACTICE

Remember: The role of accounting is to provide financial information to help make decisions.

#### government bonds

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

#### share market

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

# shares

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

#### debenture

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

#### unsecured notes

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

#### **Debentures**

A **debenture** is a loan by a member of the public to a company. Unlike shares, if a debenture is taken out, the investor is not a part-owner of the company. The company records debentures as liabilities, because they are loans that must be repaid. A debenture is generally for a fixed period (e.g. one, three or five years) and interest is normally paid at regular intervals (e.g. every six months).

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

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

#### **Unsecured notes**

**Unsecured notes** are another form of investment involving companies. As the name implies, unsecured notes have no security in terms of the money being repaid to the investor. For example, if a company is wound up, investors in the company's debentures will be repaid before investors in its unsecured notes.

Because of this, unsecured notes usually pay slightly more interest than debentures. Applications for unsecured notes are made by way of a prospectus, in the same way as a debenture issue.

# **Property**

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

People often buy property as an investment and to achieve financial security.



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

Speculators often buy properties that will also generate income each year through rent. Apartments or units have been used as investment properties for many years, and in recent years inner-city apartments have become popular investments. They provide two opportunities for a return on their investment: regular cash flow through rental income, which can provide a return almost immediately, and the possibility of a capital gain through increased property values.

#### **Trusts**

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

The net returns earned by the trust are periodically calculated and distributed to the unit holders of the trust. The investment return to the individual is not guaranteed and depends on the success of the decisions made by the trustee.

#### **Superannuation**

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

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

#### Other assets

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

#### 6.1 CHECK YOUR UNDERSTANDING

- 1 Briefly describe six types of investments available to a small business owner.
- 2 State one advantage and one disadvantage of the forms of investment described in Question 1.
- 3 Explain the main difference between an 'at call' savings account and a term deposit account.

#### trust

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

#### superannuation

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

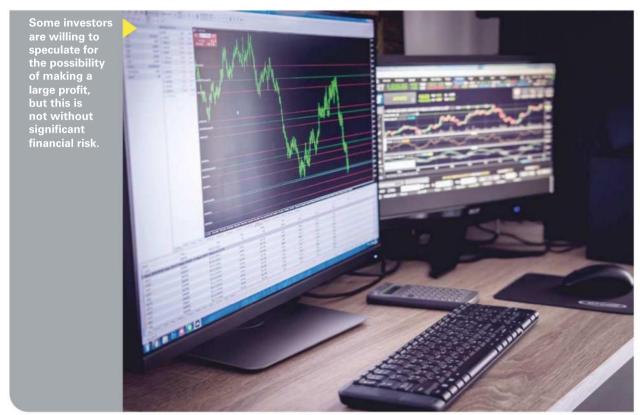


# 6.2

# SPECULATING OR INVESTING?

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

speculation making an investment on the chance that its value will grow over time Other investors prefer to take a gamble and **speculate** on the chance of making a large profit. For example, buying shares in a mining company because of a rumour about a new oil discovery is basically gambling. Such shares may be cheap in price and appear to be an attractive investment – but if no oil deposit is found (i.e. if the rumour had no basis), the shares may become worthless.



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

The decision about the types of investments required for an individual is a personal one. However, it is always recommended to take a balanced approach when putting together an investment portfolio, because this will guarantee some returns each year and provide the opportunity for financial growth on speculative investments.

Another thing to consider is the needs of the individual. Some investments tie money up for extended periods of time. Other investments are flexible in their nature and allow access to money if required. There is little value in chasing high interest rates by locking your money away for five years if you will likely need your cash in 12 months' time. Budgeting plays an important part in determining the types of investments an individual needs at a particular point in time.

## **RISK VERSUS RETURN**

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

FIGURE 6.2 Returns on investments versus security



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

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

#### 6.2 **CHECK YOUR UNDERSTANDING**



- 1 Distinguish between speculative investments and investments for specific returns. List two examples of each type of investment.
- 2 Using the headings 'Speculative', 'Specific returns' and 'Both speculative and specific returns', place each of the eight different types of investments described in this chapter under the correct heading.
- 3 Visit your local bank and collect any available material on the different types of accounts available. Prepare a table summarising this information, including such details as name of account, minimum deposit, special conditions, bank fees, interest rate and any other relevant data.

# 6.3 CALCULATING RATES OF RETURN ON INVESTMENTS

rate of return

the percentage return earned on an investment over a specific period Ratio analysis can be used to evaluate returns on investments. The **rate of return** measures the percentage return made on an investment over a period.

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

The rate of return is an evaluation tool that provides information about the success (or failure) of an investment.

If money is invested in a term deposit, the return will be known at the time of investment. For example, 4% may be paid on term deposits with a bank. However, the rate of return is most useful when evaluating other forms of investment.

#### **EXAMPLE 6.1**

Rory Phelan purchased a coin collection on 1 March 2022 for \$1500. One year later, Phelan sold the collection for \$1650. To evaluate his investment, the profit made (\$150) can be compared with the original investment, giving a rate of return of:

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

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

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

### **TAXATION AND INFLATION**

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

#### **EXAMPLE 6.2**

Sophie Deering invested \$4000 in a term deposit at 5% per annum (p.a.). Deering pays tax at the rate of 37 cents in the dollar, which means that if she earns additional income she must pay 37% of that income to the taxation office.

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

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

Therefore:

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

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

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

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

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

#### **EXAMPLE 6.3**

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

| Rate of return before tax              | 5.00% |
|--|-------|
| Less taxation payable                  | 1.85% |
| Rate of return after tax               | 3.15% |
| Less inflation rate                    | 3.00% |
| Rate of return after tax and inflation | 0.15% |

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

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

#### 6.3 CHECK YOUR UNDERSTANDING



- 1 Using an example, describe the usual relationship between the security of investments and the return on these investments.
- 2 What is the return on investments ratio? What is its purpose?
- 3 Explain why a rate of return after tax is a good measure of an investment's value.

# 6.4 SIMPLE INTEREST VERSUS COMPOUND INTEREST

simple interest

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

#### **EXAMPLE 6.4**

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

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

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

Simple interest is a flat rate of interest paid upon the original investment.









#### compound interest

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

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

#### **EXAMPLE 6.5**

Let's assume that Sophie Deering's term deposit had a 5% compound interest rate.

From the second year onwards, Deering would receive interest on both her original \$4000 and her accumulated interest. The investment continues to compound until maturity, when she receives the full amount of the interest earned.

Here's the effect of compounding her interest each year:

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

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



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

#### INTEREST RATE PERIODS

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

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

1 8% p.a. simple interest

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

## 2 8% p.a. compounding yearly

| After 1st year | 0.08 × \$10 000.00 = \$800.00        |
|----------------|--------------------------------------|
| 2nd year       | 0.08 × \$10 800.00 = 864.00          |
| 3rd year       | 0.08 × \$11 664.00 = 933.12          |
| 4th year       | $0.08 \times \$12\ 597.12 = 1007.77$ |
| 5th year       | $0.08 \times \$13604.89 = 1088.39$   |
| Total interest | \$4693.28                            |

**3** 8% p.a. compounding half-yearly To compound half-yearly, 8% p.a. equates to 4% per half-year. Therefore, interest will be calculated over 10 periods.

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

4 8% p.a. compounding quarterly

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

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

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

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

The purpose of compound interest is to create an accumulating fund to provide a one-off payment at maturity, as is the case with superannuation. Superannuation funds can provide very large payments on retirement because an employee puts money away and allows it to compound yearly. This may occur over 30 to 40 years, which maximises the benefit of compound interest.

For those students interested in maths, the compound interest formula is:

Future value = P(1 + I)n

Where:

P = principal invested, I = interest rate per period, and n = number of compounding periods

## **COMPOUND INTEREST AND ANNUAL YIELDS**

When banks and financial institutions offer investments involving compound interest, it's common practice to state both the actual interest being paid (called the *nominal rate*) and the effective *annual yield* earned.

This yield is the rate at which the investment effectively earns interest once the compounding of interest is considered. For example, if an investment earns 5% p.a. payable monthly, that equates to 5.1164% as an annual yield when the interest is compounded every month. Knowing this, the investor can compare this rate to other investments paying simple interest over the same period.

This reinforces the earlier point that compound interest equates to a higher effective rate only if two things occur:

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

# 6.4 CHECK YOUR UNDERSTANDING



- 1 Distinguish between 'simple interest' and 'compound interest'.
- 2 'Superannuation uses compound interest to great effect.' Explain this statement fully.
- 3 'When investing, don't put all your eggs in one basket.' Explain the relevance of this statement to investing in the financial market.

# 6.5 THE SHARE MARKET

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

#### **KEY TERMS**

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

#### Shares

When an individual purchases shares, they become part-owner of a company. A share certificate (sometimes called a holding statement) is issued to the shareholder, stating how many shares they own.

A large company may have millions of shares available, but an individual shareholder may own just a few hundred or thousand of them.

# Registered capital

This is the maximum amount of capital that a company may raise from its shareholders. It's registered when the company is originally formed and it includes a statement about the types and numbers of shares available.

For example, a company may have registered capital of one million \$1 ordinary shares.

#### Par value and market price

The original value of the shares when they were first created is called the par value. The current price at which shares are being sold on the open market is called the market price. It will go up and down depending on the company's success or failure.

#### **Stockbrokers**

A **stockbroker** acts as an agent for a person wanting either to buy or sell shares. Someone wanting to buy into a company instructs their broker as to what share to buy, the quantity to buy and at what price. The broker then registers the bid to buy at this particular price. Meanwhile, a person who owns shares in the same company may have decided to sell. Their broker receives similar instructions – the company to sell, the quantity of shares for sale and a desired selling price.

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

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

In recent years, online share trading has become very popular. For a relatively small fee (around \$10-25 per trade), individuals can now trade in shares online. However, the organisations that offer online trading (such as CommSec or NABtrade) actually play the stockbroker role; they act as an agent on behalf of the buyer or seller.

The internet has streamlined share market transactions because offers to buy and sell can be received from anywhere and at any time from all over the country.

#### par value

the original price at which a share was first issued

#### market price

the current price at which a particular share is being traded

#### stockbroker

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



Investors can also receive up-to-date information on shares from the Australian Securities Exchange (ASX) website. This is an invaluable source of information for investors: share prices, company results, company histories and special announcements are all available at any time.

# **Brokerage fee**

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

#### **Dividend**

A **dividend** is a payment to shareholders as their share of the profit being distributed among the owners. For example, a dividend paid may be 20 cents per share for each share owned.

There is no set rate for dividend payments, and shareholders may not receive a dividend at all if profit results were disappointing (or non-existent).

#### **All Ordinaries Index**

The **All Ordinaries Index** is a measure of the overall state of the market after a day's trading. Essentially, it's an average of the changes in share prices. If most shares increase in value, the All Ordinaries will increase. If the market is depressed and most shares fall in price, so too will the index.

The index is a guide to the confidence (or lack of confidence) that investors have in the financial market. It's usually quoted on evening television and radio news to summarise the change in the stock market on that day.

## **READING A STOCK MARKET REPORT**

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

Figure 6.3 is a typical stock market report. It is based on actual data and uses some well-known companies as examples.

#### FIGURE 6.3 A stock market report

| a. 1                    | ASX  |       |        | _     | 6 11  |       | onth  | Sales  | Dividend |
|-------------------------|------|-------|--------|-------|-------|-------|-------|--------|----------|
| Stock                   | code | Close | Move   | Buy   | Sell  | High  | Low   | 100s   | yield    |
| Blue-<br>Scope<br>Steel | BSL  | 14.63 | + 0.35 | 14.62 | 14.68 | 16.25 | 10.61 | 25 179 | 0.63%    |
| Coca-<br>Cola           | CCL  | 8.37  | 0      | 8.34  | 8.40  | 10.87 | 7.52  | 13 499 | 5.50%    |
| JB Hi-Fi                | JBH  | 25.86 | -2.25  | 25.84 | 25.88 | 30.78 | 21.20 | 29 256 | 4.20%    |
| NAB                     | NAB  | 28.68 | -0.23  | 28.65 | 28.69 | 34.09 | 28.01 | 52 654 | 6.85%    |
| Reject<br>Shop          | TRS  | 6.15  | -0.21  | 6.14  | 6.22  | 8.70  | 3.25  | 808    | 3.77%    |

Source: Market Summary, 12 February 2018

Each column in this report provides a different piece of data.

#### dividend

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

#### **All Ordinaries Index**

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

#### Stock

This is simply the name of the company (or an abbreviation). While this is usually straightforward, some companies trade under different or multiple titles.

#### Close

This is the closing price at the end of the day's trading – the last price at which shares were sold during that particular day. For example, the Reject Shop closed at \$6.15 per share, while shares in NAB closed at \$28.68 per share.

#### Move

This is the change in share price (if any) from the previous day's trading. For example, shares in BlueScope Steel gained \$0.35 during this day's trading, while JB Hi-Fi lost \$2.25 per share by the end of the day.

# **Buy/Sell**

These columns list the latest offer to buy and sell shares. You can see that someone has made a bid to buy JB Hi-Fi shares at a price of \$25.84, while someone else is prepared to sell at \$25.88. The offer to buy will usually be lower than the offer to sell, so it may have to increase if a trade is to take place. Alternatively, the seller may drop their price to complete a sale.

# 12-month High and 12-month Low

The constant questions for investors are 'Will the price go higher?' or 'Is there a chance the price will fall this week?' These two columns help investors predict future trends in the market.

Figure 6.3 shows that, at this time, NAB was trading near its 12-month low, while the other shares were trading at a mid-point between their high and low prices. NAB may appear as a good buy at its listed price, because it's currently at a low point and may rise. But then again, it may drop even further!

#### Sales 100s

This column shows the turnover in shares for the day (in units of 100). This can be used to gauge the general level of interest in a company's shares.

Figure 6.3 indicates that 5 265 400 shares in NAB were sold and 2 925 600 JB Hi-Fi shares changed hands in one day's trading. The NAB turnover means that about \$150 million changed hands in one day in just that one company!

#### Dividend yield

**Dividend yield** is an analytical ratio similar to the rate of return on investment. It compares the latest declared dividend from the company with its latest selling price per share.

The dividend yield is calculated by the following formula.

Dividend yield = Dividend per share

Current market price

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

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

particular shares

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

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

Referring to Figure 6.3, NAB has the best dividend yield from the four companies listed (6.85%), while BlueScope Steel has the lowest yield (0.63%). Of course, those investors who purchased NAB at \$34.09 (the high for the year) would be earning a lower return on their investment. Shareholders who bought into NAB at \$28.01 would currently be earning a much higher return. This highlights the nature of the dividend yield calculation: as prices change from day to day, so too will the dividend yield.

# 6.5 CHECK YOUR UNDERSTANDING



- 1 What does the term 'registered capital' mean when referring to a company?
- 2 Explain the difference between the par value and market value of a share.
- 3 How is dividend yield calculated?
- 4 Explain the two ways shareholders hope to make money on their investment.

# 6 CHAPTER REVIEW

# **KEY CONTENT**

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

# **CHAPTER 6 EXERCISES**

#### 1 RATE OF RETURN



Robert Valvo purchases a stamp collection on 1 January 2023 for \$400. He sells the collection on 31 December 2023 for \$460.

- a Calculate the rate of return Valvo earns on his investment. Express your answer as a percentage per annum.
- **b** Would your answer be different if Valvo had purchased the collection on 1 January 2022? What would be the rate of return under these circumstances?
- c Explain how the rate of return calculation can be used to evaluate investments.

#### **2 RATE OF RETURN AFTER TAX**



Sayo Tanaka invests \$8000 in a one-year government bond paying 6% p.a. Her marginal tax rate is 19 cents in the dollar. The inflation rate over the year has been put at 2.5%.

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

#### 3 RATE OF RETURN AFTER TAX



Josh Kelic takes out a three-year \$12 000 debenture earning 7% p.a. His marginal tax rate is 45%.

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

#### **4 RATE OF RETURN AFTER TAX**



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

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

#### **5 COMPARING INVESTMENTS**



Consider the following advertisements:

Α





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

#### **6 COMPARING INVESTMENTS**



An investor is considering the following possible investments.

| Term deposit | Government bonds | Debentures      | Unsecured notes |
|--------------|------------------|-----------------|-----------------|
| 30 days      | 12 months        | ABC Finance Co. | ABC Finance Co. |
| 4%           | 6%               | 1 year          | 1 year          |
|              |                  | 7%              | 8%              |

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

#### 7 SIMPLE OR COMPOUND INTEREST?



Kevin Buckley has \$10 000 to invest. He has been offered 6.5% simple interest over three years, or 6% compound interest (compounding yearly) over the same time period. He has asked your advice about the two alternatives.

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

#### **8 SIMPLE OR COMPOUND INTEREST?**



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

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

#### 9 NOMINAL RATES AND EFFECTIVE YIELD



The following advertisement was printed in the financial press.

|   | CBC BA              |      |  |  |
|---|---------------------|------|--|--|
| 0/1011                                      | Effective rates 1/6 |      |  |  |
| Nominal rate Effective annua (%) yield (%)* |                     |      |  |  |
| \$5 000–9 999                               | 3.45                | 3.51 |  |  |
| \$10 000–19 999                             | 3.75                | 3.82 |  |  |
| \$20 000–49 999                             | 4.80                | 4.91 |  |  |
| \$50 000 +                                  | 5.25                | 5.38 |  |  |

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

#### 10 DIVIDEND YIELDS



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

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

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

#### 11 SHARE PRICES: 2018 TO NOW



Refer to Figure 6.3 on page 84. The share prices in the table were actual market prices quoted in February 2018, so they can now be used as a comparison with current prices.

- **a** Using the ASX website as a reference, determine the latest closing price for each of the five companies listed.
- **b** Calculate the change in the share price for each company.
- c Express the change in selling price in percentage terms.
- **d** In terms of capital gains, which of the five companies was the best buy in 2018? Explain your answer fully.

#### 12 LET'S BUY SOME SHARES!



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

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

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

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

# **ACCOUNTING IN THE REAL WORLD**





The Australian Securities Exchange (ASX) is Australia's stock market. It's a publicly traded company with an average daily turnover of more than 4.5 billion dollars.

Visit the ASX website, enter the company codes in the table below and use the latest information about each company to complete the table. (Alternatively, if your teacher approves, you could select your own five companies.)

| Stock         | ASX code | Closing<br>price | High<br>price for<br>day | Low<br>price<br>for day | Volume (turnover)<br>100s |
|---------------|----------|------------------|--------------------------|-------------------------|---------------------------|
| ANZ Bank      | ANZ      |                  |                          |                         |                           |
| BHP Billiton  | ВНР      |                  |                          |                         |                           |
| Caltex        | CTX      |                  |                          |                         |                           |
| Harvey Norman | HVN      |                  |                          |                         |                           |
| Woolworths    | WOW      |                  |                          |                         |                           |

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

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

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

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

# **ETHICAL CONSIDERATIONS**



For a number of years, you have owned some mining company shares in your investment portfolio. However, you've just read that one of these companies has decided to start mining for uranium in an overseas country.

You have a significant sum of money invested in this mining company, and its future is very promising, but you keep hearing about potential environmental issues. The announcement has had a lot of media coverage, and some people are protesting that the new business venture may destroy areas of forest and contaminate major waterways.

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



# **CHAPTER CHECKLIST**

Now that you have finished Chapter 6, double-check your progress.

Are you ready for your Unit 1 assessment?

#### I have ...

- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- ompleted the end-of-chapter activities
- Manded in my workbook for marking.

#### I understand ...

distribution and alternative investment opportunities to establishing a business.

## I can ...

- use correct accounting terminology
- discuss alternative investment opportunities to establishing a business.

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#### PRFPARE

Read back over the chapter now, then complete the online revision activity.



#### \Λ/ΔΤΟΗ

Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



mea.digital/vceacc12\_6

# 7

# RECORDING AND REPORTING CASH FLOWS

In Chapter 4, you encountered the concept of single entry accounting and how it is used. Single entry accounting is based on two journals – the cash receipts journal and the cash payments journal – that record on all cash flowing into and out of a small business.

This chapter expands on what you already know and introduces the techniques used to record and report cash flows. In this chapter you'll learn how to design and use different forms of these recording journals, how to summarise the records into a report, and about how the goods and services tax (GST) is recorded and paid.

### **LEARNING OBJECTIVES**

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

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



# 7.1

### CASH RECEIPTS AND CASH PAYMENTS

In an organised accounting system, financial transactions are classified so that similar transactions are grouped together. Breaking down large volumes of data into different groups allows for easier recording and processing.

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

- selling goods for cash
- providing services for cash
- receiving interest on investments
- collecting money owed from accounts receivable
- borrowing from banks and other institutions
- selling unwanted assets for cash
- the owner contributing cash as capital (which, under the entity principle, is also a cash receipt).



cash payment outflows of cash paid to individuals or businesses

cash receipts inflows of cash

received from

individuals or businesses

A business may also make a variety of cash payments, such as:

- buying goods for cash
- paying for services in cash (e.g. wages, cleaning)
- paying interest on loans
- paying accounts payable
- repaying loans
- purchasing non-current assets for cash
- the owner withdrawing cash from the business.

Cash transactions may vary in nature, but they're expected to occur many times in the day-to-day operations of a business. All cash receipts and payments must be recorded accurately.

### 7.1 CHECK YOUR UNDERSTANDING



- 1 List four different types of financial transactions where a business may receive cash.
- 2 List four different types of financial transactions where a business may pay cash.

# 7.2

### RECORDING CASH RECEIPTS

Accounting records aim to create a history of the details included on business documents.

A **cash receipts journal** records all cash receipts, regardless of their source. A journal is also known as a day book, because it records transaction details on a daily basis. (Note that many journals are spreadsheets, rather than physical books.)

The journal needs to include the relevant details of each receipt, including the date of receipt, receipt number or EFTPOS details, the nature of the transaction, the amount received and the GST.

Figure 7.1 shows a basic cash receipts journal for Jack Rio – Cabinetmaker.

cash receipts journal

a daily record of the

details of all cash receipts

### FIGURE 7.1 Cash receipts journal

### JACK RIO - CABINETMAKER: CASH RECEIPTS JOURNAL (BASIC)

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

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

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

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

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

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

### **MULTI-COLUMN CASH RECEIPTS JOURNALS**

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

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

Figure 7.2 shows Jack Rio's journal redesigned as a multi-column cash receipts journal. It reflects the items Rio constructs most frequently: kitchen cupboards, bookshelves and student desks.

multi-column journal a daily record

subdivided into special columns to cater for frequent cash receipts and payments

The special columns in a multi-column cash receipts journal allow different types of businesses to show their most frequent types of transactions clearly. A cabinetmaker's cash receipts journal would benefit by being able to itemise desks, bookshelves and cupboards more easily.



FIGURE 7.2 Multi-column cash receipts journal

JACK RIO - CABINETMAKER: CASH RECEIPTS JOURNAL (MULTI-COLUMN)

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

A multi-column cash journal has several advantages over a simple cash journal.

First, a total can be quickly calculated for each special column in the journal. If using a spreadsheet, this total can be calculated automatically and the performance of the business tracked throughout the period. These totals can also be used at a later stage to prepare a summary of the journal (covered later in this chapter).

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

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

### 7.2 CHECK YOUR UNDERSTANDING



- 1 Name the two source documents used to make entries in the cash receipts journal.
- 2 Explain the main advantages of using multi-column cash receipts journals.
- 3 Explain the circumstances that need to exist for a business to benefit from using a multi-column cash receipts journal.

# 7.3

## **RECORDING CASH PAYMENTS**

# cash payments journal

a daily record of the details of all cash payments The **cash payments journal** records all payments by a business, regardless of their nature. It can be designed along the same lines as the cash receipts journal.

Cash payments are usually made by EFT or by cheque – although the use of cheques is rapidly declining in Australia. Copies of EFT payments or cheque butts will be the source of the financial information entered into a cash payments journal.

Figure 7.3 shows the simple version of a cash payments journal, once again using the example of Jack Rio – Cabinetmaker.

FIGURE 7.3 Cash payments journal

### JACK RIO - CABINETMAKER: CASH PAYMENTS JOURNAL (BASIC)

| Date  | Details        | Cheque no. | Total paid<br>\$ | Amount paid<br>\$ | GST paid<br>\$ |
|-------|----------------|------------|------------------|-------------------|----------------|
| Sep 1 | Electric tools | 7001       | 583              | 530               | 53             |
| 2     | Timber         | 7002       | 440              | 400               | 40             |
| 3     | Wages          | EFT        | 300              | 300               |                |
| 5     | Advertising    | 7003       | 275              | 250               | 25             |
| 7     | Drawings       | EFT        | 200              | 200               |                |
| 9     | Timber         | 7004       | 330              | 300               | 30             |
| 10    | Wages          | EFT        | 280              | 280               |                |
| 13    | Timber         | 7005       | 110              | 100               | 10             |
| 14    | Drawings       | EFT        | 200              | 200               |                |
| 17    | Wages          | EFT        | 300              | 300               |                |
| 18    | Timber         | 7006       | 264              | 240               | 24             |
| 21    | Drawings       | EFT        | 200              | 200               |                |
| 24    | Wages          | EFT        | 300              | 300               |                |
| 27    | Insurance      | 7007       | 528              | 480               | 48             |
| 28    | Drawings       | EFT        | 250              | 250               |                |
| 30    | Totals         |            | 4 560            | 4 330             | 230            |

This cash payment journal uses similar columns to the simple cash receipts journal.

- The Date column tracks when the payment was made.
- The *Details* column notes the nature of each payment.
- The *Cheque no.* column notes the number of the source document either the number on the cheque butt or 'EFT' for electronic transfers.
- The Total paid column shows the total amount paid by the business, while the remaining columns break that amount down into the base amount and the GST (if any).

Business owners should always be careful when writing a cheque to copy all details of the payment onto the cheque butt. Cheques are used in sequence, so the *Cheque no.* column provides an easy way to ensure that all cheques are accounted for – just run an eye down this column to check that all numbers are sequential and none are missing. (Sadly, there's no similar shortcut for checking EFT payments.)

### **MULTI-COLUMN CASH PAYMENTS JOURNALS**

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

As with cash receipts, Jack Rio's business experience certain cash payments more often than others – he frequently buys timber and other assets, pays wages and draws earnings for himself. Figure 7.4 shows how the simple journal in Figure 7.3 can be redesigned as a multi-column cash payments journal reflecting those payments.

FIGURE 7.4 Multi-column cash payments journal

JACK RIO - CABINETMAKER: CASH PAYMENTS JOURNAL (MULTI-COLUMN)

| Date  | Details        | Cheque no. | Total<br>paid<br>\$ | Timber<br>\$ | Wages<br>\$ | Drawings<br>\$ | Assets<br>\$ | Sundry<br>payments<br>\$ | GST<br>paid<br>\$ |
|-------|----------------|------------|---------------------|--------------|-------------|----------------|--------------|--------------------------|-------------------|
| Sep 1 | Electric tools | 7001       | 583                 |              |             |                | 530          |                          | 53                |
| 2     | Timber         | 7002       | 440                 | 400          |             |                |              |                          | 40                |
| 3     | Wages          | EFT        | 300                 |              | 300         |                |              |                          |                   |
| 5     | Advertising    | 7003       | 275                 |              |             |                |              | 250                      | 25                |
| 7     | Drawings       | EFT        | 200                 |              |             | 200            |              |                          |                   |
| 9     | Timber         | 7004       | 330                 | 300          |             |                |              |                          | 30                |
| 10    | Wages          | EFT        | 280                 |              | 280         |                |              |                          |                   |
| 13    | Timber         | 7005       | 110                 | 100          |             |                |              |                          | 10                |
| 14    | Drawings       | EFT        | 200                 |              |             | 200            |              |                          |                   |
| 17    | Wages          | EFT        | 300                 |              | 300         |                |              |                          |                   |
| 18    | Timber         | 7006       | 264                 | 240          |             |                |              |                          | 24                |
| 21    | Drawings       | EFT        | 200                 |              |             | 200            |              |                          |                   |
| 24    | Wages          | EFT        | 300                 |              | 300         |                |              |                          |                   |
| 27    | Insurance      | 7007       | 528                 |              |             |                |              | 480                      | 48                |
| 28    | Drawings       | EFT        | 250                 |              |             | 250            |              |                          |                   |
| 30    | Totals         |            | 4 560               | 1 040        | 1 180       | 850            | 530          | 730                      | 230               |

Note that, while a business such as cabinetmaking would probably conduct some business on credit, you'll consider only cash transactions in this chapter.

To minimise recording errors, the entries in the multi-column cash payments journal should also be checked by totalling the special columns and reconciling these with the *Total paid* column.

If this journal is prepared as a spreadsheet, all regular payments can be conveniently summarised at the end of the month.

### 7.3 CHECK YOUR UNDERSTANDING



- 1 Identify the two source documents used to make entries in the cash payments journal.
- 2 Explain the main advantages of using multi-column cash payments journals.
- **3** 'A multi-column cash payments journal can be designed to suit all types of businesses.' Do you agree? Discuss.

# 7.4 STATEMENTS OF RECEIPTS AND PAYMENTS

Cash journals exist to record the daily details of cash receipts and cash payments. However, once a business has been operating for some time, the cash journals will cover numerous pages and be difficult to understand. A transaction summary is needed.

A **statement of receipts and payments** is a report that summarises cash receipts and cash payments over a period of time. A cash journal prepared on a multi-column basis helps in preparing a statement of receipts and payments, because the most frequent transactions are already totalled.

For Jack Rio's business, a statement of receipts and payments for September would be prepared as shown in Figure 7.5. Note that the heading includes the name of the business and the period covered.

statement of receipts and payments

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

### FIGURE 7.5 Statement of receipts and payments

# JACK RIO – CABINETMAKER: STATEMENT OF RECEIPTS AND PAYMENTS FOR MONTH ENDED 30 SEPTEMBER 2023

| Cash receipts                    | \$    | \$     |
|----------------------------------|-------|--------|
| Sales – Kitchen cupboards        | 1 940 |        |
| – Bookshelves                    | 800   |        |
| – Student desks                  | 1 360 |        |
| Capital contribution             | 9 000 |        |
| Loan – NAB                       | 3 000 |        |
| GST collected                    | 410   | 16 510 |
| Cash payments                    |       |        |
| Timber                           | 1 040 |        |
| Wages                            | 1 180 |        |
| Drawings                         | 850   |        |
| Purchase of assets               | 530   |        |
| Advertising                      | 250   |        |
| Insurance                        | 480   |        |
| GST paid                         | 230   | 4 560  |
| Excess of receipts over payments |       | 11 950 |
| Bank balance (1 September 2023)  |       | Nil    |
| Bank balance (30 September 2023) |       | 11 950 |



purchases from a set period of time are summarised of receipts and payments.

Statements of receipts and payments should be prepared on a regular basis (e.g. monthly) to allow comparisons with previous periods.

The statement of receipts and payments provides important information about the sources of cash receipts, as well as the purposes for which cash was used. Although ratios such as the working capital ratio can be used to evaluate a firm's liquidity, a statement of receipts and payments can be used to identify causes of a change in liquidity.

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

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

### CHECK YOUR UNDERSTANDING



- 1 Outline the purpose of the statement of receipts and payments.
- 2 Explain why items listed in the 'Sundries' column of a cash journal shouldn't be listed as sundries in a statement of receipts and payments.
- 3 Explain why a statement of receipts and payments should indicate the length of the period in its heading.

# 7.5

### REPORTING FOR THE GST

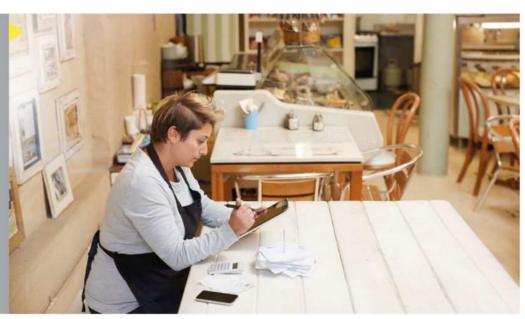
During any period of trading, a business will experience many transactions involving the GST. If a business is registered for the GST, it must collect 10% GST on all sales made to customers. It will also pay 10% GST on many of its cash payments.

The statement of receipts and payments in Figure 7.5 included two items relating to the GST:

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

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

Businesses registered for the GST need to collect 10% GST on all sales. At the end of each accounting period, the difference between the GST received and GST paid needs to be calculated.





### BEST PRACTICE

Remember: GST on sales will increase the liability of the business, but payments of GST will decrease the liability.

### **GST** liability

an obligation to the taxation office that exists because the GST collected by a business exceeds the GST it paid to its suppliers

### **GST LIABILITIES**

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

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

| Current liabilities: |       |
|----------------------|-------|
| GST liability        | \$180 |

### **GST REFUNDS**

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

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

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

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

| Current assets: |       |
|-----------------|-------|
| GST refund      | \$100 |

### GST refund

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

### 7.5 CHECK YOUR UNDERSTANDING

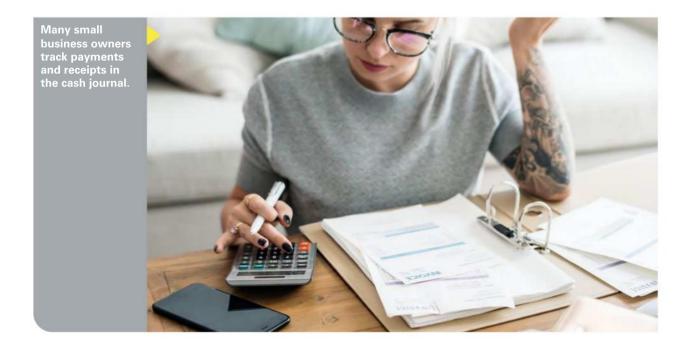


- 1 Explain how one business may be entitled to a GST refund, while another business has a GST liability to the taxation office.
- 2 A business collected \$900 GST from its customers during June, but paid \$700 GST to its suppliers during the same month. How should it report this in its balance sheet as at 30 June?
- **3** A business owner reports that she received \$600 GST from customers during the last quarter, but believes she's entitled to a tax refund from the government. Explain how this is possible, using an example to prove your case.

# 7.6

# EVALUATING SINGLE ENTRY ACCOUNTING FOR A SMALL BUSINESS

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



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

This information may be required because:

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

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

Double entry accounting is the focus of Units 3 & 4 of the VCE Accounting course, so we won't discuss it in this text. The rest of this book concentrates on single entry accounting and how it can be expanded for use in a variety of situations. However, it's worth bearing in mind that, in the future, you'll be leaving single entry accounting behind and moving on to more complex systems.

## double entry accounting

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



# **CHAPTER REVIEW**

### **KEY CONTENT**

[7.1]

in (cash receipts) and cash going out (cash payments). These transactions will occur many times in the day-to-day operations of a business. All cash receipts and payments must be recorded accurately.
 [7.2] A cash receipts journal records all cash receipts, regardless of their source, on a daily basis. It needs to include the relevant details of each receipt. A multi-column journal is like the standard journal, but includes a series of columns that summarise the business's most frequent receipts.
 [7.3] Similarly, the cash payments journal records all cash payments on a daily basis. The multi-column version includes columns that summarise the business's most frequent payments, such as paying wages or buying manufacturing materials.
 [7.4] A statement of receipts and payments is a report that summarises cash receipts and cash payments over a period of time. A cash journal prepared on a multi-column basis

There are two major cash flows relevant to any small business – cash coming

transactions are already totalled.

A business registered for the GST must collect 10% GST on all sales made to customers, and will also pay 10% GST on many of its cash payments. At the end of each accounting period, the difference between the GST received and GST paid should be calculated. This determines whether the business has a GST liability, or is owed a refund from the ATO.

helps in preparing a statement of receipts and payments, because the most frequent

A single entry accounting system is suitable for many small businesses but, the larger a business becomes, the more it needs a system that provides additional information. Many businesses prefer to use a double entry accounting system, which is covered in Units 3 & 4 of the VCE Accounting course.

### **CHAPTER 7 EXERCISES**

### 1 CASH JOURNALS – SIMPLE FORMAT





The following transactions relate to Olinda Office Cleaners for the first two weeks of September 2023.

| Receipts |                | \$           |
|----------|----------------|--------------|
| Sep 1    | Capital        | 10 000       |
| 4        | Fees (Rec. 51) | 180 + 18 GST |
| 5        | Loan NAB       | 5 000        |
| 8        | Fees (Rec. 52) | 160 + 16 GST |
|          | Fees (Rec. 53) | 180 + 18 GST |
| 11       | Fees (Rec. 54) | 180 + 18 GST |
| 13       | Fees (Rec. 55) | 160 + 16 GST |
|          | Fees (Rec. 56) | 120 + 12 GST |
| 14       | Fees (Rec. 57) | 190 + 19 GST |

| Payments |                               | \$             |
|----------|-------------------------------|----------------|
| Sep 1    | Advertising (Chq. 101)        | 500 + 50 GST   |
| 2        | Equipment (EFT)               | 800 + 80 GST   |
| 3        | Cleaning materials (Chq. 102) | 290 + 29 GST   |
| 9        | Advertising (Chq. 103)        | 140 + 14 GST   |
| 11       | Drawings (EFT)                | 600            |
| 13       | Cleaning materials (Chq. 104) | 280 + 28 GST   |
| 14       | Computer system (Chq. 105)    | 2000 + 200 GST |

- a Prepare a simple cash receipts journal, with columns for Date, Details, Receipt number, Total received, Amount received and GST received.
- **b** Prepare a simple cash payments journal, with columns for Date, Details, Cheque number, Total paid, Amount paid and GST paid.
- c Prepare a statement of receipts and payments for the two weeks ended 14 September 2023, showing a summary of the firm's cash transactions and the bank balance at that date.



# 2 CASH JOURNALS – SIMPLE AND MULTI-COLUMN FORMATS



Malvern Motor Mechanics had \$2400 in the bank on 1 October 2023 and had the following transactions during the first two weeks of October 2023.

- Oct 1 Received \$250, plus \$25 GST, from Ace Couriers for a tune-up (Rec. 11)
  - 2 Received \$350 for a service, plus \$35 GST (Rec. 12) from D Comito
  - 3 Paid weekly rent \$820, plus GST of \$82 (EFT)
    Received \$250, plus \$25 GST, from J Iles for a tune-up (Rec. 13) and \$360, plus \$36 GST for a service from N Piscopo (Rec. 14)
  - 4 Purchased oil \$190, plus \$19 GST (Chq. 942)
  - 5 Received \$360 + \$36 GST from J Genoese for a service (Rec. 15)
  - 7 Banked receipt from A Camilleri for service \$360 + \$36 GST (EFTPOS) The owner withdrew \$900 for personal use (EFT)
  - 9 Purchased spare parts \$680, plus GST of \$68 (EFT)
  - 10 Paid weekly rent \$820, plus \$82 GST (EFT)
  - 11 Received service fees from D Comito \$360, plus GST of \$36 (Rec. 16) and Ace Couriers \$380, plus \$38 GST (EFTPOS)
  - 13 Received \$290, plus \$29 GST from Quicker Transport Co. for a tune-up (Rec. 17)
  - 14 The owner withdrew \$800 (EFT)
- a Prepare simple versions of cash receipts and cash payments journals for Malvern Motor Mechanics.
- **b** Redraft your journals in part **a** to a multi-column format.
- c Prepare a statement of receipts and payments for the fortnight ended 14 October 2023.
- d List two advantages of using multi-column cash journals.



### 3 MULTI-COLUMN CASH JOURNALS





Eddie's Electrical Services is a small business that repairs digital radios, TVs and stereo systems. On 1 November 2023 the firm had a \$300 overdraft. The following transactions occurred during November 2023.

- Nov 2 Received from Flemington High School \$120 for radio repairs, plus GST of \$12 (Rec. no. 189)
  - 3 Paid assistant's wages \$850 (Chg. 3281)
  - 4 Received \$600 for TV repairs from D Giampiccolo (plus \$60 GST)
  - 5 Received \$360, plus \$36 GST for TV repairs and \$80, plus \$8 GST for repairs to a digital radio
  - 7 Purchased spare parts \$530 + \$53 GST
  - 8 Received \$160 from N Hariman for radio repairs (plus GST of \$16)
  - 9 Received \$150 + \$15 GST for stereo repairs and \$100 + \$10 GST for radio repairs
  - 10 Paid assistant's wages \$750 and advertising \$380, plus GST of \$38
  - 12 Princes Hill Secondary College paid \$420 for work done on its digital radios and paid an additional \$42 GST
  - 13 Received \$180 from M Long, plus \$18 GST for stereo repairs, and the owner cashed a cheque and withdrew \$650
  - Received \$100 for radio repairs, plus \$10 GST and \$290 for TV repairs, plus \$29 GST

Purchased spare parts \$420 + GST of \$42

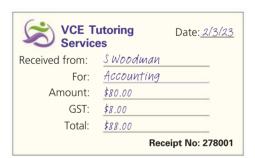
- a Design multi-column cash journals for Eddie's Electrical Services and then record the above transactions in these journals. Reminder: the numbers on cheques and receipts used by Eddie will run in numerical sequence.
- **b** Prepare a statement of receipts and payments to summarise the fortnight's cash transactions.

### **4 DOCUMENTS TO JOURNALS**

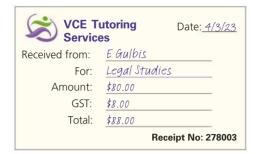


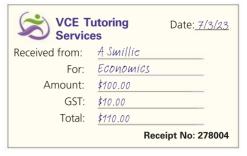


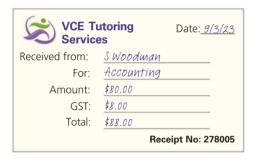
VCE Tutoring Services provides tutoring in accounting, economics and legal studies. On 1 March 2023 the business had assets of \$400 Cash at Bank and \$600 Equipment. The following documents were used to evidence transactions during March 2023.

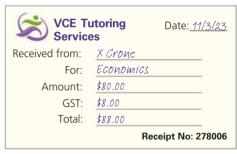


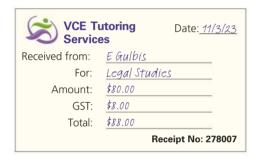
| VCE T<br>Service | Date: <u>4/3/23</u> |                 |
|------------------|---------------------|-----------------|
| Received from:   | X Crone             |                 |
| For:             | Economics           |                 |
| Amount:          | \$80.00             |                 |
| GST:             | \$8.00              |                 |
| Total:           | \$88.00             |                 |
|                  | Reco                | eipt No: 278002 |

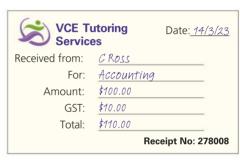


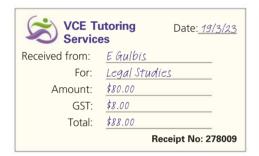


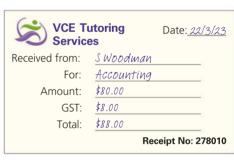


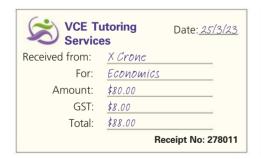


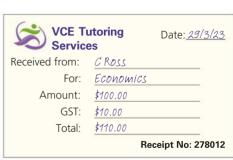












 Date:
 2/3/23

 Payee:
 Promo Ads

 For:
 Advertising

 Amount:
 \$170.00

 GST:
 \$17.00

 TOTAL:
 \$187.00

Cheque no. 33471

 Date:
 5/3/23

 Payee:
 Quickcopy

 For:
 Photocopying

 Amount:
 \$60.00

 GST:
 \$66.00

 TOTAL:
 \$66.00

 Cheque no. 33472

 Date:
 13/3/23

 Payee:
 Acme Supplies

 For:
 Equipment

 Amount:
 \$100.00

 GST:
 \$10.00

 TOTAL:
 \$110.00

 Cheque no. 33473

EFT

Date: 15/3/23

To: Cash

For: Drawings

Amount: \$400.00

GST: \$

Total: \$400.00

 Date:
 16/3/23

 Payee:
 Promos Ads

 For:
 Advertising

 Amount:
 \$180.00

 GST:
 \$18.00

 TOTAL:
 \$198.00

Cheque no. 33474

 Date:
 19/3/23

 Payee:
 Quickcopy

 For:
 Photocopying

 Amount:
 \$70.00

 GST:
 \$7.00

 TOTAL:
 \$77.00

 Cheque no. 33475

 EFT

 Date:
 22/3/23

 To:
 Cash

 For:
 Drawings

 Amount:
 \$350.00

 GST:
 \$

 Total:
 \$350.00

 Date:
 26/3/23

 Payee:
 Quickcopγ

 For:
 Photocopγing

 Amount:
 \$70.00

 GST:
 \$7.00

 TOTAL:
 \$77.00

 Cheque no. 33476

 Date:
 28/3/23

 Payee:
 AAMI

 For:
 Insurance

 Amount:
 \$450

 GST:
 \$45

 TOTAL:
 \$495

 Cheque no.
 33477

- a Prepare multi-column cash journals for VCE Tutoring Services for the month of March 2023. Use appropriate columns for recurring items and make sure that all transactions are entered in chronological order.
- **b** Prepare a statement of receipts and payments for the month of March 2023.



### **5 DOCUMENTS TO JOURNALS**



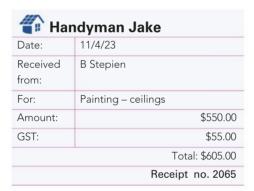
Jake Riccardi provides a range of home services, including lawn mowing, plumbing work and painting. He needs your help to design his cash journals, and provides the following documents from his last month of trading.

| Handyman Jake  |                  |
|----------------|------------------|
| Date:          | 2/4/23           |
| Received from: | T Smyth          |
| For:           | Lawn mowing      |
| Amount:        | \$60.00          |
| GST:           | \$6.00           |
|                | Total: \$66.00   |
|                | Receipt no. 2061 |

| Handyman Jake  |                   |
|----------------|-------------------|
| Date:          | 7/4/23            |
| Received from: | N Ross            |
| For:           | Painting – lounge |
| Amount:        | \$880.00          |
| GST:           | \$88.00           |
|                | Total: \$968.00   |
|                | Receipt no. 2062  |

| Handyman Jake  |                  |
|----------------|------------------|
| Date:          | 8/4/23           |
| Received from: | D Pell           |
| For:           | Plumbing repairs |
| Amount:        | \$400.00         |
| GST:           | \$40.00          |
|                | Total: \$440.00  |
|                | Receipt no. 2063 |

| Handyman Jake  |                  |
|----------------|------------------|
| Date:          | 9/4/23           |
| Received from: | H Smyth          |
| For:           | Lawn mowing      |
| Amount:        | \$60.00          |
| GST:           | \$6.00           |
|                | Total: \$66.00   |
|                | Receipt no. 2064 |



| Handyman Jake  |                  |
|----------------|------------------|
| Date:          | 12/4/23          |
| Received from: | T Smyth          |
| For:           | Lawn mowing      |
| Amount:        | \$70.00          |
| GST:           | \$7.00           |
|                | Total: \$77.00   |
|                | Receipt no. 2066 |

| Handyman Jake  |                   |
|----------------|-------------------|
| Date:          | 14/4/23           |
| Received from: | N Ross            |
| For:           | Painting – garage |
| Amount:        | \$450.00          |
| GST:           | \$45.00           |
|                | Total: \$495.00   |
|                | Receipt no. 2067  |

| Handyman Jake  |                   |
|----------------|-------------------|
| Date:          | 15/4/23           |
| Received from: | J Corby           |
| For:           | Painting – lounge |
| Amount:        | \$540.00          |
| GST:           | \$54.00           |
|                | Total: \$594.00   |
|                | Receipt no. 2068  |

| Handyman Jake  |                  |
|----------------|------------------|
| Date:          | 18/4/23          |
| Received from: | D Walker         |
| For:           | Lawn mowing      |
| Amount:        | \$50.00          |
| GST:           | \$5.00           |
|                | Total: \$55.00   |
|                | Receipt no. 2069 |

| Handyman Jake  |                  |
|----------------|------------------|
| Date:          | 19/4/23          |
| Received from: | H Smyth          |
| For:           | Lawn mowing      |
| Amount:        | \$70.00          |
| GST:           | \$7.00           |
|                | Total: \$77.00   |
|                | Receipt no. 2070 |

| Handyman Jake  |                    |
|----------------|--------------------|
| Date:          | 21/4/23            |
| Received from: | M Harvey           |
| For:           | Painting – 2 rooms |
| Amount:        | \$850.00           |
| GST:           | \$85.00            |
|                | Total: \$935.00    |
|                | Receipt no. 2071   |

| Handyman Jake  |                          |
|----------------|--------------------------|
| Date:          | 22/4/23                  |
| Received from: | M Culvenor               |
| For:           | Plumbing – blocked pipes |
| Amount:        | \$240.00                 |
| GST:           | \$24.00                  |
|                | Total: \$264.00          |
|                | Receipt no. 2072         |

| Handyman Jake  |                  |
|----------------|------------------|
| Date:          | 25/4/23          |
| Received from: | M Mills          |
| For:           | Painting – patio |
| Amount:        | \$180.00         |
| GST:           | \$18.00          |
|                | Total: \$198.00  |
|                | Receipt no. 2073 |

| Handyman Jake  |                     |
|----------------|---------------------|
| Received from: | P Horner            |
| For:           | Painting – ceilings |
| Amount:        | \$720.00            |
| GST:           | \$72.00             |
|                | Total: \$792.00     |
|                | Receipt no. 2074    |

| Handyman Jake  |                  |  |
|----------------|------------------|--|
| Date:          | 30/4/23          |  |
| Received from: | T Gleeson        |  |
| For:           | Lawn mowing      |  |
| Amount:        | \$60.00          |  |
| GST:           | \$6.00           |  |
|                | Total: \$66.00   |  |
|                | Receipt no. 2075 |  |

| Date:    | 3/4/23   |  |
|----------|----------|--|
| Payee:   | Caltex   |  |
| For:     | Petrol   |  |
| Amount:  | \$160.00 |  |
| GST:     | \$16.00  |  |
| TOTAL:   | \$176.00 |  |
| Cheque n | ю. 1956  |  |

 EFT

 Date:
 5/4/23

 To:
 Leader Newspapers

 For:
 Advertising

 Amount:
 \$320.00

 GST:
 \$32.00

 Total:
 \$352.00

Date: 11/4/23

Payee: Caltex

For: Petrol

Amount: \$150.00

GST: \$15.00

TOTAL: \$165.00

Cheque no. 1957

 Date:
 13/4/23

 Payee:
 Wattyl Paints

 For:
 Paint

 Amount:
 \$900.00

 GST:
 \$90.00

 TOTAL:
 \$990.00

 Cheque no. 1958

Date: 14/4/23

Payee: Caltex

For: Petrol

Amount: \$150.00

GST: \$15.00

TOTAL: \$165.00

Cheque no. 1959

EFT
Date: 16/4/23
To: Cash
For: Drawings
Amount: \$500.00
GST:
Total?:

 Date:
 17/4/23

 Payee:
 Wattyl Paints

 For:
 Paint

 Amount:
 \$650.00

 GST:
 \$65.00

 TOTAL:
 \$715.00

 Cheque no. 1960

 EFT

 Date:
 23/4/23

 To:
 Cash

 For:
 Drawings

 Amount:
 \$400.00

 GST:
 Total?:

Date: 24/4/23

Payee: Clatex

For: Petrol

Amount: \$150.00

GST: \$15.00

TOTAL: \$165.00

Cheque no. 1961

EFT
Date: 26/4/23
To: Bendigo Bank
For: Loan Repayment
Amount: \$800.00
GST:
Total?:

Date: 27/4/23

Payee: Wattyl Paints

For: Paint

Amount: \$450.00

GST: \$45.00

TOTAL: \$495.00

Cheque no. 1962

Date: 29/4/23

Payee: Caltex

For: Petrol

Amount: \$160.00

GST: \$16.00

TOTAL: \$176.00

Cheque no. 1963

- a Design an appropriate cash receipts journal for Jake's business and record the relevant transactions for the month of April 2023.
- **b** Design a multi-column cash payments journal for Handyman Jake and complete the journal for April 2023.
- c Prepare a statement of receipts and payments to summarise the cash transactions of the business for the month, given that the Cash at Bank account balance was \$393 on 1 April 2023.

### **CASE STUDY**





Jacobina Derici is the proprietor of Yurts R Us, a small business that specialises in supplying and erecting modern versions of the portable, round tent-like structures traditionally used in Central Asia and the Middle East.

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

In Derici's business, customers place orders for three types of yurt – the traditional Mongolian ger, the Kazakh bentwood yurt and the modern yurt (which features a skylight). Customers pay cash up-front for their orders, because most of the yurts are custom-made. GST of 10% is collected on all orders. Derici purchases materials based on each customer's order. She has three main suppliers for these materials and pays cash on delivery, plus the required GST.

Derici's assistants help her to install and erect the yurts, but she does all the office work. She purchases stationery every few days, whenever needed, from a supplier across the road from her rented shop. She runs weekly advertisements through Google Ads, which are increasingly helpful in gaining new customers.

From time to time, Derici has to purchase non-current assets for the business, such as tools and ladders. She usually pays cash for such items, because she's already committed to a loan that requires weekly repayments. Derici makes a cash withdrawal each week, because she's quite confident about making a profit on a regular basis.

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



### CHAPTER CHECKLIST

Now that you have finished Chapter 7, double-check your progress.

Are you ready for your Unit 1 assessment?

### I have ...

- ompleted all 'Check Your Understanding' questions
- completed all exercises
- ompleted the end-of-chapter activities
- Manded in my workbook for marking.

### I understand ...

- odocuments used by a business to record financial transactions
- the purpose and use of special journals:
  - Cash Receipts Journal
  - Cash Payments Journal.

### I can ...

- use correct accounting terminology
- of apply theoretical knowledge to simulated situations
- didentify, classify and record financial data manually and through the use of ICT
- of prepare accounting reports manually and using ICT, including spreadsheets, for a service business.

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### RFAD

Make sure you skim this chapter one more time when preparing for the exam.



### **PREPARE**

Read back over the chapter now, then complete the online revision activity.



### WATCH

Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



mea.digital/vceacc12\_7



# INCOME STATEMENTS FOR SERVICE FIRMS

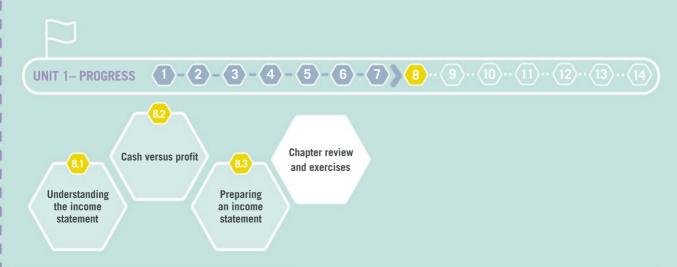
Back in Chapter 1, you learnt that accounting involves both recording financial events and reporting on these events. It's important to draw that distinction between a record and a report; the raw data being recorded needs to be reported in order for it to be understood by users.

In this chapter, we examine a key report, the income statement, which businesses use to compare revenue and expenses for a reporting period. You will learn how to design and prepare an income statement, and consider how the report is used and what makes it an effective tool.

### LEARNING OBJECTIVES

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

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



# UNDERSTANDING THE INCOME STATEMENT

The distinction between an accounting record and an accounting report can be confusing, especially when working with spreadsheets. It's relatively simple to create a spreadsheet that both records data and reports on it at the same time – but that doesn't mean that they're the same thing.

This chapter introduces another general purpose accounting report – the income statement. Before we get into the details of that report, it's worth refreshing your memory on what accounting reports are and why they're so important.

### **ACCOUNTING REPORTS REVISITED**

The important thing to bear in mind is that a record is just raw data that has been stored in a basic fashion. A report draws connections between those pieces of data so that they generate meaning for the manager of a business, or for another user of the report. It might be possible for a user to draw out that meaning just from the records, if they're skilled and experienced, but it's the job of an accounting system – and of an accountant – to make that possible for all users.

As discussed in Chapter 2, accounting reports should be prepared on the basis of the six qualitative characteristics of accounting.

- *Relevance*: only information relevant to the particular business entity being examined should appear in its reports.
- Faithful representation: the information in reports must faithfully represent the economic events it represents.
- *Comparability*: reports should be prepared so that they can be compared with the reports of other similar entities and with similar information about the same entity.
- *Verifiability*: accounting information should come from source documents; this factual evidence enables the information to be verified, or checked.
- Timeliness: reports must be produced in a timely fashion to be useful to their users.
- Understandability: reports should be easy to understand for as many people as possible.

The statement of receipts and payments (page 102) is an example of an accounting report that should have these characteristics, so that it can be a valuable tool for the user.

- In the case of cash flows, the *relevant* information is all the cash receipts and cash payments.
- To satisfy verifiability, the cash inflows can be checked against the cash receipts issued by the business and copies of EFTPOS documentation, while the cash payments can be verified with cheque butts and copies of EFT payments.
- This report has a simple layout, so the demand for understandability is easily satisfied.
- If the statement is prepared in the same way at the end of each month, results can be easily compared, satisfying the demand for *comparability*.
- If monthly reports are being prepared, they should be finalised as soon as possible to meet the requirement of *timeliness*.
- Finally, information contained in the report must *faithfully represent* the economic events of the month under review.

These six characteristics should always be kept in mind whenever an accounting report is being prepared.



### **REVENUES, EXPENSES AND INCOME**

The statement of receipts and payments is a summary of all cash inflows and outflows. However, when reporting on the profit performance of a business, not all cash transactions are considered.

An **income statement** is a report that compares the revenue and expenses that occur within one reporting period. The final result of such a report is shown as a net profit or a net loss for the period. **Profit** is the excess of revenue over expenses. A loss will occur if the expenses for the period are greater than the revenue.

But what exactly are revenues and expenses?

**Revenue** is an increase in assets (other than contributions from the owner) or decrease in liabilities that results in an *increase* in owner's equity. Revenue is recognised if a business performs a service and receives cash for doing so, because the business receives an economic benefit (cash) that increases its assets.

If the service is provided on a credit basis, rather than for cash, it's still viewed as revenue because the customer's promise to pay is a future economic benefit that also leads to an increase in assets. However, in this case, cash isn't affected: the asset that increases is Accounts Receivable. Similarly, if a trading firm sells goods for cash or on credit, an amount of revenue is created.

Note that cash contributed by an owner doesn't qualify as a revenue transaction.

**Expenses** are decreases in assets (other than withdrawals by the owner) or increases in liabilities that result in a *decrease* in owner's equity. An expense is recognised if a business pays for services (e.g. paying wages) during a period. The payment of wages results in a decrease in an asset, as cash is being paid out. Such reductions will eventually reduce the owner's equity in the business. Similarly, a trading firm hands over physical goods when it makes a sale. The cost of the goods reduces the inventory of the business, which is an asset.

Rather than reducing an asset, an expense may increase a liability. For example, if a business places an advertisement in a local paper, it may be arranged on a credit basis. This transaction doesn't reduce the firm's assets; instead, it increases its liabilities in the form of Accounts Payable. The definition is still satisfied, so it's recognised as an expense.

### income statement

an accounting report that states revenue, expenses and the resulting profit or loss for a reporting period

### profit

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

### revenue

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

### expenses

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

### 8.1 CHECK YOUR UNDERSTANDING

- WB PAGE 83
- 1 Identify and describe the six qualitative characteristics that an accounting report must satisfy to provide valuable information.

c Car park

- 2 Define the term 'revenue', and provide an example of revenue for each of the following businesses.
  - **a** Pizza shop **b** Accountant
- 3 Define the term 'expenses', and give an example of expenses for each of the following businesses.
  - a Hairdresser b Mechanic c Window cleaner

# 8.2 CASH VERSUS PROFIT

Before preparing an income statement, it's important to recognise the differences between this report and a statement of receipts and payments. While these two reports might seem similar on the surface, they contain mostly different items and have entirely different purposes.

- The statement of receipts and payments examines the cash inflows and cash outflows for the accounting period. Its final result is the cash balance at the end of that period.
- The income statement reports on the revenues and expenses for the accounting period. Its final result is a net profit (or loss) for that period.

The qualitative characteristic of relevance is important when preparing any accounting report. The definition of cash receipts and payments, and of revenues and expenses, determines what should or shouldn't be included in each report.

Consider the following comparison of transactions that occur during one reporting period, which demonstrates some of the differences between the two types of reports.

### accounting period

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



Remember: Not all cash inflows are revenues. Not all cash outflows are expenses.

### TABLE 8.1 Cash flows compared to revenues and expenses

| Cash inflows  | Revenues  |
|---|---|
| Cash received from customers Cash contributions by the owner Money borrowed from a bank               | Sale of goods to customers (cash or credit)  Provision of services to customers (cash or credit)  |
| Cash outflows   | Expenses  |
| Cash paid to suppliers Cash paid to employees Cash withdrawn by the owner Loan repayments to the bank | Inventory (goods) sacrificed to earn sales Services used by the business (cash or on credit) Materials used by a service business when providing its services (e.g. timber used by a carpenter) |

**Promotions such** as 'buy one, get one free' sacrifice inventory to earn sales.



It's important to realise that an item may sometimes be shown in both reports. For example, if a business sells goods for cash, a cash inflow has occurred, so this transaction is relevant to the statement of receipts and payments. However, the business has also experienced an inflow of economic resources in the form of an increase in assets. This inflow also increases equity, so it qualifies under the definition of revenue.

Compare this to a loan taken out from a bank. Although this is a cash inflow (the business has received cash), the transaction also increases liabilities and doesn't increase the equity of the owner. The loan therefore doesn't qualify as a revenue item.

A similar situation may exist with cash payments and expenses. If a business pays cash out for employee wages, a cash outflow has occurred and is reported in the statement of receipts and payments. Wages represent an economic sacrifice that decreases the owner's equity, so the transaction would also be reported as an expense in the income statement.

However, the situation is different in the case of a loan repayment. In this case, a cash payment has still occurred, but it doesn't create an expense item. This is because the repayment reduces the future obligation to a liability but has no effect on the owner's equity.

The format of the two accounting reports may be summarised as follows. Statement of receipts and payments:

Cash receipts - cash payments = excess of receipts over payments + Bank balance at beginning = bank balance at end

Income statement:

Revenue – expenses = profit for the period

### 8.2 CHECK YOUR UNDERSTANDING



- 1 Explain what accountants mean by the term 'profit'.
- 2 Revenues cause an increase in the assets of a firm. State the two assets that could be increased when a business earns revenue.
- 3 Explain how two different items in a balance sheet may be affected by the creation of an expense.

# 8.3

### PREPARING AN INCOME STATEMENT

The income statement is one of the most important accounting reports for a small business, because it tells the owner or manager whether a profit or loss has been made over a period of time.

The statement follows the *period assumption*, in which revenue for a specific period of time is compared to the expenses over that same period, in order to determine whether a profit or a loss has occurred. These two classifications provide the basic format of the income statement.

To demonstrate this format, let's look back to Chapter 7 and the example of Jack Rio – Cabinetmaker. In that chapter, you saw a statement of receipts and payments for his business (page 102), and that statement is repeated here as Figure 8.1.

FIGURE 8.1 Statement of receipts and payments

JACK RIO – CABINETMAKER: STATEMENT OF RECEIPTS AND PAYMENTS FOR MONTH ENDED 30 SEPTEMBER 2023

| Cash receipts                    | \$    | \$     |
|----------------------------------|-------|--------|
| Sales – Kitchen cupboards        | 1 940 |        |
| – Bookshelves                    | 800   |        |
| – Student desks                  | 1 360 |        |
| Capital contribution             | 9 000 |        |
| Loan – NAB                       | 3 000 |        |
| GST collected                    | 410   | 16 510 |
| Cash payments                    |       |        |
| Timber                           | 1 040 |        |
| Wages                            | 1 180 |        |
| Drawings                         | 850   |        |
| Purchase of assets               | 530   |        |
| Advertising                      | 250   |        |
| Insurance                        | 480   |        |
| GST paid                         | 230   | 4 560  |
| Excess of receipts over payments |       | 11 950 |
| Bank balance (1 September 2023)  |       | Nil    |
| Bank balance (30 September 2023) |       | 11 950 |

Under the definitions of revenue and expenses, the six coloured items in Figure 8.1 wouldn't be included in an income statement, for the following reasons.

- Capital contribution isn't revenue, because it represents a contribution of assets by the owner. The \$9000 is an asset put into the business by the owner, so it's part of owner's equity.
- Loan NAB doesn't represent an inflow of economic resources that increase the owner's equity. When a loan is taken out, the asset Cash at Bank increases. A corresponding increase occurs in the firm's present obligations (i.e. liabilities). The loan is thus treated as an increase in liabilities, not as revenue.
- Drawings is cash withdrawn by the owner for personal use. This represents a distribution of equity funds to the owner, so it's not a decrease in assets according to the definition of expenses. It should never be treated as an expense.

- Purchase of assets is clearly an increase in the assets of the business. An item classified as an asset should not be treated as an expense until it's used up in order to increase owner's equity. For example, the cost of an asset will be treated as an expense when it's sold, because cash received for its sale will be treated as a revenue item.
- GST collected and GST paid should never be part of an income statement. GST is collected from customers on behalf of the government; it doesn't belong to the business owner. Its collection creates a liability, not an increase in owner's equity. The GST paid by a business simply reduces the amount the business owes to the government, so GST paid is never reported as an expense. GST transactions for a period should always be reported in the balance sheet of a business as either a GST liability or a GST refund.

Now that you understand why some items are not relevant to an income statement, the report can be prepared as shown in Figure 8.2.

FIGURE 8.2 Income statement

JACK RIO - CABINETMAKER: INCOME STATEMENT FOR MONTH **ENDED 30 SEPTEMBER 2023** 

| Revenue                   | \$    | \$    |
|---------------------------|-------|-------|
| Sales – Kitchen cupboards | 1 940 |       |
| – Bookshelves             | 800   |       |
| – Student desks           | 1 360 | 4 100 |
| Less: Expenses            |       |       |
| Timber                    | 1 040 |       |
| Wages                     | 1 180 |       |
| Advertising               | 250   |       |
| Insurance                 | 480   | 2 950 |
| Net profit                |       | 1 150 |

Note the following important things about the income statement.

- As with all accounting reports, the heading should always state the name of the entity and the period being examined. In the case of Jack Rio, the report clearly states that it is for one month's operations. (When evaluating a profit figure, it's essential to know the length of time taken to earn that profit.)
- To improve understandability, it's common practice to use subheadings to show totals for revenue and expenses.
- The final figure should be labelled clearly. In this case, a profit of \$1150 has been earned for the month of September 2023.

Once a profit or loss figure is calculated, this amount is transferred to the owner's equity section of the balance sheet. A profit will increase the owner's equity, while a loss will decrease the equity. In addition to the profit figure, any withdrawals made by the firm's owner must be shown under owner's equity, as drawings decrease the owner's claim on the business.

The balance sheet for Jack Rio in Figure 8.3 demonstrates these points.

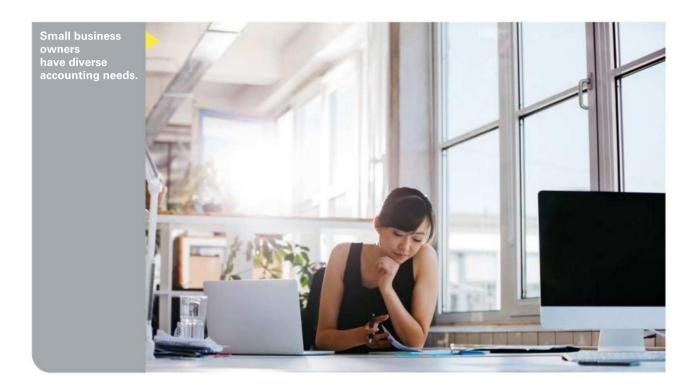
FIGURE 8.3 Balance sheet

JACK RIO - CABINET MAKER: BALANCE SHEET AS AT 30 SEPTEMBER 2023

| Assets         | \$     | Liabilities             | \$    | \$     | \$     |
|----------------|--------|-------------------------|-------|--------|--------|
| Bank           | 11 950 | Loan – NAB              |       | 3 000  |        |
| Electric tools | 530    | GST liability           |       | 180    | 3 180  |
|                |        | Owner's equity          |       |        |        |
|                |        | Capital                 | 9 000 |        |        |
|                |        | <i>Plus:</i> Net profit | 1 150 | 10 150 |        |
|                |        | Less: Drawings          |       | 850    | 9 300  |
|                | 12 480 |                         |       |        | 12 480 |

Both these statements have a simple format designed to suit the needs of a service business with only a few expense items. In later chapters you'll examine the needs of a more complex business, as well as reporting for a trading firm.

Always keep in mind that all accounting reports must be designed so that they are *useful* to the users of that report. Therefore, changes can (and should) be made to the format of an income statement to meet the needs of its users.



### 8.3 CHECK YOUR UNDERSTANDING



- 1 List three reasons why profit may not equal the balance of a firm's bank account at the end of a period.
- 2 'If a business earns a loss for a period, this means that it has no money in the bank.' Do you agree? Discuss.
- **3** A business earned a profit, but its owner's equity decreased. Explain how this is possible.

# 8

# **CHAPTER REVIEW**

### **KEY CONTENT**

- [8.1] An accounting record is raw data that has been collected, while an accounting report draws connections between those pieces of data so that they generate meaning. Accounting reports should be prepared on the basis of the six qualitative characteristics of accounting.
- Revenues are increases in assets or decreases in liabilities that result in an increase in owner's equity. Expenses are decreases in assets or increases in liabilities that result in a decrease in owner's equity. If revenues are greater than expenses for an accounting period, the business generates a profit. If expenses are greater than revenues for a period, the business suffers a loss.
- [8.2] Cash inflows are not necessarily the same as revenues, and cash outflows are not necessarily the same as expenses. This is because some inflows and outflows do not change the owner's equity. Only cash flows that change owner's equity have an effect on overall profit and loss.
- **[8.3]** An income statement is an accounting report that compares revenues and expenses for one reporting period. This allows the user to determine the profit or loss for the business in that period. Once a profit or loss figure is calculated, the amount is transferred to the owner's equity section of the balance sheet.

### **CHAPTER 8 EXERCISES**

### 1 PREPARING AN INCOME STATEMENT





The following accounting report has been provided by Christian Malivindi, a custom guitar maker, who has \$25 000 of capital as at 1 January 2023.

# CHRISTIAN MALIVINDI: STATEMENT OF RECEIPTS AND PAYMENTS FOR THE MONTH ENDED 31 JANUARY 2023

| Cash receipts                             | \$    | \$     |
|---|-------|--------|
| Guitar-making fees – Individual customers | 3 250 |        |
| – Studio customers                        | 2 450 |        |
| Interest from bank                        | 220   |        |
| Loan – NAB                                | 4 500 |        |
| GST collected                             | 570   | 10 990 |
| Cash payments                             |       |        |
| Timber                                    | 980   |        |
| Wages                                     | 1 600 |        |
| Office expenses                           | 140   |        |
| Drawings                                  | 930   |        |





| Advertising                      | 450   |       |
|----------------------------------|-------|-------|
| Purchase of tools                | 1 280 |       |
| GST paid                         | 285   | 5 665 |
| Excess of receipts over payments |       | 5 325 |
| Bank balance (1 January 2023)    |       | 3 420 |
| Bank balance (31 January 2023)   |       | 8 745 |

- a Prepare an income statement for Christian Malivindi for the month of January 2023.
- **b** Prepare the owner's equity section of the balance sheet as at 31 January 2023.
- c State four items that appear in the above statement that you didn't include in the income statement. Explain why you excluded those items from your report.
- **d** What is the GST situation for this business as at 31 January 2023? Explain your answer fully.



### **2 PREPARING AN INCOME STATEMENT**



Bonnie Blyth, the proprietor of Blyth Mechanical Repairs, has \$40 000 capital as at 1 April 2023 and provides the following information.

# BLYTH MECHANICAL REPAIRS: STATEMENT OF RECEIPTS AND PAYMENTS FOR QUARTER ENDED 30 JUNE 2023

| Cash receipts                    | \$     | \$      |
|----------------------------------|--------|---------|
| Repair fees – Brakes             | 7 480  |         |
| – Tune-ups                       | 5 460  |         |
| – General services               | 3 200  |         |
| Capital injection                | 5 000  |         |
| Commission on sale of batteries  | 850    |         |
| GST received                     | 1 699  |         |
| Interest – Term deposit          | 420    |         |
| Loan – Trusty Finance            | 1 500  | 25 609  |
| Cash payments                    |        |         |
| Spare parts used                 | 1 980  |         |
| Wages – Mechanic                 | 6 800  |         |
| Postage                          | 180    |         |
| Drawings                         | 5 400  |         |
| Advertising                      | 590    |         |
| Cleaning of garage               | 840    |         |
| GST paid                         | 1 987  |         |
| Rent of garage                   | 14 000 |         |
| Purchase of computer             | 2 280  | 34 057  |
| Excess of payments over receipts |        | (8 448) |
| Bank balance (1 April 2023)      |        | 6 428   |
| Bank balance (30 June 2023)      |        | (2 020) |

- a Prepare an income statement for Blyth Mechanical Repairs for the quarter.
- **b** Prepare the owner's equity section of the balance sheet as at 30 June 2023.
- **c** Explain your treatment of the following items: 'Commission on sale of batteries', 'Capital injection', 'Wages Mechanic' and 'Purchase of computer'.
- **d** Comment on the performance of this business for the reporting period under examination.

# 3 STATEMENT OF RECEIPTS AND PAYMENTS AND INCOME STATEMENT





Cavalieri's Computer Services is a small business that provides repairs and general servicing of computers and printers. On 1 April 2023 the firm had a bank balance of \$430, a GST debt of \$560 and owner's equity of \$36 000. The following transactions occurred during April 2023.

- Apr 2 Received from D Hughes \$220, plus \$22 GST, for computer repairs (Rec. 892)
  - 3 The owner withdrew \$400 cash via EFT and paid wages \$600 (Chg. 8123)
  - 5 Paid rent for month using EFT \$2850, plus \$285 GST
  - 7 Received \$100 from A Glenn for printer repairs (plus \$10 GST) receipt issued
  - 8 Received \$260 for computer repairs (plus \$26 GST) from EFTPOS and issued a receipt for \$120 for repairs to a printer (plus \$12 GST)
  - 10 Paid wages \$630 (chq.) and bought spare parts for cash \$440, plus \$44 GST (chq.)
  - 11 Received \$160, plus \$16 GST from A Nelson for printer repairs (rec.)
  - 13 Received \$250 for printer repairs (plus \$25 GST) and \$310 for computer repairs (plus \$31 GST) both paid using EFTPOS
  - 14 Paid advertising \$170, plus GST of \$17, using a cheque, and the owner withdrew \$350 (EFT)
  - 15 C Adele paid us \$220 via EFTPOS for work done on a computer (plus \$22 GST)
  - 17 Received \$180, plus \$18 GST, from C Carly for computer repairs (receipt issued) and paid wages \$630 (chq.)
  - 18 Received \$100 for computer service and \$90 for printer repairs (plus GST of \$10 and \$9, respectively). Both customers used the EFTPOS facility
  - 19 Purchased spare parts \$390, plus \$39 GST using a cheque
  - 20 Received \$120 for computer repairs, plus \$12 GST, from D Liu (rec.)
  - 21 Fixed a printer and received \$190, plus \$19 GST, from G Garnsworthy (rec.)
  - 22 Paid for advertisement in local paper \$220, plus \$22 GST (chq.)
  - 24 Paid wages \$520 via EFT
  - 26 Received \$220 for computer repairs and \$150 for servicing a printer (plus GST of \$22 and \$15) receipts issued to both customers
  - 28 The proprietor withdrew \$400 by cashing a cheque (EFT)
  - 30 Received \$100 from L Carter, plus \$10 GST, for printer repairs using EFTPOS
- a Design suitable cash journals for Cavalieri's Computer Services using a spreadsheet and record all the transactions for April 2023.
- **b** On your spreadsheet, prepare a statement of receipts and payments for the month ended 30 April 2023.
- c Prepare an income statement for the month of April 2023.
- **d** Show how the owner's equity section of the balance sheet would appear as at 30 April 2023.
- e Calculate the GST debt or refund that exists at 30 April 2023. Explain how this should be reported in the balance sheet as at this date.



### **4 FROM DOCUMENTS TO REPORTS**



Olive McRae owns Classic Photography, which provides a range of photographic services. On 1 May 2023 the business had the following assets: Cash at bank \$1400 and Equipment \$10 200. It also has a GST liability of \$650. The following documents were used to evidence transactions during May 2023.

| Classic Photography |            |        |
|---------------------|------------|--------|
| Date:               | 1/5/23     |        |
| Received from:      | D Caccamo  |        |
| For:                | Passport   |        |
| Amount:             | \$3        | 30.00  |
| GST:                | 9          | \$3.00 |
|                     | Total: \$3 | 33.00  |
| Receipt no. 187     |            |        |

| Classic Photography |                 |  |
|---------------------|-----------------|--|
| Date:               | 2/5/23          |  |
| Received from:      | M & S Cafra     |  |
| For:                | Wedding         |  |
| Amount:             | \$840.00        |  |
| GST:                | \$84.00         |  |
|                     | Total: \$924.00 |  |
| Receipt no. 188     |                 |  |

| Classic Photography |                 |  |
|---------------------|-----------------|--|
| Date:               | 3/5/23          |  |
| Received from:      | M & J Payne     |  |
| For:                | Wedding         |  |
| Amount:             | \$750.00        |  |
| GST:                | \$75.00         |  |
|                     | Total: \$825.00 |  |
| Receipt no. 189     |                 |  |

| Classic Photography |                       |  |
|---------------------|-----------------------|--|
| 5/5/23              |                       |  |
| J Lo Presti         |                       |  |
| Passport            |                       |  |
|                     | \$30.00               |  |
|                     | \$3.00                |  |
|                     | Total: \$33.00        |  |
|                     |                       |  |
|                     | 5/5/23<br>J Lo Presti |  |



| Classic Photography |          |                |
|---------------------|----------|----------------|
| Date:               | 8/5/23   |                |
| Received from:      | C O'Dea  |                |
| For:                | Passport |                |
| Amount:             |          | \$30.00        |
| GST:                |          | \$3.00         |
|                     |          | Total: \$33.00 |
| Receipt no. 192     |          |                |

| Classic Photography |           |                 |
|---------------------|-----------|-----------------|
| Date:               | 10/5/23   |                 |
| Received from:      | J & J Eid |                 |
| For:                | Wedding   |                 |
| Amount:             |           | \$890.00        |
| GST:                |           | \$89.00         |
|                     |           | Total: \$979.00 |
| Receipt no. 193     |           |                 |

| Classic Photography |                 |  |
|---------------------|-----------------|--|
| Date:               | 11/5/23         |  |
| Received from:      | F Latina        |  |
| For:                | Family portrait |  |
| Amount:             | \$160.00        |  |
| GST:                | \$16.00         |  |
|                     | Total: \$176.00 |  |
| Receipt no. 194     |                 |  |



| Date:          | 13/5/23  |                |
|----------------|----------|----------------|
| Received from: | A Liddle |                |
| For:           | Passport |                |
| Amount:        |          | \$40.00        |
| GST:           |          | \$4.00         |
|                |          | Total: \$44.00 |
|                |          |                |

| Receipt | 10. 195 |  |
|---------|---------|--|
|         |         |  |

| Classic Photography |  |  |
|---------------------|--|--|
| 16/5/23             |  |  |
| J & K Kelic         |  |  |
| Wedding             |  |  |
| \$740.00            |  |  |
| \$74.00             |  |  |
| Total: \$814.00     |  |  |
|                     | 16/5/23<br>J & K Kelic<br>Wedding<br>\$740.00<br>\$74.00 |  |

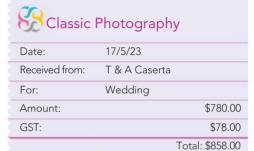
# Classic Photography Date: 21/5/23

Receipt no. 197

| Received from:  | A Long          |
|-----------------|-----------------|
| For:            | Family portrait |
| Amount:         | \$120.00        |
| GST:            | \$12.00         |
|                 | Total: \$132.00 |
| Receipt no. 199 |                 |

| SClassic Photography |          |                |
|----------------------|----------|----------------|
| Date:                | 29/5/23  |                |
| Received from:       | J Deasy  |                |
| For:                 | Passport |                |
| Amount:              |          | \$30.00        |
| GST:                 |          | \$3.00         |
|                      |          | Total: \$33.00 |
| Receipt no. 201      |          |                |

# Classic Photography Date: 14/5/23 Received from: M Nguyen For: Passport Amount: \$40.00 GST: \$4.00 Total: \$44.00



# Classic Photography Date: 25/5/23 Received from: J & J Vu For: Wedding Amount: \$880.00 GST: \$88.00

Receipt no. 198

Receipt no. 200

West Bank

 Date:
 3/5/23

 To:
 City News

 For:
 Advertising

 Amount:
 \$160.00

 GST:
 \$16.00

 Total:
 \$176.00

West Bank

 Date:
 6/5/23

 To:
 Canon

 For:
 Enlargements

 Amount:
 \$120.00

 GST:
 \$12.00

 Total:
 \$132.00

West Bank

 Date:
 9/5/23

 To:
 O McRae

 For:
 Drawings

 Amount:
 \$300.00

 GST:
 \$

 Total:
 \$

West Bank

Date: 12/5/23
To: Quicktrips
For: Courier fees
Amount: \$50.00
GST: \$5.00
Total: \$55.00

West Bank

Date: 15/5/23
To: O McRae
For: Drawings
Amount: \$350.00
GST: \$
Total: \$

West Bank

 Date:
 19/5/23

 To:
 City News

 For:
 Advertising

 Amount:
 \$160.00

 GST:
 \$16.00

 Total:
 \$176.00

**West Bank** 

 Date:
 22/5/23

 To:
 Quicktrips

 For:
 Courier fees

 Amount:
 \$60.00

 GST:
 \$6.00

 Total:
 \$66.00

**West Bank** 

 Date:
 28/5/23

 To:
 Canon

 For:
 Equipment

 Amount:
 \$400.00

 GST:
 \$40.00

 Total:
 \$440.00

West Bank

 Date:
 31/5/23

 To:
 Agfa

 For:
 Enlargements

 Amount:
 \$70.00

 GST:
 \$7.00

 Total:
 \$77.00

- a Using a spreadsheet, prepare cash journals for Classic Photography for the month of May 2023, using appropriate columns for recurring items.
- **b** Prepare a statement of receipts and payments for the month of May 2023.
- c Prepare an income statement for the month of May 2023.
- d Calculate the GST liability of the business as at 31 May 2023.
- e Prepare a balance sheet as at 31 May 2023.
- f Explain how the above business documents satisfy the demand for verifiability.
- **g** By referring to your two accounting reports prepared in parts **b** and **c**, explain how you've satisfied the demand for *understandability*.

#### 5 RECEIPTS AND PAYMENTS TO INCOME STATEMENT





Max Haas provides the following information in relation to his business, which trades as Maximum Mowing.

Summary of transaction data for February 2023:

Feb 1 Cash at bank as at 1 February – \$540, GST liability as at 1 February – \$840

- 2 The owner contributed \$2000 as capital
- 3 Cost of fuel for the month \$320 paid in cash, plus \$60 still owing (GST paid \$32)
- 4 Equipment purchased for cash \$2500, plus GST of \$250
- 5 Advertising costs paid \$430, plus GST of \$43
- 6 Cash withdrawals made by the owner \$750
- 7 Fees received from clients \$1800, plus GST of \$180
- 8 Repairs to mowers \$220, plus GST of \$22
- 9 Loan repayments \$800
- 10 Telephone bill for the month \$90 (not yet paid)
- Prepare a statement of receipts and payments for the month ended 28 February 2023.
- **b** Prepare an income statement for the month ended 28 February 2023.
- **c** With reference to the qualitative characteristic of *relevance*, explain your treatment of item (3) above in the two accounting reports prepared in this question.

#### **6 RECEIPTS AND PAYMENTS TO INCOME STATEMENT**





The following is a summary of the transactions experienced by Tan Ha, owner of a small business trading under the name Tan the Painter, during the month of June 2023.

- June 1 Cash collected from customers for work done during June \$7700, plus GST of \$770
  - 2 The cost of paint used on jobs during June was \$1540. This was bought for cash, along with GST of \$154
  - 3 Wages paid to the assistant during June \$3200
  - 4 \$40 was received for interest on the business bank account
  - 5 Delivery costs of \$60 were paid during June, plus GST of \$6
  - 6 The owner withdrew \$600 from the business for personal use on 16 June
  - 7 Tan organised for an advertisement to be run during June at a cost of \$480, plus GST. The paper hasn't sent an account yet and Tan thinks he will pay for this item early in July.
  - During June, Tan placed an order for some new paintbrushes to be delivered in July. At this stage, he isn't sure how much they will cost, but he thinks it will be about \$200.
- a Prepare a statement of receipts and payments for the month ended 30 June 2023. (The bank balance as at 1 June was \$240.)
- **b** For each of the eight items listed above, indicate whether or not they would appear in an income statement prepared for the month ended 30 June 2023.
- c Prepare an income statement for June.

#### 7 RECOGNITION OF EXPENSES



The new owner of South Coast Jetski, Linda Hawthorn, needs some advice.

Hawthorn has decided to rent a shop at a cost of \$30 000 per year, starting on 1 June 2023. However, the owner of the property offered her a deal; she can pay \$125 000 in advance for the next five years' rental. She agreed to this offer and takes possession of the business property on 1 June 2023.

Hawthorn has decided that the accounting period for her business will conclude on 31 December each year. She has a basic understanding of accounting but isn't sure how to treat the rent expense in the accounting reports for the year 2023.

Her brother suggests that the full amount of \$125 000 be treated as an expense, because it was paid during that year. Her mother recommends that one-fifth, or \$25 000, should be reported because 2023 is the first year of a five-year contract. Finally, her father suggests that, as the usual cost is \$30 000 per year, that's how much she should report for 2023.

- a State one advantage and one disadvantage of the five-year payment for Hawthorn's business.
- **b** Consider the definition of expenses earlier in this chapter. Comment on each of the solutions offered by the members of Hawthorn's family.
- c How much rent expense (if any) do you think Hawthorn should report in her income statement on 31 December 2023? Give reasons for your answer. Refer to any relevant accounting assumptions and/or qualitative characteristics to support your findings.

#### **8 RECOGNITION OF REVENUES**



Bobby's Boats is a small business that designs and constructs custom-made boats.

On 1 May 2023, Bobby's Boats signed a contract with V Jackson to build a boat. The contract price was stated as \$50 000. A 10% deposit was required within 30 days of the signing of the contract and this was received on 25 May 2023. Progress payments were then required as follows:

30/6/23: \$15 00031/8/23: \$500031/10/23: \$5000

balance on delivery.

The boat was delivered to the customer on 22 December, but Jackson asked for 30 days to settle the final amount outstanding. Bobby's Boats works on a six-month accounting period.

- a How much revenue (if any) should Bobby's Boats report in relation to the contract with Jackson for the six months ended 30 June 2023? Explain your answer fully, with reference to the definition of revenue earlier in this chapter.
- **b** How much revenue should Bobby's Boats report for the six months ended 31 December 2023? Explain your answer fully.

## **CASE STUDY**





Gisborne Furniture Repairs is owned and operated by Brendon Fogarty, who established it on 1 September 2022. At that time, he deposited \$90 000 into a separate bank account to start the business.

During the year ended 31 August 2023, the following transactions occurred.

- Repair fees received in cash totalled \$48 000, plus GST of \$4800.
- Fogarty borrowed \$15 000 from the bank.
- The loan has to be repaid at the rate of \$250 per month. A total of \$3000 was paid back to the bank during Fogarty's first reporting period.
- Interest expense of \$900 on the loan was paid in cash.
- The loan was used to buy office furniture (\$4000, plus \$400 GST) and equipment (\$11 000, plus \$1100 GST).
- Advertising completed during the year cost \$1500 (plus \$150 GST) paid in cash.
- Repair materials had to be purchased in order to complete customers' jobs. Materials costing \$8600 were purchased for cash (plus \$860 GST).
- A part-time assistant was employed during the year, and his wages were \$12 250.
- Rent of the repair shop cost Fogarty \$24 000, plus \$2400 GST.
- Office expenses cost \$950 (plus \$95 GST); all of these were paid in cash.
- Fogarty bought a computer during the year for \$3000, plus GST of \$300. It was purchased on credit from Computer Solutions, which was still owed \$500 of the \$3000 on 31 August 2023. All of the GST has been paid.
- Fogarty withdrew cash from the business on the last day of every month, for a total of \$18 000 during the year.
- **a** Select the items from the above list that are cash flows and prepare a statement of receipts and payments for the year ended 31 August 2023.
- **b** Identify the items that represent revenue and expenses, and prepare an income statement for the year ended 31 August 2023.
- **c** Taking into account all of the above information, prepare a balance sheet as at 31 August 2023.
- **d** Consider the results as reported in your statement of receipts and payments. Comment on the cash position of the business after one year of operation.
- **e** Using the results shown in your income statement, comment on the profit result achieved over the year.



The profit result after one year of operation of a small business can be unexpected.

### **CHAPTER CHECKLIST**

Now that you have finished Chapter 8, double-check your progress.

Are you ready for your Unit 1 assessment?

#### I have ...

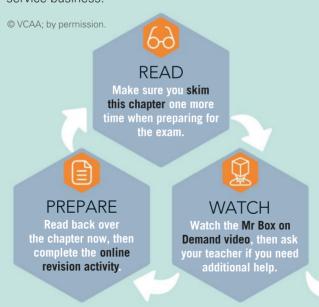
- completed all 'Check Your Understanding' questions
- completed all exercises
- ompleted the end-of-chapter activities
- Manded in my workbook for marking.

#### I understand ...

- the accounting elements: assets, liabilities, owner's equity, revenues and expenses
- documents used by a business to record financial transactions
- the distinction between cash and profit
- disclassified accounting reports for a service business:
  - Cash Flow Statement
  - Income Statement.

#### I can ...

- use correct accounting terminology
- of apply theoretical knowledge to actual and simulated situations
- of explain and apply relevant qualitative characteristics and accounting assumptions
- analyse the effect of financial transactions on the accounting equation
- of prepare accounting reports manually and using ICT, including spreadsheets, for a service business.





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# 9

# ACCOUNTING FOR CREDIT TRANSACTIONS

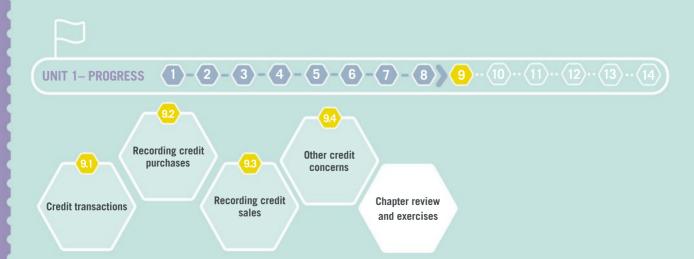
So far, we've concentrated on cash transactions for small businesses. However, many small businesses don't deal only on a cash basis. Many service firms buy goods and materials on credit, and often provide credit facilities to their customers.

In this chapter, you will investigate how credit transactions are recorded in a single entry accounting system, using subsidiary records and journals.

#### **LEARNING OBJECTIVES**

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

- distinguish between cash and credit transactions [9.1]
- define the terms 'accounts receivable' and 'accounts payable' [9.1]
- record credit sales and purchases in appropriate records [9.2 and 9.3]
- maintain subsidiary records for both accounts receivable and accounts payable [9.2 and 9.3]
- prepare accounts receivable and accounts payable schedules at the end of a period [9.4]
- determine GST liability, taking into account credit transactions [9.4].



# CREDIT TRANSACTIONS

#### credit transaction

a transaction in which goods or services are provided now, but payment follows later

invoice

a business document

evidence of a credit transaction

used to provide

A credit transaction is one where goods or services are supplied immediately, but payment follows at a later date. This delay in payment may only be a few days, or it could be 30 or 60 days.

The period of time offered to credit customers, and the discounts available to them, make up the credit terms of a credit agreement. Typical credit terms include:

- 5/7 meaning '5% discount if paid within 7 days'
- 2/30 2% discount if paid within 30 days
- n/60 the net amount payable due within 60 days; that is, no discount.

As you can see, some businesses offer discounts as an incentive for prompt payment. These are called settlement discounts, because they encourage the customer to settle, or pay off, their accounts quickly.

Credit transactions must be verified by source documents. An invoice informs a customer of the cost of a credit transaction. The supplier gives the original invoice to the customer and keeps a copy. The credit terms are usually stated on the invoice given to the customer.

Figure 9.1 shows an invoice made out by Perfect Printers to Vivien Blake Editorial Services. Perfect Printers keeps a copy for its records.

#### FIGURE 9.1 Sales invoice

#### **Perfect Printers**

12 Sydney Street West Coburg VIC 3058

Supplied to: Vivien Blake Editorial Services

Tax invoice no. T278

ABN: 765-212-354

Date: 12/7/23

6 Main Road Malvern VIC 3144

Details of goods supplied:

|   | QUANTITY                 | DESCRIPTION                  | COST PER UNIT   | TOTAL \$ |  |
|---|--------------------------|------------------------------|-----------------|----------|--|
|   | 1000                     | Business cards as per sample | \$15.00 per 100 | 150.00   |  |
|   |                          | GST (10%)                    |                 |          |  |
|   |                          | TOTAL AMOUNT OWING 165       |                 | 165.00   |  |
| Π | Nata Cudit tama 5/7 p/20 |                              |                 |          |  |

Note: Credit terms: 5/7 n/30

Note that if Vivien pays the invoice within the seven-day discount period, she may deduct a settlement discount of 5%. Although this reduced price helps Vivien's business, it also benefits Perfect Printers, because slow-paying customers can be costly to businesses.

#### ACCOUNTS RECEIVABLE AND ACCOUNTS PAYABLE

If you were keeping the books for Perfect Printers, you'd classify Vivien Blake Editorial Services as an **account receivable**, because Perfect Printers has supplied goods or services to Vivien Blake Editorial Services on credit. Accounts receivable are usually classified as current assets in a balance sheet, because they're expected to pay their debts within the next 12 months (hopefully, within one or two months).

**Accounts payable** includes all individuals or businesses that have supplied goods or services to a business on credit. In the case of Perfect Printers, that might be a supplier of materials such as paper and inks, which Perfect Printers would purchase for use in its business.

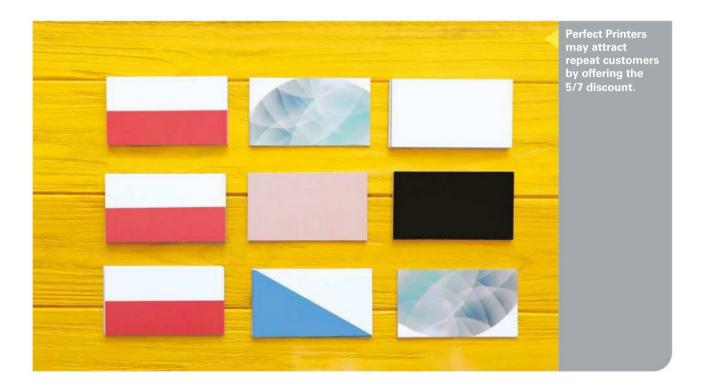
Accounts payable are usually classified as current liabilities, because they're considered to be a short-term source of finance. Accounts payable usually allow credit terms of 30 days (sometimes 60 days) and therefore meet the definition of current liabilities.

#### accounts receivable

customers that owe a business money because they obtained goods or services on credit

#### accounts payable

suppliers that a business owes money to after obtaining goods or services on credit



#### 9.1 CHECK YOUR UNDERSTANDING

- 1 Explain what is involved in a credit transaction.
- 2 State the source documents used to evidence:
  - a a cash purchase of goods.
  - **b** a credit purchase of goods.
- 3 Distinguish between accounts receivable and accounts payable.



# 9.2

# RECORDING CREDIT PURCHASES

subsidiary records

additional accounting records used to keep track of accounts receivable or accounts payable

#### purchases journal

a daily record used to keep track of all credit purchases Most single entry accounting systems rely on cash journals as the main accounting record, so **subsidiary records** need to be created if credit transactions occur frequently. These additional records are used to keep track of credit accounts.

Many small business owners simply place invoices in a shoebox or desk drawer until they're paid. A more organised approach is recommended, particularly if a firm has many accounts receivable and accounts payable.

#### THE PURCHASES JOURNAL

The first step in organising credit transactions is to create a **purchases journal**. This simple record keeps all a business's credit purchases together in one record, and can be referred to in the future if there are any queries.

Figure 9.2 shows such a record for a small business trading as Lisa the Landscaper.

#### FIGURE 9.2 Purchases journal

#### LISA THE LANDSCAPER: PURCHASES JOURNAL

| Date   | Accounts payable          | Invoice<br>no. | Materials<br>\$ | Tools<br>\$ | Sundries<br>\$ | GST<br>\$ | Accounts payable \$ |
|--------|---------------------------|----------------|-----------------|-------------|----------------|-----------|---------------------|
| Aug 1  | Reliable Lawn<br>Supplies | 32165          | 1 200           |             |                | 120       | 1 320               |
| Aug 5  | Wholesale<br>Timber Co.   | 5409           | 950             |             |                | 95        | 1 045               |
| Aug 8  | Tim's Tools Co.           | BF890          |                 | 1 320       |                | 132       | 1 452               |
| Aug 14 | Reliable Lawn<br>Supplies | 32289          | 650             |             |                | 65        | 715                 |
| Aug 19 | Wholesale<br>Timber Co.   | 5499           | 800             |             |                | 80        | 880                 |
| Aug 22 | Tim's Tools Co.           | BG023          |                 | 400         |                | 40        | 440                 |
| Aug 28 | Reliable Lawn<br>Supplies | 32365          | 300             |             |                | 30        | 330                 |
| Aug 31 | Totals for month          |                | 3 900           | 1 720       |                | 562       | 6 182               |

The key details of each invoice should always be recorded in the purchases journal:

- date
- names of accounts payable
- invoice numbers
- value of the transaction
- GST charged
- the total of each invoice.

The specific design of the journal depends on the needs of the business and what they purchase on credit. In this example, the business owner often purchases materials on credit, as well as occasionally buying tools.

It's also wise to include a column headed *Sundries*. This would be used for unusual credit purchases or purchases that occur on an infrequent basis. For example, Lisa the Landscaper may buy some office stationery on credit every six months. There's little point in having a column just for stationery, but if it is bought on credit, then an accounts payable entry should be made.

Although this record shows all purchases on credit for a particular period of time, it doesn't show the amount owing to each individual creditor.

#### MAINTAINING INDIVIDUAL RECORDS

A business that deals on credit may also require individual accounts payable records, in order to keep track of different transactions.

The details in the purchases journal of Lisa the Landscaper have been used to create the individual accounts payable records shown in Figure 9.3.

FIGURE 9.3 Individual records for accounts payable

#### **ACCOUNTS PAYABLE RECORD: RELIABLE LAWN SUPPLIES**

| Date   | Details       | Doc. no.   | Amount<br>\$ | Balance<br>\$ |
|--------|---------------|------------|--------------|---------------|
| Aug 1  | Materials/GST | Inv. 32165 | 1 320        | 1 320         |
| Aug 14 | Materials/GST | Inv. 32289 | 715          | 2 035         |
| Aug 28 | Materials/GST | Inv. 32365 | 330          | 2 365         |

#### ACCOUNTS PAYABLE RECORD: WHOLESALE TIMBER CO.

| Date   | Details       | Doc. no.  | Amount<br>\$ | Balance<br>\$ |
|--------|---------------|-----------|--------------|---------------|
| Aug 5  | Materials/GST | Inv. 5409 | 1 045        | 1 045         |
| Aug 19 | Materials/GST | Inv. 5499 | 880          | 1 925         |

#### ACCOUNTS PAYABLE RECORD: TIM'S TOOLS CO.

| Date   | Details   | Doc. no.   | Amount<br>\$ | Balance<br>\$ |
|--------|-----------|------------|--------------|---------------|
| Aug 8  | Tools/GST | Inv. BF890 | 1 452        | 1 452         |
| Aug 22 | Tools/GST | Inv. BG023 | 440          | 1892          |

In these accounts payable records, one entry is made each time a credit purchase is made. Each entry includes the GST charged as part of the total transaction. Alternatively, the entries can be broken down into two parts: one for the cost price of the inventory being purchased, and one for the GST being charged.

Figure 9.4 shows how this approach could be applied to the Tim's Tools account, rather than simply recording 'Tools/GST' as the one item.

FIGURE 9.4 An alternative approach to individual records

#### ACCOUNTS PAYABLE RECORD: TIM'S TOOLS CO.

| Date   | Details     | Doc. no.   | Amount<br>\$ | Balance<br>\$ |
|--------|-------------|------------|--------------|---------------|
| Aug 8  | Tools       | Inv. BF890 | 1 320        | 1 320         |
|        | GST charged |            | 132          | 1 452         |
| Aug 22 | Tools       | Inv. BG023 | 400          | 1 852         |
|        | GST charged |            | 40           | 1 892         |

Both approaches are acceptable, as each satisfies the demand for verifiability. As long as the document numbers are stated, the invoices can be traced at a later date to answer any queries.

#### POSTING FROM THE PURCHASES JOURNAL

The records for accounts payable simply break down all the credit purchases on an individual basis. The information is then *posted* (transferred) from the purchases journal to the individual records. Note how the current amount owing to an accounts payable can be shown in the right-hand column each time the account is updated.

The headings a firm uses in its purchases journal should always reflect what it's likely to purchase on credit in the day-to-day running of its business. That information should also be noted when posting to individual records.

For example, two of the records above have an entry for 'Materials/GST', but the record for Tim's Tools Co. has an entry for 'Tools/GST'. Why is this difference recorded?

Many service businesses need to buy a variety of materials to provide their services to their customers. A landscaper may buy soil, potting mix, plants, seeds and so on. A carpenter would require timber, nails, screws and glue. So materials can be defined as goods purchased with the intention of using them to provide a particular service to a customer – as opposed to tools, which are used for general purposes and with multiple customers. This distinction should be reflected in the records, as the business owner may need to analyse their spending patterns in the future.



#### CASH TRANSACTIONS IN CREDIT RECORDS

No matter how detailed, individual records only show part of the overall picture that exists in a typical business situation. Accounts payable will be paid cash eventually, so if some cash transactions are included, a more realistic picture can be seen.

Consider the cash journals maintained by Lisa the Landscaper, where the following two cash payments are located.

- Aug 4 Paid Reliable Lawn Supplies \$1320
  - 31 Paid Reliable Lawn Supplies \$715

If these cash payments were included in the individual accounts payable record for Reliable Lawn Supplies, the record would be as shown in Figure 9.5.

#### FIGURE 9.5 Accounts payable record with cash payment included

#### **ACCOUNTS PAYABLE RECORD: RELIABLE LAWN SUPPLIES**

| Date   | Details       | Doc. no.   | Amount<br>\$ | Balance<br>\$ |
|--------|---------------|------------|--------------|---------------|
| Aug 1  | Materials/GST | Inv. 32165 | 1 320        | 1 320         |
| Aug 4  | Cash payment  | Chq. 76320 | 1 320        | Nil           |
| Aug 14 | Materials/GST | Inv. 32289 | 715          | 715           |
| Aug 28 | Materials/GST | Inv. 32365 | 330          | 1 045         |
| Aug 31 | Cash payment  | Chq. 76325 | 715          | 330           |

The record shown in Figure 9.5 is an ideal way to provide essential information about a firm's accounts payable. Because a running balance is recorded after every transaction, the amount owing to individual accounts payable is available at a glance. All document numbers are recorded for future reference, providing a history of the transactions with a particular account in one compact record.

#### 9.2 CHECK YOUR UNDERSTANDING

WB PAGE 102

- 1 Describe the function of a purchases journal.
- 2 Explain why it's preferable for a business owner to maintain individual records for accounts payable.
- 3 The invoice numbers in a purchases journal don't run in sequence. Explain why.

# 9.3

# RECORDING CREDIT SALES

#### sales journal

a daily record used to keep track of all credit sales An additional record can be designed for transactions where a service business provides services on credit to its customers. The **sales journal** is used to record the details of all invoices issued to customers for services provided on credit. In this case, the original invoice is issued to the customer and a copy is used to record the details in the journal.

Figure 9.6 shows a typical sales journal.

#### FIGURE 9.6 Sales journal

#### LISA THE LANDSCAPER: SALES JOURNAL

| Date   | Accounts receivable | Inv. no. | Sale<br>\$ | GST<br>\$ | Accounts<br>receivable<br>\$ |
|--------|---------------------|----------|------------|-----------|------------------------------|
| Sep 1  | Balwyn College      | 1201     | 2 100      | 210       | 2 310                        |
| Sep 4  | BBQs Galore         | 1202     | 500        | 50        | 550                          |
| Sep 7  | D Haynes            | 1203     | 450        | 45        | 495                          |
| Sep 14 | Balwyn College      | 1204     | 600        | 60        | 660                          |
| Sep 19 | M Taylor            | 1205     | 80         | 8         | 88                           |
| Sep 24 | BBQs Galore         | 1206     | 250        | 25        | 275                          |
| Sep 30 | Balwyn College      | 1207     | 200        | 20        | 220                          |
| Sep 30 | Totals              |          | 4 180      | 418       | 4 598                        |

As with the purchases journal, the sales journal records the key transaction details:

- date
- names of accounts receivable
- invoice numbers
- value of the sales transaction
- GST charged
- the total of each invoice.

One notable difference with the sales journal is that the invoice numbers should always run in sequence. This is because the document numbers used are all from the same source. (In the purchases journal, the invoices may be received from several different businesses.) This ensures that all invoices are recorded accurately, since it is easy to identify missing numbers.

#### INDIVIDUAL RECORDS FOR ACCOUNTS RECEIVABLE

Just as with the purchases journal, businesses may post transactions from the sales journal to individual accounts receivable records. These records could also include cash receipts from these credit customers.

As well as the credit sales listed in Figure 9.6, Lisa the Landscaper also has the following cash receipts.

- Sep 6 Received from BBQs Galore \$550 (Rec. no. 101)
  - 16 Received from Balwyn College \$2310 (Rec. no. 102)
  - 20 Received from Balwyn College \$660 (Rec. no. 103)
  - 24 Received from D Haynes \$495 (Rec. no. 104)



From these credit and sales transactions, Lisa the Landscaper would have individual accounts receivable records as shown in Figure 9.7.

FIGURE 9.7 Individual records for accounts receivable

#### ACCOUNTS RECEIVABLE RECORD: BALWYN COLLEGE

| Date   | Details         | Doc. no.  | Amount<br>\$ | Balance<br>\$ |
|--------|-----------------|-----------|--------------|---------------|
| Sep 1  | Credit sale/GST | Inv. 1201 | 2310         | 2310          |
| Sep 14 | Credit sale/GST | Inv. 1204 | 660          | 2970          |
| Sep 16 | Cash received   | Rec. 102  | 2310         | 660           |
| Sep 20 | Cash received   | Rec. 104  | 660          | Nil           |
| Sep 30 | Credit sale/GST | Inv. 1207 | 220          | 220           |

#### ACCOUNTS RECEIVABLE RECORD: BBQS GALORE

| Date   | Details         | Doc. no.  | Amount<br>\$ | Balance<br>\$ |
|--------|-----------------|-----------|--------------|---------------|
| Sep 4  | Credit sale/GST | Inv. 1202 | 550          | 550           |
| Sep 6  | Cash received   | Rec. 101  | 550          | Nil           |
| Sep 24 | Credit sale/GST | Inv. 1206 | 275          | 275           |

#### **ACCOUNTS RECEIVABLE RECORD: D HAYNES**

| Date   | Details         | Doc. no.  | Amount<br>\$ | Balance<br>\$ |
|--------|-----------------|-----------|--------------|---------------|
| Sep 7  | Credit sale/GST | Inv. 1203 | 495          | 495           |
| Sep 24 | Cash received   | Rec. 104  | 495          | Nil           |

#### **ACCOUNTS RECEIVABLE RECORD: M TAYLOR**

| Date   | Details         | Doc. no.  | Amount<br>\$ | Balance<br>\$ |
|--------|-----------------|-----------|--------------|---------------|
| Sep 19 | Credit sale/GST | Inv. 1205 | 88           | 88            |



A service business, such as a landscaping service, may provide services on credit.

#### MANAGING ACCOUNTS RECEIVABLE

It's important that an owner and/or manager has up-to-date information regarding accounts receivable. The records shown here provide a clear, concise summary of transactions relating to each individual credit customer. It's therefore easy to see which accounts are fully paid and which haven't made a payment in the last month. The business owner can then follow up with overdue accounts.

In order to control accounts receivable, an owner or manager might use some of the following tactics.

- Making a reminder phone call
- Posting a monthly statement with a reminder notice
- Emailing a reminder
- Employing a debt collector
- Threatening legal action (in extreme cases)
- Refusing to provide further credit until the account is settled
- Charging interest (if stipulated as a term of the contract)

#### 9.3 CHECK YOUR UNDERSTANDING



- 1 Why should a firm that sells on credit maintain individual accounts receivable records?
- 2 Name three tactics a business owner may use if accounts receivable have overdue accounts.
- 3 Do all small businesses need a sales journal? Explain your answer fully.

# OTHER CREDIT CONCERNS

Any business that offers credit terms, or that purchases goods and services on credit, needs to keep track of more information than a cash-only operation. As well as the accounts payable and receivable records already covered, there are other reports and records that need to be created.

#### **ACCOUNT SCHEDULES**

When preparing a balance sheet, there's little point in listing every individual accounts receivable and accounts payable, especially if the business has hundreds of accounts receivable.

However, the total amount owing to the business by accounts receivable must be listed under the heading of Current assets. Similarly, the total amount the business owes to accounts payable must be listed under the heading of Current liabilities. If a business is using a system of individual accounts for its accounts receivable or accounts payable, a summary of these records is required.

An accounts receivable schedule is a listing of all accounts receivable, with their amounts owing at a particular date. Using the accounts receivable records in Figure 9.7 (page 143), an accounts receivable schedule could be prepared as follows.

#### accounts receivable schedule

a listing of accounts receivable and the amount owing from each

#### **ACCOUNTS RECEIVABLE SCHEDULE** AS AT 30 SEPTEMBER 2023

| Balwyn College     | \$220 |
|--------------------|-------|
| BBQs Galore        | 275   |
| M Taylor           | 88    |
| Total amount owing | \$583 |

Therefore, the balance sheet of Lisa the Landscaper would show accounts receivable of \$583 as a current asset as at 30 September 2023.

An accounts payable schedule can be prepared in a similar way from the accounts payable records, listing all the accounts payable, with the amounts owing to them at a particular date.

#### accounts payable schedule

a listing of accounts payable and the amount owing to each

#### CALCULATING GST

There are four types of transactions that may affect the GST debt of a business.

- GST collected by a business on its cash sales
- GST paid by a business on its cash payments
- GST charged to accounts receivable when credit sales are made
- GST charged by suppliers when credit purchases are made

A business with accounts payable or receivable must take them into account when calculating their GST situation. When a business owner completes their business activity statement (BAS), typically monthly or quarterly, they can determine their overall GST situation.

Consider the following example.

| GST collected on cash sales (from cash receipts journal)                       | \$700 |
|--|-------|
| GST charged to accounts receivable on credit sales (from credit sales journal) | 400   |
| Total charged to customers   | 1 100 |
| GST paid on cash payments (from cash payments journal)                         | 300   |
| GST charged by accounts payable (from credit purchases journal)                |       |
| GST charged by all suppliers   | \$500 |

The GST paid to and charged by suppliers is deducted from the GST collected from and charged to customers. This determines the overall GST debt the business owes to the government.

The net result from this example is as follows.

| GST charged to customers       | \$1 100 |
|--------------------------------|---------|
| Less: GST charged by suppliers | 500     |
| GST debt owing to the ATO      | 600     |

Of course, if the GST paid to suppliers exceeds the amounts charged to customers, the business is entitled to a GST refund.

It's up to each business owner to keep appropriate records so that they can prove to the Australian Taxation Office (ATO) their entitlement or obligation at the end of the month.



#### 9.4 CHECK YOUR UNDERSTANDING



- 1 Explain how accounts receivable and accounts payable are classified in a balance sheet.
- 2 A business owner has cash sales of \$11 000 during a month. This amount includes GST received. During the same month, the business pays GST of \$400. Does this business have a GST liability or is it owed a GST refund? Calculate the dollar amount in your answer.
- 3 Explain why business documents are important in relation to the reporting of GST.

# 9

# **CHAPTER REVIEW**

## **KEY CONTENT**

- [9.1] A credit transaction is one where goods or services are supplied immediately, but payment follows at a later date. An invoice is the source document used to inform a customer of the cost of a credit transaction. Accounts receivable are the credit customers who owe a business money; accounts payable are suppliers to which a business owes money for their goods or services.
- [9.2] In single entry accounting, subsidiary records track credit accounts. The purchases journal keeps all of a business's credit purchases together in one record. These transactions can then be posted to individual accounts payable records.
- [9.3] The sales journal keeps all of a business's credit customers together in one record. These transactions can be posted to individual accounts receivable records. Managers should review these regularly to monitor overdue accounts.
- Businesses that offer or take advantage of credit terms need to reflect this in their records. Schedules of accounts receivable and accounts payable summarise all credit terms for entering into the balance sheet. This information is also used when calculating the business's GST situation.

### **CHAPTER 9 EXERCISES**

#### 1 CREDIT PURCHASES – ACCOUNTS PAYABLE





The following credit purchases were made by Doncaster Electricals during July 2023.

- Jul 2 Bought electrical materials on credit from Wholesale Electrics: Invoice no.32001: \$500 plus \$50 GST
  - 5 Credit purchase of light fittings from Lights 'R' Us Pty Ltd \$340, plus \$34 GST: Invoice no. 4530
  - 9 Received Invoice no. TJ324 from Red Hot Electrics for materials purchased, a total of \$330, including GST of \$30
  - 13 Bought materials on credit from Wholesale Electrics for \$90, plus \$9 GST: Invoice no. 32093
  - 19 Received Invoice no. TJ371 for \$120 worth of materials, plus \$12 GST, purchased from Red Hot Electrics
  - Purchased light fittings from Wholesale Electrics and received Invoice no.33102 for a total of \$130, plus GST of \$13
- a In a spreadsheet, enter the above transactions in a credit purchases journal, using a special column for purchases of materials.
- **b** Transfer the information from the purchases journal into individual records for accounts payable.
- c Prepare an accounts payable schedule as at 31 July 2023.



#### 2 CREDIT PURCHASES - ACCOUNTS PAYABLE



Hunter Hot Air Ballooning supplies the following information regarding accounts payable transactions during August 2023.

| Date  | Credit purchases:  | GST \$ |
|-------|--|--------|
| Aug 1 | Invoice no. 654, from Bulk Silk Supplies for \$2700                      | 270    |
| 5     | Ballina Baskets, Invoice no. TY780, for \$2900                           | 290    |
| 10    | Bulk Silk Supplies \$3000 (Invoice no. 698)                              | 300    |
| 13    | Invoice no. 712, from Bulk Silk Supplies for \$1600                      | 160    |
| 17    | \$1800 from Ballina Baskets: Invoice no. 50                              | 180    |
| 25    | Purchases of tools on credit from Ace Tools, Invoice no. 546, for \$1200 | 120    |

| Date   | Payments to accounts payable:                 |  |
|--------|---|--|
| Aug 11 | Paid Bulk Silk Supplies \$2970 (Cheque 54001) |  |
| 16     | Cheque 54002 sent to Ballina Baskets \$2000   |  |
| 23     | Paid Bulk Silk Supplies \$3300 (Cheque 54003) |  |
| 31     | Paid \$600 to Ace Tools (EFT payment)         |  |

- **a** Using a spreadsheet, prepare a credit purchases journal for August 2023 with columns for 'Materials', 'Tools' and 'Sundries'.
- **b** Record both the credit purchases and cash payments to accounts payable in the individual accounts payable records. (All entries must be in chronological sequence.)
- c Prepare an accounts payable schedule as at 31 August 2023.



#### 3 CREDIT SALES - ACCOUNTS RECEIVABLE



Melbourne Computer Repairs provides services to its regular customers on credit. The following credit transactions occurred during September 2023.

- Sep 1 Issued Invoice no. 4501 to Carlton College for services provided. The total amount charged was \$308, including \$28 GST.
  - 4 Charged Fitzroy University \$150 for services on credit. GST added of \$15 (Invoice no. 4502)
  - 8 Sent Invoice no. 4503 to P Scaturchio for \$230, plus \$23 GST
  - 11 Carlton College was issued Invoice no. 4504 for repairs completed, \$440 including \$40 GST
  - 18 Classy Couriers billed for \$150 plus \$15 GST (Invoice no. 4505)
  - 22 Charged Carlton College \$850, plus \$85 GST (Invoice no. 4506)
  - 29 Invoice no. 4507 was sent to Fitzroy University for a total of \$473, including \$43 GST
- a Enter the above transactions into Melbourne Computer Repairs' credit sales journal.
- **b** Post the information from the sales journal to individual records for accounts receivable.
- c Prepare an accounts receivable schedule as at 30 September 2023.

#### 4 CREDIT SALES – ACCOUNTS RECEIVABLE





Kay's Cleaning Services supplies the following information regarding her dealings with accounts receivable in October 2023.

| Date  | Credit sales charged to accounts receivable       | GST \$ |
|-------|---|--------|
| Oct 1 | Invoice no. 1496, to Footscray Library, for \$380 | 38     |
| 3     | To Preston TAFE, Invoice no. 1497 for \$140       | 14     |
| 7     | Invoice no. 1498, to H Mai for \$150              | 15     |
| 12    | Footscray Library, Invoice no. 1499, for \$280    | 28     |
| 17    | Footscray Library, Invoice no. 1500, for \$280    | 28     |
| 21    | Preston TAFE, Invoice no. 1501, for \$130         | 13     |
| 24    | Invoice no. 1502, to T Lam, for \$110             | 11     |
| 28    | Footscray Library, Invoice no. 1503, for \$300    | 30     |
| 31    | Invoice no. 1504, to Preston TAFE, for \$140      | 14     |

| Date   | Cash receipts from accounts receivable                |  |
|--------|---|--|
| Oct 10 | Received from Preston TAFE \$154, Receipt no. 900     |  |
| 13     | Footscray Library paid \$418 (Rec. no. 901)           |  |
| 16     | Received from H Mai \$165 (Rec. no. 902)              |  |
| 21     | Receipt no. 903 issued to Footscray Library for \$308 |  |

- a Using a spreadsheet, record the credit sales for October in a suitably designed credit sales journal.
- b Enter both the credit sales charged to accounts receivable and the cash received from accounts receivable in individual records for accounts receivable. (All entries must be in chronological sequence.)
- c Prepare an accounts receivable schedule as at 31 October 2023.
- d Explain why the document numbers in the sales journal run in sequence.

### **5 CREDIT PURCHASES AND CREDIT SALES**





The following transactions relate to a small business trading as Strathmore Signwriting.

Nov 1 Invoice no. 564 issued to Jacana Transport for \$460, plus \$46 GST





6 Invoiced Jacana Transport \$550 (including \$55 GST): Invoice no. 565

9 Charged B Young \$190, plus \$19 GST: Invoice no. 566

11 Received Invoice no. A134 from Taz Industries for \$540, including \$54 GST

12 Received \$506 from Jacana Transport: Rec. no. 860

16 Invoiced Yellow Cabs \$780, plus \$78 GST: Inv. no. 567

18 Paid Deluxe Paints \$484: Chq. no. 3412

Charged B Young \$190, plus \$19 GST: Invoice no. 568 21

23 Purchased paints on credit from Deluxe Paints: Invoice no. 401, \$560, plus \$56 GST

25 Received \$605 from Jacana Transport: Rec. no. 861.

26 Paid Taz Industries \$540: Chq. no. 3413

28 Invoice no. 569 to Yellow Cabs \$680, plus \$68 GST

29 Received \$209 from B Young: Rec. no. 862

30 Received Invoice no. 434 from Deluxe Paints \$480, plus \$48 GST Charged Jacana transport \$380 plus GST of \$38: Invoice no. 570

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- **a** From the list above, enter the relevant transactions in a credit sales journal and a credit purchases journal.
- **b** Prepare individual records for both the accounts receivable and accounts payable of Strathmore Signwriting.
- c Draw up an accounts receivable schedule and an accounts payable schedule as at 30 November 2023.



#### **6 ACCOUNTS PAYABLE**



The following transactions all relate to dealings with United Trading Co. over the month of June 2023. At the start of June, this accounts payable was already owed \$200.

| Credit purchases |                 |                      |
|------------------|-----------------|----------------------|
| Jun 2            | Invoice no. 765 | \$320, plus \$32 GST |
| 9                | Invoice no. 791 | \$260, plus \$26 GST |
| 15               | Invoice no. 823 | \$440, plus \$44 GST |
| 24               | Invoice no. 845 | \$200, plus \$20 GST |
| 30               | Invoice no. 891 | \$480, plus \$48 GST |

| Cash payments |             |       |
|---------------|-------------|-------|
| Jun 4         | EFT payment | \$200 |
| 14            | EFT payment | \$352 |
| 29            | EFT payment | \$286 |

- a Prepare the accounts payable record for United Trading Co., showing all transactions during the month of June 2023.
- **b** Explain how *verifiability* has been satisfied in your accounts payable record.
- c State and explain two benefits of purchasing materials on credit.

#### **7 GST: DEBT OR REFUND?**



Anthony Kirley notes the following events in his hairdressing salon during July 2023.

| GST collected on cash transactions           | \$1 200 |
|--|---------|
| GST paid on cash payments                    | \$500   |
| GST charged by suppliers on credit purchases | \$250   |

Taking into account the above information, does Kirley owe the ATO in relation to the GST, or is he owed a tax refund? Explain fully.

#### **8 GST: DEBT OR REFUND?**



On 1 October 2023, Nat Ryan owed the ATO \$450 because of GST transactions recorded for her business, Ryan's Reproductions. During October, Nat experienced the following events in her business.

| GST charged by suppliers on credit purchases       | \$650   |
|--|---------|
| GST charged to accounts receivable on credit sales | \$980   |
| GST paid on cash payments                          | \$350   |
| Cash payments not attracting GST                   | \$5 400 |
| GST received on cash sales                         | \$780   |
| Cash receipts not attracting GST                   | \$1 200 |

- a Calculate the GST debt or GST refund due as at 31 October 2023.
- **b** How would you classify your answer to part **a** above in the balance sheet of Nat's business? Explain your answer fully.

#### 9 ACCOUNTS RECEIVABLE AND ACCOUNTS PAYABLE





Perfect Fit Tailors is a bespoke clothing store that buys its fabrics on credit and allows credit to its trusted customers. Discounts are allowed for prompt settlement of accounts. On 1 July 2023, the following amounts were already owed by accounts receivable: T May \$100, G Matthews \$90.

The following events took place during July 2023.





- 4 Purchased material from Cool Cotton Co. at a cost of \$1300, plus \$130 GST. Invoice no. TR651 was received
- 5 Bought a sewing machine on credit from Singer Pty Ltd for \$490 plus GST (Invoice no. 312)
- 9 Tony May paid \$100: Receipt no. 24
- 11 Issued Invoice no. 790 to Michael Waugh for \$320, plus \$32 GST
- 13 Ron Ponting paid \$528 (Rec. no. 25)
- 15 Bought fabric from Top Designs for \$600, plus \$60 GST (Inv. no. 354)
- 17 Issued Invoice no. 791 to Max Hughes for \$320, plus \$32 GST
- 19 Paid Cool Cotton Co. \$1430: Chq. no. 76003
- 21 Gary Matthews paid \$40 (Rec. no. 26)
- 22 Paid Singer Pty Ltd \$539 via EFT
- 24 Charged Ivan Healy \$190, plus \$19 GST, for a credit sale (Inv. no. 792)
- 26 Purchased a sewing machine from Singer Pty Ltd for \$450, plus GST (Inv. no. 345)
- 28 Paid Top Designs \$660 by EFT
- 31 Purchased \$600 of material from Cool Cotton Co. and received Inv. no. TR790 (GST charged \$60)
  - Invoiced Gary Matthews \$260, plus \$26 GST (Inv. no. 793)
- a Enter the relevant transactions from the list above into a credit purchases journal (*Hint*: use columns for 'Materials', 'Equipment' and 'Sundries'.)
- **b** Prepare individual records for accounts payable, showing all entries in correct sequence.
- **c** Select the appropriate transactions from the list above and prepare a credit sales journal.
- d Prepare individual records for accounts receivable with all relevant entries.
- e Prepare accounts receivable and accounts payable schedules as at 31 July 2023.
- f Using your credit journals, determine the GST situation of this business at the end of July 2023. Explain your answer fully.



#### 10 ACCOUNTS RECEIVABLE AND ACCOUNTS PAYABLE



Ferrante Furniture is a small business that provides quality furniture repairs to a range of customers. Management looks after its valued clients by providing 30 days' credit.

On 1 August 2023, the following accounts receivable were already in existence: J Espandiar \$1450, R Benigno \$600 and D Tran & Co. \$2200. Balances owing to accounts payable at that date were Australian Timber \$5100 and Fancy Fabrics \$3200.



- Aug 1 Paid Australian Timber \$3100
  - 2 Invoice no. 213 issued to R Benigno for \$180, plus \$18 GST
  - 3 Purchased material from Fancy Fabrics for \$2800, plus \$280 GST (Inv. no. 432)
  - 6 Repairs completed for J Espandiar for \$550, including \$50 GST (Inv. no. 214)
    - D Tran & Co. paid \$1680 (Rec. no. 332)
  - 8 Purchased new tools from Harry's Hardware (Inv. no. 34) \$220 plus GST
  - 9 Issued Invoice no. 215 to R Benigno for \$240, plus \$24 GST
  - 11 J Espandiar paid \$1450 (Rec. no. 333)
  - 12 Issued Invoice no. 216 to Shepparton Secondary College for \$2800, plus \$280 GST
  - 15 Bought timber from Australian Timber for \$2100 (Inv. no. TY445): GST charged \$210
  - 18 Credit sale S Bramante for \$800, plus \$80 GST (Inv. no. 217)
  - 21 Paid Fancy Fabrics \$3200 (Chq. no. 98343)
  - 22 Issued Invoice no. 218 to Shepparton Secondary College for \$520, plus \$52 GST
  - 23 R Benigno sent a cheque for \$600 for overdue payment (Rec. no. 334)
  - 24 Repairs made on credit for J Espandiar \$540, plus \$54 GST (Inv. no. 219)
  - 26 Purchased timber on credit from Australian Timber for \$2600, plus \$260 GST (Inv. no. TY476)
  - 27 Harry's Hardware provided new tools on credit \$352 (including GST) (Inv. no. 65)
  - 28 S Bramante paid \$880 (Rec. no. 335)
  - 29 Invoiced D Tran & Co. for repairs of \$4200, plus GST of \$420 (Inv. no. 220)
  - 30 Purchased material from Fancy Fabrics for \$2300, plus GST of \$230 (Inv. no. 454)
  - Sold goods on credit to Cusack and Sons for \$2360 (Inv. no. 221): GST charged \$236

Note: this business makes all cash payments via EFT.

- a Design appropriate journals and enter the above transactions for August in your journals to account for:
  - credit sales
  - cash receipts
  - credit purchases
  - cash payments.
- **b** Prepare individual records for accounts receivable, with all relevant entries in correct sequence.

- c Prepare individual records for accounts payable showing all entries for August.
- d Prepare accounts receivable and accounts payable schedules as at 31 August 2023.
- e Determine whether this business has a GST debt or is owed a GST refund at the end of August 2023 (show workings).

### **ETHICAL CONSIDERATIONS**



Jan Morrison has operated a business for several years under the name Ace Automotive. She sells spare parts for cars, as well as providing maintenance work on a range of motor vehicles.

Morrison is concerned about the cost of spare parts, which are all locally made. Price increases have eaten away at her profits to such an extent that she's concerned about the future of her business. After doing extensive research, Morrison has discovered that if she imports her spare parts from overseas, she can save 30% on the cost of most items.

She wants your advice on what she should do. She wants to support local industry, but the price increases are making this very difficult.

Discuss the pros and cons of this issue and make a recommendation to Morrison. Should she continue to support local suppliers, or should she import her spare parts? Your answer should consider both financial and non-financial considerations.



often try to find ways of sourcing cheaper materials and equipment to maintain their profits, but it can of supporting local industry.

## **CHAPTER CHECKLIST**

Now that you've finished Chapter 9, double-check your progress.

Are you ready for your Unit 1 assessment?

#### I have ...

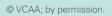
- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- ompleted the end-of-chapter activities
- Manded in my workbook for marking.

#### I understand ...

- the nature of cash and credit transactions.
- the purpose and use of special journals:
  - Sales Journal
  - Purchases Journal.

#### I can ...

- use correct accounting terminology
- didentify, classify and record financial data manually and through the use of ICT
- of analyse the effect of financial transactions on the accounting equation.





Make sure you skim this chapter one more time when preparing for the exam.



#### **PREPARE**

Read back over the chapter now, then complete the online revision activity.



#### \MATCH

Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



mea.digital/vceacc12\_9



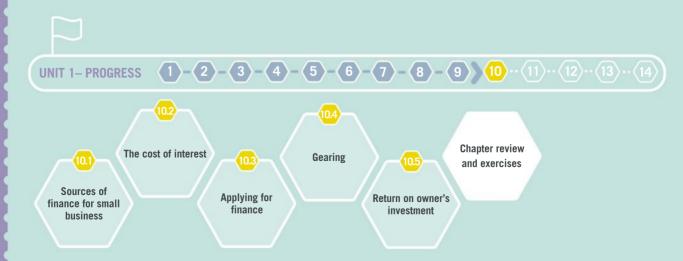
A small business owner must decide the best way to finance their business. The question of where to find financing to establish a business is often incredibly important, for without finance the business may not even start. Even for established firms, decisions relating to finance often arise.

In this chapter, you will examine several different options for financing a small business. You'll also investigate different methods of evaluating how effective those options are for different businesses.

#### **LEARNING OBJECTIVES**

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

- describe various sources of finance for small business[10.1]
- distinguish between flat rate interest and reducing balance interest [10.2]
- distinguish between a flat rate and an effective rate of interest [10.2]
- outline the factors used to assess a loan application[10.3]
- explain the concept of gearing [10.4]
- calculate a debt ratio for a business [10.4]
- calculate a return on owner's investment ratio [10.5]
- explain the effect of gearing on the owner's return on investment [10.5].



# 10.1 SOURCES OF FINANCE FOR SMALL BUSINESS

The question of business finance is usually an ongoing problem for small business owners. A business owner may need finance to expand into larger premises, or purchase a major asset such as a service vehicle. Even the day-to-day buying of goods or materials may involve decisions about whether to use some form of finance.

There are two types of finance available to small business owners. Internal sources of finance come from within the business; that is, from the resources of the owner and the business itself. External sources of finance are individuals or other entities who lend funds or finance the operations of a small business.

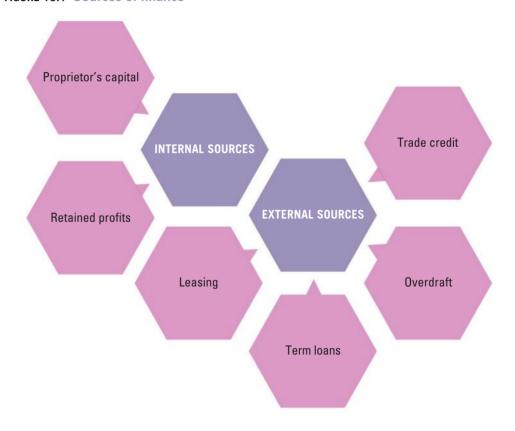
#### internal sources of finance

funds provided to a business by the owner, which may include the owner's capital plus any retained profits

#### external sources of finance

funds borrowed from an individual or business that is external to the business seeking finance





#### **INTERNAL SOURCES**

There are two major internal sources of finance.

- **Proprietor's capital:** When a sole trader sets up a business, the owner usually makes a substantial commitment of both time and money. The owner's contribution of cash and assets is called proprietor's or owner's capital. It's common for the owner's capital to make up the majority of the finance for a small business.
- Retained profits: Once a business has been established for a period of time, it should (hopefully) earn a profit. The owner may choose to withdraw some of these profits (known as drawings), while the remainder stays in the business for future use. The **retained profits** are kept within the business to help finance future plans. Of course, retained profits only occur if a profit is earned and the owner doesn't withdraw it for private use.

## retained profits

profits kept within a business rather than being withdrawn by the owner

#### **EXTERNAL SOURCES**

There are four major external sources of finance.

Trade credit: In Chapter 9, you learnt about credit transactions. Trade credit is a common form of short-term credit used by small businesses. Trading businesses use trade credit to purchase the inventory (goods) they sell in their day-to-day operations. Service firms use trade credit to purchase the necessary materials for providing their services to customers. For example, a plumber may use trade credit to purchase spouting, or a garage may use it to purchase spare parts for vehicle

Accounts payable (the suppliers of the goods) stipulate the credit terms to the buyer. Trade credit provides finance for a short period of time, such as 30 or 60 days, and is usually free of interest as long as the account is paid on time.

Overdraft: A bank or financial institution may extend an overdraft to a small business owner, allowing them to withdraw more than the amount that's in the firm's bank account. An overdraft is an ideal source of finance to cover short-term fluctuations in cash. During slow trading periods, if a business runs short of cash, it can use an overdraft to get through the slow period without committing to a costly long-term loan.

The amount borrowed via an overdraft will vary depending on the firm's needs. Interest is payable on overdrafts and is calculated daily. The bank will always place a limit on borrowing through the overdraft facility.

Term loans: For longer-term finance, a term loan might be suitable. Term loans may be for a short period (such as two or three years), or a much longer period (10 or 20 years). Such loans are usually taken out for a specific purpose; for example, a five-year term loan may be used to buy a new delivery van. This period gives the business enough time to generate the cash needed to repay the loan (plus the interest) on the specified repayment date.

Depending on the financial record of the business and its owner, a short-term loan may be unsecured; that is, the borrower isn't required to put up any collateral (security) in case it can't repay the loan. To finance a more substantial purchase, such as property, a business may take a loan over a long period, such as 20 years. Such a loan would usually be secured; for example, the bank may ask for a mortgage on the business owner's personal house as security.

**Leasing:** As an alternative to buying assets, some businesses choose to lease them. Assets such as computers, photocopiers and vehicles are often leased, as are business premises themselves. Leasing saves a business from making the large outlay of cash involved in buying an asset. It also avoids the long-term commitment associated with some loans.

Leasing is like renting in that the business never actually owns the leased asset. The main benefit of leasing is that the business gets the use of the asset immediately, without having to save up its purchase price or commit itself to a long-term loan. Also, as many leases run for only one or two years, the assets leased can always be the most modern and up-to-date models.

#### trade credit

short-term credit usually made available by suppliers of materials or goods

#### overdraft

a bank account with a negative balance, used as a short-term source of finance

#### term loan

a loan taken out for a fixed period of time, and due for repayment at a predetermined date

#### leasing

payment of a fee to use an asset that isn't actually owned by the business

#### **CHOOSING A SOURCE OF FINANCE**

With multiple possible types of finance available, business owners need to consider their specific needs before deciding which to pursue.

Table 10.1 provides a summary of the advantages and disadvantages of the various types of finance.

TABLE 10.1 Advantages and disadvantages of various types of finance

|                     | Advantages  | Disadvantages   |
|---------------------|---|---|
| Capital             | <ul><li>Interest free</li><li>No fixed payments</li></ul>   | Limited to personal resources   |
| Retained<br>profits | <ul><li>Interest free</li><li>No repayments</li></ul>   | <ul><li>May not exist (if losses occur)</li><li>May be eliminated by drawings</li></ul>   |
| Trade<br>credit     | <ul><li>Readily available</li><li>No interest</li></ul>   | <ul> <li>Only for short-term items (30 days' credit is common)</li> <li>Must be repaid on time, or supply may be threatened</li> </ul>                |
| Bank<br>overdraft   | <ul><li>Flexible amount</li><li>Available when needed</li></ul>   | <ul><li> High interest</li><li> May be called up at short notice</li></ul>  |
| Term<br>loans       | <ul> <li>Ideal for long-term projects</li> <li>Can be designed to suit the needs<br/>of the business</li> </ul> | <ul> <li>Fixed repayments must be budgeted</li> <li>Involves a commitment for an extended period of time</li> <li>Security may be required</li> </ul> |
| Leasing             | <ul><li>Avoids large outlay of cash</li><li>Assets can be updated every couple of years</li></ul>               | <ul><li>Item isn't actually purchased</li><li>Rent money is 'dead' money</li><li>Not available for all assets</li></ul>                               |

It's important to use the appropriate form of finance when borrowing money. As a general rule, short-term finance should be used for short-term assets, and long-term finance for long-term assets.

So, when buying materials or inventory for a business, trade credit is ideal. However, it would be inappropriate to use trade credit to buy a fleet of vehicles. Such assets could be leased, or they could be financed with a long-term loan.

The other thing to consider is the cost of finance. It costs money to borrow money! Before making a commitment to any form of finance, the owner should investigate its full cost.

#### 10.1 CHECK YOUR UNDERSTANDING



- 1 Distinguish between internal and external sources of finance.
- 2 Name and describe two types of internal finance.
- 3 Name and describe two types of external finance.
- 4 List one advantage and one disadvantage of each type of finance you identified in Questions 2 and 3.

# 10.2 THE COST OF INTEREST

Term loans are a very common source of finance, and most banks offer loan packages aimed at small businesses. However, business owners need to be aware of the consequences of borrowing money before they commit themselves to long-term finance contracts. The cost of interest is an important consideration when comparing loans.

#### FLAT RATE VERSUS REDUCING BALANCE INTEREST

The first distinction to be made is between flat rate and reducing balance interest.

- Flat rate interest is calculated on the amount borrowed.
- Reducing balance interest is calculated on the amount owing.

With a flat rate loan, the interest isn't reduced as the loan is gradually repaid. It's the same amount in the first year as in the second, third or fourth year. By contrast, the interest on a reducing balance loan will be smaller as each year passes, because the amount owing is reduced.

Consider a loan of \$12 000 taken over three years. Assuming the loan will be paid off at an equal rate over the three years (i.e. \$4000 p.a.), the following calculations can be made.

| Flat rate              |                           |  |
|------------------------|---------------------------|--|
| Year 1                 | 10% of \$12 000 = \$1 200 | Amount owing at start of year \$12 000 |
| Year 2                 | 10% of \$12 000 = \$1 200 | Amount owing at start of year \$8 000  |
| Year 3                 | 10% of \$12 000 = \$1 200 | Amount owing at start of year \$4 000  |
| Total interest payable | \$3 600                   |  |

| Reducing balance       |                           |  |
|------------------------|---------------------------|--|
| Year 1                 | 10% of \$12 000 = \$1 200 | Amount owing at start of year \$12 000 |
| Year 2                 | 10% of \$8 000 = \$800    | Amount owing at start of year \$8 000  |
| Year 3                 | 10% of \$4 000 = \$400    | Amount owing at start of year \$4 000  |
| Total interest payable | \$2 400                   |  |

This example simplifies the calculations made under reducing balance loans. Such loans normally calculate interest on a more regular basis (e.g. monthly, or even daily). Also, the amount of interest payable depends on how many repayments are made in each yearly period. However, it still shows the basic difference between the two types of loans.

Reducing balance interest is obviously the most beneficial for the borrower. However, it may not always be available for the purpose the borrower requires. If a person wants a four-year loan to buy a car for their business, they will probably only be offered a loan at a flat rate of interest. If the same person requests finance to purchase a business property, a mortgage loan over 20 years with reducing balance interest may be offered.

#### flat rate interest

interest applied to the principal amount borrowed over a fixed term

#### reducing balance interest interest on a loan that is based on the amount

currently owed

owner looking to buy a vehicle for their food offered a flat rate of interest.



#### **EFFECTIVE RATE OF INTEREST**

With a flat rate, the interest being charged is based on the amount borrowed, not on what remains to be repaid. This means that the borrower is effectively paying a higher rate of interest – the effective rate – than that quoted in flat rate terms.

Using the data from the previous example, the rates being paid each year could be shown as follows.

Year 1

$$\frac{\text{Interest}}{\text{Amount owing}} = \frac{\$ \ 1 \ 200}{\$ \ 12 \ 000} = 10\%$$

Year 2

$$\frac{\text{Interest}}{\text{Amount owing}} = \frac{\$ \ 1 \ 200}{\$ \ 8 \ 000} = 15\%$$

Year 3

$$\frac{\text{Interest}}{\text{Amount owing}} = \frac{\$ \ 1 \ 200}{\$ \ 4 \ 000} = 30\%$$

To calculate the effective rate over the total period of the loan, the following formula is used.

$$EI = \frac{2RI}{P(N+1) + \frac{|(N-3R+2)|}{2}} \times 100$$

Where:

EI = effective interest rate, R = the number of repayments per year, l = the total interest over the life of the loan, P = the principal borrowed, N = the total number of repayments in the loan.

effective rate (of interest) the 'real' cost of borrowing money, as compared to the flat rate of interest quoted

(Note: This formula has been provided for students with an interest in maths; it won't normally be examined as part of your VCE Accounting course.)

Using this formula, the actual effective rate for the three-year loan of \$12 000 at 10% flat interest would be:

$$EI = \frac{2RI}{P(N+1) + \frac{I(N-3R+2)}{3}} \times 100$$

$$= \frac{2 \times 12 \times 3600}{12000(36+1) + \frac{3600(36-(3 \times 12) + 2)}{3}} \times 100$$

$$= \frac{24 \times 3600}{12000(36+1) + (1200 \times 2)} \times 100$$

$$= \frac{86400}{444000 + 2400} \times 100$$

$$= \frac{86400}{446400} \times 100$$

$$= 19.35\%$$

This means that the quoted rate of 10% equates to an effective rate of 19.35% over three years.

To gain an approximate idea of the effective rate of interest for a flat rate loan, simply double the flat rate. For our example, the 10% flat rate would approximate to 20% - very close to its true effective rate of 19.35%. However, the accuracy of the doubling method will depend on the variables involved, such as the number of repayments per year and the total time period of the loan.

#### 10.2 **CHECK YOUR UNDERSTANDING**

- WB PAGE 123
- 1 For each of the following assets, state the source of finance that should be used by a small business owner who is running short of cash. (More than one source may be suitable for some items.)
  - a Trading inventory
- **b** Office furniture
- c Vehicles
- d Payment of yearly insurance premium
- e Shop premises
- 2 Explain the basic difference between a loan with a flat rate of interest and one with reducing balance interest.
- 3 A loan at a flat rate of 10% interest may cost much more in effective terms. What is the 'effective rate' of interest? Explain why it's higher than the flat rate.

# 10.3 APPLYING FOR FINANCE

credit rating an estimate of a person's or organisation's ability and likelihood to repay loans

When a small business owner wants to borrow money, financial institutions require some details to support the loan application. These details are used to assess the owner's ability to manage the finances of the business and to repay any loans.

An individual's personal credit rating may also be considered. It is influenced by their history of borrowing money and their ability to repay loans. A credit rating helps a bank assess the risk of lending to a specific customer.

The credit rating of a small business owner is affected by many factors, including:

- monthly income
- monthly expenses
- current credit commitments
- previous credit history
- statement of assets and liabilities.

It's important for a business owner to establish proof that they can manage their finances over several periods. They can then use this record of financial management in the future to prove to a bank that they're able to manage loans and meet future commitments.

Once any sort of finance has been approved, the business owner must try to meet all repayments on time. This confirms a good credit rating, which helps when seeking further finance in the future.

A small business owner must information that supports their loan application.



#### RELEVANT ACCOUNTING REPORTS

A loan application usually requires the applicant to provide relevant accounting information. When assessing an application, financial institutions commonly use two accounting reports: the budgeted cash flow statement (which you'll examine in detail in Chapter 23) and the balance sheet (which you learnt about in Chapter 3).

A budgeted cash flow statement enables a business to compare its monthly receipts with its monthly payments. If a proprietor is to meet the repayments on a loan, the business's estimated receipts must exceed the estimated payments. Otherwise, the borrower may not be able to service the loan (i.e. meet the repayments) and the bank may refuse the application.

The second report is the balance sheet, in which the potential borrower states the assets and liabilities of the business. If a business is already highly geared (see page 164), a lender may refuse to approve further finance. Sometimes a lender will only provide financing if a mortgage on a property can be arranged. This provides protection for the lender in case the business owner doesn't meet the repayments.

While banks and financial institutions are in the business of lending money, they won't lend to an unacceptable risk. It's up to the business owner to show that they can manage the loan. Therefore, the customer must have a satisfactory level of equity in the business and not be overburdened with debt. Also, the receipts and payments over a monthly period must allow a loan to be repaid. This further emphasises the importance of accurate financial accounting for a business owner.

#### 10.3 **CHECK YOUR UNDERSTANDING**



- 1 Explain what the term 'credit rating' means.
- 2 Explain what a business owner could do to ensure a good credit rating.
- 3 List five types of information a bank may require from a business owner before approving a loan application.
- 4 What two accounting reports would a bank manager be interested in when considering a loan application? Explain why the manager would be interested in these two reports.

# 10.4 GEARING

#### gearing

the dependence of a business on borrowed funds (liabilities) The term **gearing** refers to the dependence of a business on borrowed funds (liabilities) compared to the funds contributed by its owner. A highly geared business has significant debt, compared with the amount of the owner's investment, or equity. A lowly geared firm is one that borrows very little.

Consider the following businesses.

|                | Business A | Business B |
|----------------|------------|------------|
| Assets         | \$200 000  | \$200 000  |
| Liabilities    | 20 000     | 160 000    |
| Owner's equity | 180 000    | 40 000     |

Both businesses have assets costing \$200 000, but they're financed in different ways. Business A has borrowed very little, while Business B has financed most of its assets with borrowed funds.

The ratio of liabilities to assets is called the **debt ratio**; it's a percentage determined by dividing total liabilities by total assets. It can be used to measure the extent of a firm's external borrowings, as follows.

|                   | Business A | Business B |
|-------------------|------------|------------|
| Total liabilities | \$20 000   | \$160 000  |
| Total assets      | \$200 000  | \$200 000  |
|                   | = 0.1      | = 0.8      |
|                   | or 10%     | or 80%     |

The debt ratio for Business A indicates that 10% of its assets are financed by external sources. Business B finances 80% of its assets with liabilities, so it's clearly the more highly geared business.

As a general rule, the higher the debt ratio, the higher the risk that the business will collapse. This is because, as borrowings increase, there's more pressure on a business to find the cash necessary to repay debts.

When a business owner wants to borrow money for a particular purpose, they should first review the firm's present gearing position. Financial institutions may refuse to lend to businesses that are too highly geared, because they're seen as an unacceptable risk.

#### debt ratio

a financial indicator comparing total liabilities to total assets



Remember: The higher the gearing, the higher the risk!

## 10.4 CHECK YOUR UNDERSTANDING



- 1 What does the term 'gearing' mean?
- 2 What is the debt ratio, and how is it calculated?
- 3 Explain the relationship between gearing and risk.

## 10.5) RETURN ON OWNER'S INVESTMENT

A financial indicator of particular interest to the business owner is the return on owner's investment (ROI). It measures the percentage return the owner is earning on the investment made in the business. ROI is calculated by dividing net profit for a period by owner's equity.

return on owner's investment (ROI) the return earned on the funds invested by a business owner

If an owner invests capital of \$50 000 and earns a profit of \$5000 in the first year of trading, the ROI would be calculated as follows.

ROI = 
$$\frac{\text{Net profit}}{\text{Owner's equity}}$$
$$= \frac{\$5\ 000}{\$50\ 000}$$
$$= 10\% \text{ p.a.}$$

ROI is a profitability indicator, as it compares profit to the personal funds invested. It can be used to evaluate the success or failure of the investment made by the owner in the business. ROI will be discussed in more detail in Chapter 13.

There is no single measure of whether or not a specific percentage return is satisfactory to the owner. However, it should be measured against criteria such as the following.

- The returns available on alternative investments. What interest could the owner earn by investing the same amount in the financial market?
- What returns are earned by similar businesses? An accountant may be able to evaluate whether or not the returns earned are above or below average.
- The trend in the return on investment. By comparing the ROI over several years, the owner can determine whether it is improving or declining.
- What was the expected return for this year? No matter how high the return on investment, it won't be satisfactory if it didn't achieve the owner's expectations.

#### **GEARING AND THE RETURN ON OWNER'S INVESTMENT**

As mentioned earlier, gearing compares the amount a firm borrows with the owner's personal investment. As a general rule, the higher the gearing, the higher the financial risk. Why, then, would a business owner risk being involved in a highly geared firm?

One possible reason may be necessity; if an owner has insufficient personal resources, they may have no choice but to borrow. However, some business owners use gearing to their advantage, in terms of the return on their own funds.

Consider Business A and Business B, which we considered on page 164. The two businesses are of the same size in terms of total assets, but are totally different in their gearing.

If they each earn the same profit in a given year, we get the following results.

|                     | Business A (\$) | Business B (\$) |
|---------------------|-----------------|-----------------|
| Assets              | 200 000         | 200 000         |
| Liabilities         | 20 000          | 160 000         |
| Owner's equity      | 180 000         | 40 000          |
| Profit for the year | 20 000          | 20 000          |

| Business A                  | Business B                 |
|-----------------------------|----------------------------|
| ROI = \$20 000<br>\$180 000 | ROI = \$20 000<br>\$40 000 |
| = 11% p.a.                  | = 50% p.a.                 |

You can see that for Business B, which is more highly geared, the return on the owner's investment is also much higher. This is because the owner has used other people's money to purchase the firm's assets to generate profits. In a lowly geared business, the owner contributes most of the required funds and will usually have a lower ROI.

Therefore, while highly geared firms have more financial risk because of heavier loan repayments, they may be beneficial for the owner because of the higher returns that can be earned on the personal funds they invested.

Business owners must weigh the opportunity of possibly earning higher returns through higher gearing against the greater risk of business collapse through excessive borrowing. The balance between risk and returns will depend on the personal assets of the business owner and their willingness to risk borrowing money for possible future gains.

## 10.5 CHECK YOUR UNDERSTANDING



- 1 How is the 'return on owner's investment' calculated? What is the purpose of this ratio?
- 2 State four ways of evaluating whether or not an owner's ROI is satisfactory.
- **3** Explain the relationship between gearing and the owner's ROI. Use an example to clarify your answer.

# 10

# **CHAPTER REVIEW**

# **KEY CONTENT**

- There are two types of finance available to small business owners. Internal sources of finance, such as proprietor's capital and retained profits, come from within the business. External sources of finance, such as loans and credit, come from outside the business. Business owners need to consider their specific needs before deciding which form of financing to pursue.
- Loans require the borrower to repay both the principal and any interest. Flat rate interest is calculated on the amount borrowed, while reducing balance interest is calculated on the amount owing. Reducing balance loans are more desirable to the borrower, but aren't always made available. Borrowers should also work out the effective rate of interest (i.e. the real cost of borrowing).
- **[10.3]** When a small business owner wants to borrow money, financial institutions require some details to support the loan application. These details are usually drawn from the business's cash budget and balance sheet.
- [10.4] Gearing is how dependent a business is on borrowed funds. A highly geared business has significant debt, while a lowly geared firm has little. Banks may refuse to lend to businesses that are too highly geared, because they're seen as an unacceptable risk.
- **[10.5]** The return on owner's investment is an indicator of how profitable a business is to the owner. While highly geared firms have more financial risk, they generate a higher return on owner's investment.

# **CHAPTER 10 EXERCISES**

# 1 SOURCES OF FINANCE



Make a list of a variety of assets (current and non-current) that are owned by two small businesses operating in different service industries (e.g. a plumber and a doctor). Your list should include six to eight assets.

- a Recommend an appropriate source of finance for each of the assets you listed.
- **b** Give reasons to support your recommendations.

# 2 LEASE OR BUY?



Janette Garro, an architect, is thinking about getting a new car for her business. However, she's unsure whether to buy it or lease it.

The model she is thinking of buying has an advertised price of \$30 000. If she buys the car, she will probably keep it for three years before selling it for about \$20 000.

Garro has \$5000 cash to put towards the purchase, and a bank loan is available for the balance. The loan is at 10% p.a. at a flat rate of interest over three years. Garro has also enquired about leasing a similar vehicle at a cost of \$100 per week for three years.

- **a** State one advantage and one disadvantage of each of the sources of finance Janette Garro is considering.
- **b** Calculate the cost of leasing the vehicle over the three-year period.
- c What is the interest payable on the three-year bank loan? (Show your workings.)
- d Determine the total cost of purchasing the car if Garro uses the bank loan.
- Write a report comparing the two alternatives and making a clear recommendation to Garro. Give reasons to support your conclusion.

# **3 FLAT RATE INTEREST**



Debbie Doherty is considering taking out a loan of \$6000 to purchase a new computer server for her business. Her bank has told her that a loan is available over four years, with monthly repayments, at a flat rate of interest of 10%.

- a Explain how financial institutions apply flat rate interest to loans.
- **b** Calculate the total amount of interest that Doherty would pay.
- **c** What is the total amount that she would pay back to the bank if she takes out the loan?
- d Calculate her monthly repayments.
- What accounting report should Doherty prepare to help her convince the bank manager that she can meet the loan repayments?
- f Is the real cost of the loan 10% p.a., or is it higher? Explain your answer fully.
- **g** What is the effective rate of interest on this loan? Make an estimate, or use the formula presented in this chapter to determine the effective rate.

# **4 FLAT RATE INTEREST**



Jack Knight applies for a loan of \$10 000 to buy a motorcycle for his courier business. His bank informs him that a four-year loan at 12% p.a. flat interest is available. He would have to make 48 equal monthly instalments if he accepts the loan.

- a Calculate the total cost of interest on the loan.
- **b** Calculate the total amount to be repaid under the conditions of the loan.
- c Calculate the monthly repayments to which Knight would be committed.
- d What rate of interest is Knight paying in effective terms?
- One of Knight's friends suggests that interest on the reducing balance is a better alternative. Explain to Knight the advantage of such a loan.

# **5 REDUCING BALANCE INTEREST**



Vincent Ngo has saved \$25 000 for a deposit on a business property. He approaches his bank for an 11% mortgage loan of \$125 000, to be repaid over 20 years. The bank tells him that interest will be calculated daily and charged monthly to his account. Repayments of \$1290 are to be made monthly.

- a Explain what a 'mortgage loan' is.
- **b** Does the 11% refer to flat rate or reducing balance interest? Explain how this interest will be applied to the loan.
- c Calculate the total cost of the loan to Ngo.
- **d** Would there be an advantage to Ngo if he made fortnightly repayments instead of monthly? Explain your answer fully.

# **6 DEBT RATIO**



United Earth Moving has total assets of \$250 000 and an owner's equity of \$200 000.

- a What is the total value of the business's liabilities?
- **b** Calculate the debt ratio for this business and comment briefly on the extent of its borrowings.

# 7 GEARING - A COMPARISON



St Kilda Boat Hire has liabilities of \$20 000, while Williamstown Boat Hire has liabilities of \$40 000. Which business is more highly geared? Explain your answer fully, using examples.

# **8 COMPARING TWO BUSINESSES**



The following statements relate to two small businesses, both operating as panel beaters.

### SAMMY'S PANELS: BALANCE SHEET AS AT 30 JUNE 2023

| Assets              | \$      | \$        | Liabilities             | \$    | \$        |
|---------------------|---------|-----------|-------------------------|-------|-----------|
| Current assets      |         |           | Current liabilities     |       |           |
| Accounts receivable | 5 000   |           | Bank overdraft          | 6 000 |           |
| Spare parts         | 12 000  | 17 000    | Accounts payable        | 8 000 |           |
|                     |         |           | GST liability           | 1 000 |           |
|                     |         |           | Loan                    | 3 000 | 18 000    |
| Non-current assets  |         |           | Non-current liabilities |       |           |
| Equipment           | 10 000  |           | Mortgage loan           |       | 100 000   |
| Premises            | 150 000 | 160 000   | Owner's equity          |       |           |
|                     |         |           | Capital                 |       | 59 000    |
|                     |         | \$177 000 |                         |       | \$177 000 |

# SUE'S BODY SHOP: BALANCE SHEET AS AT 30 JUNE 2023

| Assets              | \$      | \$        | Liabilities             | \$    | \$        |
|---------------------|---------|-----------|-------------------------|-------|-----------|
| Current assets      |         |           | Current liabilities     |       |           |
| Bank                | 2 500   |           | Accounts payable        | 5 000 |           |
| Accounts receivable | 3 500   |           | Loan                    | 3 000 | 8 000     |
| Spare parts         | 16 000  | 22 000    | Non-current liabilities |       |           |
| Non-current assets  |         |           | Mortgage loan           |       | 60 000    |
| Equipment           | 12 000  |           | Owner's equity          |       |           |
| Premises            | 160 000 | 172 000   | Capital                 |       | 126 000   |
|                     |         | \$194 000 |                         |       | \$194 000 |

- a Calculate the total liabilities for each business.
- **b** Calculate the debt ratio for each business.
- **c** Determine the working capital ratio (current assets/current liabilities) for both businesses.
- **d** Compare the two businesses and comment fully on their financial structures. Your comments should refer to their liquidity, gearing and general financial risk.

# 9 RETURN ON OWNER'S INVESTMENT



Joel Lombardo invested \$40 000 into Paintball Arena on 1 July 2022. For the year ended 30 June 2023, the business earned a profit of \$5000.

- a Calculate the return on Lombardo's investment in the business.
- b Taking into account the rates of interest generally available in the finance market, comment on his ROI.

# **10 PROFITABILITY**



Harry Koecher earns a profit of \$30 000 as the proprietor of Western Pool Tables, while Dave Romic earns \$40 000 operating as Deluxe Pool & Billiards.

Which business owner has the higher profitability? Use examples to explain your answer.

# 11 GEARING AND RETURN ON OWNER'S INVESTMENT WB PAGE 134



Consider the details of the following two businesses, both of which specialise in the hiring of electrical appliances.

|             | Ace Electricals | Acme Electricals |
|-------------|-----------------|------------------|
| Assets      | \$125 000       | \$125 000        |
| Liabilities | 25 000          | 50 000           |
| Net profit  | 20 000          | 20 000           |

- a Calculate the owner's equity for the two proprietors.
- b Calculate the debt ratio for each firm and state which business has the higher gearing.
- c Calculate the return on the owner's investment for each business.
- d Given that the two businesses have the same value for total assets, explain why one owner is receiving a greater return on the funds invested.

# **ACCOUNTING IN THE REAL WORLD**



One of the most common financing activities in Australia, for businesses and individuals, is borrowing money to purchase a property. The costs of buying a house, apartment or business premises may include stamp duty, government taxes and (of course) the interest on the amount borrowed.

For individuals, the decision to buy a property, rather than renting a home, will be strongly influenced by personal and family concerns. For businesses, the decision is usually more pragmatic; it's all about the costs of finance versus the benefits of ownership.

Sharon Matheson is considering purchasing a business property for \$900 000. She has saved towards this goal for a few years and has accumulated \$50 000 cash for a deposit on the property. She's been offered finance at 7% p.a. for a loan of \$850 000 over 25 years, based on monthly repayments.

Matheson is interested in knowing what the property will *really* cost her over that period, and she's come to you for your expert analysis.

Visit the website of one of the following major financial institutions.

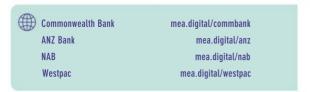
- Commonwealth Bank
- ANZ Bank
- NAB
- Westpac

Find the home loan calculator on the website, enter Matheson's details and answer the following questions.

- a What is the interest payable on the loan over 25 years?
- b How much will Matheson have to repay if she borrows \$850 000?
- **c** She is thinking about reducing the loan period to only 20 years. How much would she save if she could achieve this?
- d Matheson has also considered saving for a bit longer before buying a property. Would she be better off simply reducing the loan to 20 years, or taking the loan over 25 years but waiting until she has a deposit of \$80 000? Determine the difference in the total amount to be repaid under the two proposals.
- e Matheson is concerned about the likely increase in interest rates in the future. She's asked you to copy and complete the table below, which compares her options if interest rates increase in relation to her loan. Cross-reference the length of the loan with the interest rates and make a note of the total amount repayable for each alternative. Keep in mind that the total cost of the property is \$900 000.

| Deposit of \$50 000 | 7.5% | 8.0% | 8.5% |
|---------------------|------|------|------|
| 20 years            |      |      |      |
| 25 years            |      |      |      |
| 30 years            |      |      |      |

| Deposit of \$80 000 | 7.5% | 8.0% | 8.5% |
|---------------------|------|------|------|
| 20 years            |      |      |      |
| 25 years            |      |      |      |
| 30 years            |      |      |      |



# **CHAPTER CHECKLIST**

Now that you've finished Chapter 10, double-check your progress.

Are you ready for your Unit 1 assessment?

# I have ...

- completed all 'Check Your Understanding' questions
- ompleted all exercises
- completed the end-of-chapter activities
- Manded in my workbook for marking.

### l understand ...

- of resources required to establish a business such as internal and external sources of finance
- of indicators of business performance (financial and non-financial).

# I can ...

- use correct accounting terminology
- describe the sources of finance available to a business
- research information from a range of sources
- of analyse the effect of financial transactions on the accounting equation.

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Make sure you skim this chapter one more time when preparing for the exam.



# PREPARE

the chapter now, then complete the online revision activity



# WATCH

Watch the Mr Box on Demand video, then ask your teacher if you need



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# **CASH FLOW STATEMENTS**

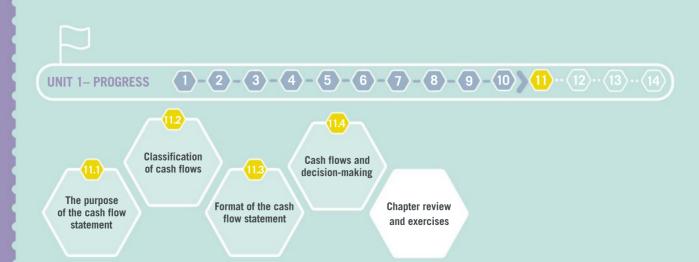
At the end of an accounting period, a business owner may prepare an income statement to measure the business's trading performance, and a balance sheet to report on the financial state of the business. There is a third accounting report that is just as important – the cash flow statement, which reports on the movement of cash in and out of the business during the period.

In this chapter you will examine the purpose of the cash flow statement. As well as preparing cash flow statements, you'll also analyse the information they provide and consider how businesses put that information to use.

# **LEARNING OBJECTIVES**

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

- explain the purpose of a cash flow statement [11.1]
- describe the additional information revealed by a cash flow statement [11.1]
- classify cash flows under the headings of operating, investing and financing activities [11.2]
- outline the basic format of a cash flow statement[11.3]
- prepare a cash flow statement from cash journals[11.3]
- analyse the results revealed by a cash flow statement[11.4]
- explain the link between a cash flow statement and management decision-making [11.4].



# THE PURPOSE OF THE CASH FLOW STATEMENT

cash flow statement

an accounting report that states all cash inflows and outflows over a period

The cash flow statement reports on the movements of cash into and out of a business during the reporting period. Its focus is purely on the business's cash reserves; it reports on the sources of cash and its uses by the business during the period.

Cash flow statements are relatively new in the world of accounting. The relevant accounting standard only came into being in 1991. Since then, businesses have put greater emphasis on cash management, and the net profit figure is no longer the only important figure at the end of a period.

The purpose of the cash flow statement is simple: it completes the financial picture of a business. Together, the income statement, balance sheet and cash flow statement report on profit performance, financial position and cash movements.

As the cash flow statement reports on movements of cash into and out of a business, it deals with an area not covered by the other two financial reports. Specifically, it helps management:

- determine the net amount of cash generated by the day-to-day activities of the business
- evaluate the business's ability to meet future obligations to lenders and bankers
- assess the business's long-term debt arrangements
- review the commitment of the business in relation to non-current assets.

As you've learnt already, profit is not cash. Even if a business is profitable, it won't survive if it doesn't have cash available when needed. Expenses have to be paid, and some cannot be delayed. For example, employees will want to be paid on time and won't be happy if payday is put off because of a cash shortage. Accounts payable and loan repayments need to be paid. The owner may also have demands for cash in terms of their personal drawings.

Under accrual accounting, the net profit figure is determined by matching the revenue earned and the expenses incurred. While the net profit figure is crucial in evaluating trading performance, it has nothing to do with cash management. The cash flow statement concentrates solely on cash flows, so it's an ideal tool to use as part of an overall cash management plan.

# CHECK YOUR UNDERSTANDING



- 1 Describe the basic purpose of a cash flow statement.
- 2 Explain what information can be gained from a cash flow statement that isn't available from other financial reports.
- 3 Explain the difference between profit and cash.

# 11.2 CLASSIFICATION OF CASH FLOWS

One report related to cash is the statement of receipts and payments (page 102). This report can be prepared directly from a business's cash journals. However, the statement of receipts and payments is simply a summary of the cash transactions over a period. The name of the report says it all: it reports on receipts and payments. The cash flows are not classified in any way.

Figure 11.1 shows a typical statement of receipts and payments.

FIGURE 11.1 Statement of receipts and payments

# THE ESCAPE ROOM EXPERIENCE: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 30 JUNE 2023

| Receipts                             | \$     | \$      |
|--------------------------------------|--------|---------|
| Cash sales                           | 90 000 |         |
| Collections from accounts receivable | 30 000 |         |
| Capital contribution                 | 40 000 |         |
| Loan from bank                       | 20 000 |         |
| GST collections                      | 9 000  | 189 000 |
| Less: Payments                       |        |         |
| Payments to accounts payable         | 60 000 |         |
| Advertising                          | 5 000  |         |
| Wages                                | 35 000 |         |
| Materials                            | 3 000  |         |
| Purchase of vehicle                  | 25 000 |         |
| Purchase of computer                 | 2 000  |         |
| Loan repayments                      | 3 000  |         |
| Drawings                             | 20 000 |         |
| GST payments                         | 3 700  | 156 700 |
| Excess of receipts over payments     |        | 32 300  |
| Bank balance as at 1 July 2022       |        | 2 000   |
| Bank balance as at 30 June 2023      |        | 34 300  |

The statement is a simple summary of the cash transactions of this business over the period. It shows that a surplus of cash of \$32 300 was generated, taking the cash balance from \$2000 at the start of the period to \$34 300 at the end. However, it doesn't provide any additional information.

# **CASH FLOW ACTIVITIES**

To get more information about the business, cash flows can be classified into three main areas: operating activities, investing activities and financing activities. These provide the basic format of the cash flow statement.

FIGURE 11.2 Classifications of cash flows



operating activities cash flows that relate to the day-today operations of a

husiness

**Operating activities** relate to the everyday operations of the business, the core activities that keep it going. Every business will have operating activities of some sort. They include two types of cash movements:

- cash inflows from the provision of goods and services to customers
- cash outflows to employees, and suppliers of both goods and services.

Operating activities include cash flows relating to many of the items that appear in an income statement. Cash sales and collections from accounts receivable are two of the most important operating cash flows. The cash outflows under operating activities include items such as payments to accounts payable, wages paid, insurance paid and advertising paid.

Credit sales are irrelevant to the cash flow statement because this is not a cash flow. However, when accounts receivable settle their accounts a cash flow does occur, so this should be included.

All businesses have operating activities, such as the provision of goods to customers, which affect cash flows.



**Investing activities** relate to the buying and selling of non-current assets. This section of the cash flow statement is used to report the cash paid out when assets are purchased, and the cash received when unwanted assets are disposed of.

When a business purchases non-current assets, it is making an investment for the long term. Remember, non-current assets are assets that the business expects to own for longer than 12 months. Because these assets have future economic benefits for a business, they are viewed as investments that are used to help generate revenue for the business.

The last classification in a cash flow statement is **financing activities**. This refers to cash flows that are a result of changes in a business's financial structure. Financing activities include the owner's capital contributions (cash only) and cash withdrawals, as well as the taking out and repayments of loans.

As you learnt in Chapter 10, it's important to consider how a business is financed when looking at its long-term future. A business may be financed by internal funds, which come from the owner, or by external funds, which involve borrowing cash from liabilities.

The cash flows required to repay debts and support an owner's drawings are an important feature of the cash flow statement. This information is relevant to lenders and prospective owners.

# APPLYING THE CLASSIFICATIONS

In the cash flow statement, all cash inflows and outflows are classified under these three headings, with a net figure produced under each heading. It's common practice to label this net figure as either **net cash provided** or **net cash used** for each particular activity.

The links between the cash flow statement and the other two main financial reports become clearer when the three classifications are considered.

- Operating activities mainly relate to revenues and expenses, which are brought together in the income statement.
- Investing activities relate to the balance sheet, as they note cash flows from non-current assets.
- Financing activities also focus on the balance sheet, as they show changes in long-term liabilities and owner's equity.

Table 11.1 provides some examples of the different nature of these cash flows.

# investing activities

cash flows that result from the purchase or the sale of non-current assets for cash

# financing activities

cash flows that relate to changes in the financial structure of a business

# net cash provided

a net cash inflow reported for one of the areas of operating, investing or financing activities

# net cash used

a net cash outflow reported for one of the areas of operating, investing or financing activities

**TABLE 11.1 Examples of cash flows by classification** 

| Operating activities  | Investing activities                                      | Financing activities  |
|---|---|---|
| Cash inflows from:  • providing services for cash  • selling goods for cash  • collecting cash from accounts receivable  • commission received  • interest received  • GST received                           | Cash inflows from:  • selling non-current assets for cash | <ul> <li>Cash inflows from:</li> <li>capital injections by the owner</li> <li>borrowing cash via loans</li> </ul> |
| <ul> <li>Cash outflows from:</li> <li>purchasing inventory for cash</li> <li>paying cash to accounts payable</li> <li>paying cash for services</li> <li>paying cash for expenses</li> <li>GST paid</li> </ul> | Cash outflows from:  • buying non-current assets for cash | Cash outflows from: <ul><li>cash drawings</li><li>loan repayments</li></ul>                                       |

# 11.2 CHECK YOUR UNDERSTANDING



- 1 Distinguish between a statement of receipts and payments and a cash flow statement.
- 2 What are the three classifications used in a cash flow statement? Provide two examples of items that would appear under each heading.
- 3 Classify the following items under the three classifications. If you don't think an item should be reported in a cash flow statement, state it as 'non-cash item'.
  - a Cash purchases of materials
  - **b** Credit purchases of materials
  - c Delivery fees paid
  - d Repayment of a loan
  - e GST collected on cash sales
  - **f** Withdrawal of materials by the owner
- g Cash sales to customers
- h Cash purchase of office furniture
- i Capital contribution by owner
- i Credit sales made to customers
- k Withdrawal of cash by the owner
- I GST paid on cash expenses

# 11.3 FORMAT OF THE CASH FLOW STATEMENT

The basic format of a cash flow statement is determined by the Accounting Standards. The standards allow for some variation, but cash flow statements are easily recognisable because they always follow a set layout, based on the three classifications.

Let's return to The Escape Room Experience (page 175). The business's statement of receipts and payments can be used as a source of the required cash flow information. Figure 11.3 shows how that information is now presented under the three headings 'Cash flows from operating activities', 'Cash flows from investing activities' and 'Cash flows from financing activities'.

FIGURE 11.3 Cash flow statement: basic format

# THE ESCAPE ROOM EXPERIENCE: CASH FLOW STATEMENT FOR YEAR ENDED 30 JUNE 2023

| Cash flows from operating activities      | \$        | \$       |
|---|-----------|----------|
| Receipts from customers                   | 129 000   |          |
| Payments to suppliers and employees       | (106 700) |          |
| Net cash provided by operating activities |           | 22 300   |
| Cash flows from investing activities      |           |          |
| Purchase of vehicle                       | (25 000)  |          |
| Purchase of computer                      | (2 000)   |          |
| Net cash used in investing activities     |           | (27 000) |
| Cash flows from financing activities      |           |          |
| Capital contribution                      | 40 000    |          |
| Loan from bank                            | 20 000    |          |
| Loan repayments                           | (3 000)   |          |
| Proprietor's drawings                     | (20 000)  |          |
| Net cash provided by financing activities |           | 37 000   |
| Net increase (decrease) in cash held      |           | 32 300   |
| Cash held at the beginning of the year    |           | 2 000    |
| Cash held at the end of the year          |           | 34 300   |

# INTERPRETING THE CASH FLOW STATEMENT

As you can see, each of the three classifications is clearly labelled, and a sub-total is provided for each category. (This helps to comply with the demand for understandability.) These sub-totals can then be used to highlight the net cash inflow or outflow for each classification.

Business owners would usually expect that their operating activities would generate cash. If the cash from operating activities is a negative result, this may be a worrying sign that a business may have problems. However, sales may have slowed, the business may have purchased a lot of materials in anticipation of a busier period, or it may have paid some expenses in advance. This means that operating activities may be a negative result, which uses up cash rather than providing a net amount.

There are no set expectations for the rest of the report. The areas of investing and financing may have a net cash inflow or outflow. If a business is expanding, it may use a lot of cash in the investing area. In other periods, a business may not buy any new assets; if it disposes of old assets for cash, the investing area may reveal a 'net cash provided' figure.

Similarly, financing activities may result in net cash provided or net cash used. In some periods, cash may be raised from either the owner or liabilities, and this may result in a net cash inflow. On the other hand, an established business may simply have cash outflows in this area. Loan repayments and the owner's drawings may result in a 'net cash used' result.

# **ALTERNATIVE FORMATS**

Figure 11.3 shows very little detail in relation to the operating cash flows. Although this format satisfies the Accounting Standards, some users of the report may prefer detailed information about the operating activities.

If the business has many expenses, the list of operating outflows may be long, so a supporting schedule may also be prepared. This schedule would list all of the items that make up the two items under 'operating activities'. Figure 11.4 shows this type of schedule.

FIGURE 11.4 Schedule of cash flows from operating activities

| Receipts from customers              | \$       | \$        |  |
|--------------------------------------|----------|-----------|--|
| Cash sales                           | 90 000   |           |  |
| Collections from accounts receivable | 30 000   |           |  |
| GST receipts                         | 9 000    | 129 000   |  |
| Payments to suppliers and employees  |          |           |  |
| Payments to accounts payable         | (60 000) |           |  |
| Advertising                          | (5 000)  |           |  |
| Wages                                | (35 000) |           |  |
| Cleaning materials                   | (3 000)  |           |  |
| GST payments                         | (3 700)  | (106 700) |  |
| Net cash from operating activities   |          | 22 300    |  |

If needed, the details of this schedule could be included in the cash flow statement, as shown in Figure 11.5. These details may clutter up the report. For example, if there are too many expenses paid in a given period, the operating section of the report becomes large and difficult to interpret.

FIGURE 11.5 Cash flow statement: alternative format

# THE ESCAPE ROOM EXPERIENCE: CASH FLOW STATEMENT FOR YEAR **ENDED 30 JUNE 2023**

| Cash flows from operating activities      | \$       | \$       |
|---|----------|----------|
| Cash sales                                | 90 000   |          |
| Collections from accounts receivable      | 30 000   |          |
| GST receipts                              | 9000     |          |
| Accounts payable                          | (60 000) |          |
| Advertising                               | (5000)   |          |
| Wages                                     | (35 000) |          |
| Materials                                 | (3000)   |          |
| GST payments                              | (3700)   |          |
| Net cash provided by operating activities |          | 22 300   |
| Cash flows from investing activities      |          |          |
| Purchase of vehicle                       | (25 000) |          |
| Purchase of computer                      | (2000)   |          |
| Net cash used in investing activities     |          | (27 000) |
| Cash flows from financing activities      |          |          |
| Capital contribution                      | 40 000   |          |
| Loan from bank                            | 20 000   |          |
| Loan repayments                           | (3000)   |          |
| Proprietor's drawings                     | (20 000) |          |
| Net cash provided by financing activities |          | 37 000   |
| Net increase (decrease) in cash held      |          | 32 300   |
| Cash held at the beginning of the year    |          | 2000     |
| Cash held at the end of the year          |          | 34 300   |

As with all accounting statements, the cash flow statement should meet the needs of the individual user. You should practise preparing statements using both styles of presentation. Note that the net result is exactly the same in both formats. The only difference is that the standard format summarises the operating activities and presents the two totals for inflows and outflows.

If more information is needed about the business's operating activities, you can include a detailed listing of all the operating activities in the report.

Note: For VCE exams, the recommended format is the one in Figure 11.5. If you're stating an inflow, simply list the dollar value for each item. If you're reporting a cash outflow, put the dollar value in brackets and treat it as a negative when adding up the column of numbers.

### 11.3 **CHECK YOUR UNDERSTANDING**



- 1 Name one revenue item that should be reported in a cash flow statement and one that shouldn't be reported in this statement.
- 2 Name two cash outflows that should be reported in a cash flow statement under the heading 'Cash flows from financing activities'.
- 3 The cash flows from a business's operating activities show a negative result of \$20 000. If you were this business owner, would you be concerned? Explain your answer fully.

# 11.4 CASH FLOWS AND DECISION-MAKING

As with all financial statements, there's little point in preparing a cash flow statement if management doesn't analyse the results and use it to make decisions to solve problems or improve the business.

A good starting point is to compare the results of the current period with those of the previous period. This allows management to identify changes in the three areas reported in the cash flow statement. For example, if the net cash provided by operating activities is decreasing over consecutive periods, it should set off alarm bells. The reason for such a fall should be identified (if possible) and decisions need to be made to try to improve the situation.

Take a look at the comparative reports in Figure 11.6, which again relate to The Escape Room Experience.

# FIGURE 11.6 Comparative cash flow statements

# THE ESCAPE ROOM EXPERIENCE: CASH FLOW STATEMENTS FOR YEARS ENDED 30 JUNE

|   | 2022     |          | 2023     |          |
|---|----------|----------|----------|----------|
|   | \$       | \$       | \$       | \$       |
| Cash flows from operating activities      |          |          |          |          |
| Cash sales                                | 80 000   |          | 90 000   |          |
| Collections from accounts receivable      | 26 000   |          | 30 000   |          |
| GST receipts                              | 8 000    |          | 9 000    |          |
| Payments to accounts payable              | (58 000) |          | (60 000) |          |
| Advertising                               | (4 000)  |          | (5 000)  |          |
| Wages                                     | (33 500) |          | (35 000) |          |
| Cleaning materials                        | (2 000)  |          | (3 000)  |          |
| GST payments                              | (1 500)  |          | (3 700)  |          |
| Net cash provided by operating activities |          | 15 000   |          | 22 300   |
| Cash flows from investing activities      |          |          |          |          |
| Purchase of shop fittings                 | (9 000)  |          | -        |          |
| Purchase of vehicle                       | _        |          | (25 000) |          |
| Purchase of computer                      | _        |          | (2 000)  |          |
| Net cash used in investing activities     |          | (9 000)  |          | (27 000) |
| Cash flows from financing activities      |          |          |          |          |
| Capital contribution                      | _        |          | 40 000   |          |
| Loan from bank                            | _        |          | 20 000   |          |
| Loan repayments                           | -        |          | (3 000)  |          |
| Proprietor's drawings                     | (10 000) |          | (20 000) |          |
| Net cash used in financing activities     |          | (10 000) |          | 37 000   |
| Net increase (decrease) in cash held      |          | (4 000)  |          | 32 300   |
| Cash held at the beginning of the year    |          | 6 000    |          | 2 000    |
| Cash held at the end of the year          |          | 2 000    |          | 34 300   |

As you can see, there's good news in relation to operating activities: an increase of \$7300 in the net cash provided by operating activities in 2023 over the previous year.



The *investing activities* reflect a considerable investment in assets over the past two years. In 2022, \$9000 was invested in shop fittings, followed by the purchase of a vehicle and a computer in 2023. These items required significant finance, and it's clear that at the end of 2022 the business didn't have enough cash to fund these purchases. However, in 2023 the owner made a cash contribution of \$40 000 and then borrowed an additional \$20 000. These activities helped the business to purchase the new non-current assets without using up all its cash. At the end of 2023, the business's overall cash position is in a sound state.

This example shows how the various cash flow items describe what has happened in a business over a period. The changes in the various items can be easily identified, as well as any problems that are developing. Successful strategies can also be reviewed.

If management has an objective, the comparative statements can be used to evaluate decisions taken during the period. For example, a simple objective might be to increase net cash provided by operating activities by 10%, to fund the purchase of new assets. By preparing comparative statements, such decisions can easily be evaluated.

The complete package of an income statement, balance sheet and cash flow statement provides management with a range of information that should allow them to make sound decisions.

# THE MEANING OF 'CASH'

One final point: when preparing a cash flow statement, it's important to keep an open mind about the meaning of the term 'cash'.

The Accounting Standards refer to 'cash and cash equivalents'. This means that cash includes assets such as cash on hand and cash at bank, but it can also include very short-term investments. For example, if a business has cash in a 60-day term deposit, this item would be viewed as being part of 'cash'. Also, if it has a bank overdraft, this should be viewed as a negative cash item that is part of the cash resources of the business.

A business might therefore calculate cash held as follows.

 Cash on hand
 500

 Bank overdraft
 (400)

 Term deposit (60 days)
 5000

 Cash held
 5100

The definition of cash held is important, as this is the final dollar amount reported in the cash flow statement. The report starts with 'cash held' at the start of the period and concludes with the value of 'cash held' at the end of the reporting period.

# cash held the total of all cash and short-term investments, less any bank overdrafts

# 11.4 CHECK YOUR UNDERSTANDING



- 1 Explain the advantage of preparing comparative cash flow statements for two consecutive reporting periods.
- **2** a A business has \$200 cash on hand, \$4000 in an investment account and a \$1200 bank overdraft. What is the amount of the business's cash held?
  - **b** Investing activities has been reported as \$60 000. Describe what could have happened in this business to bring about such a result.

# 11) CHAPTER REVIEW

# **KEY CONTENT**

- The cash flow statement reports on the movements of cash into and out of the business during the reporting period. Together, the income statement, balance sheet and cash flow statement report on profit performance, financial position and cash movements.
- To get more information about the business, cash flows can be classified into three main areas. Operating activities are cash flows relating to the day-to-day actions of the business. Investing activities are cash flows that result from the purchase or the sale of non-current assets for cash. Financing activities are cash flows that relate to changes in the financial structure of a business.
- **[11.3]** The basic format of a cash flow statement is like a statement of receipts and payments, but with information classified under the headings 'Cash flows from operating activities', 'Cash flows from investing activities' and 'Cash flows from financing activities'.
- The cash flow items describe what has happened in a business over a period, allowing changes and problems to be identified, and decisions to be evaluated. The complete package of an income statement, balance sheet and cash flow statement provides management with a solid range of financial information.

# **CHAPTER 11 EXERCISES**

# 1 CASH FLOWS FROM OPERATING ACTIVITIES



Vivien Forbes is the owner of Forbes Dry Cleaning. She has extracted the following information from the financial records of her business.

|                                      | \$     |
|--------------------------------------|--------|
| Cash sales                           | 92 000 |
| Credit sales                         | 23 000 |
| Collections from accounts receivable | 12 000 |
| GST receipts                         | 9 200  |
| Purchase of machinery                | 55 000 |
| Cash purchases of cleaning materials | 53 000 |
| Wages                                | 22 500 |
| Cartage inwards                      | 1 200  |
| GST payments                         | 5 420  |

- a Select the relevant items from the table and calculate the net cash provided by (or used in) operating activities.
- **b** Explain your treatment of the item 'credit sales'.
- **c** Would you expect net cash flows from operating activities to be a positive or a negative figure? Explain your answer fully.

# **2 CASH FLOWS FROM OPERATING ACTIVITIES**



The proprietor of Sumner's Shoe Repairs provides the following information about his business.

| Receipts                          | \$     | Payments                    | \$     |
|-----------------------------------|--------|-----------------------------|--------|
| Cash sales                        | 40 000 | Cash purchases of materials | 25 000 |
| Collections – accounts receivable | 10 000 | Wages                       | 12 000 |
| GST collections                   | 4 000  | Office expenses             | 3 000  |
|                                   |        | Loan repayments             | 8 000  |
|                                   |        | GST payments                | 2 800  |

- a Using relevant information from the table above, calculate the net cash provided by operating activities for the year ended 31 July 2023.
- **b** Did you leave out any items in your calculation in part **a**? If so, explain why.

# **3 CASH FLOWS FROM INVESTING ACTIVITIES**



Michael Nguyen provides this summary of events in relation to his cash flows over the past year for his legal practice.

| Receipts                             | \$      | Payments                     | \$     |
|--------------------------------------|---------|------------------------------|--------|
| Cash clients                         | 186 000 | Cash purchases of stationery | 3 700  |
| Collections from accounts receivable | 22 000  | Purchase of office equipment | 4 000  |
| Sale of office equipment             | 2 000   | Drawings                     | 25 000 |
| GST receipts                         | 18 600  | Salaries                     | 55 000 |
|                                      |         | Purchase of furniture        | 2 500  |
|                                      |         | GST payments                 | 1 020  |

Using the relevant information from this list, calculate the net cash provided by (or used in) investing activities.

# **4 CASH FLOWS FROM INVESTING ACTIVITIES**



Helen Ferry, the proprietor of Melbourne Glider Repairs, provides the following information about her business.

|   | \$     |
|---|--------|
| Cash purchase of laser printer              | 1 450  |
| Cash purchase of repair materials           | 32 560 |
| Sales to cash clients                       | 67 340 |
| GST receipts                                | 6 734  |
| Cash received from sale of office equipment | 2 130  |
| Purchase of repair tools for cash           | 9 820  |
| Sales to credit clients                     | 12 320 |
| Cash receipts from accounts receivable      | 4 600  |
| GST payments                                | 4 238  |

Determine the net cash provided by (or used in) investing activities. Show all workings.

# **5 CASH FLOWS FROM FINANCING ACTIVITIES**



The manager of Wilson's Pavilion Hire provides the following details about her business.

| Receipts            | \$      | Payments                     | \$     |
|---------------------|---------|------------------------------|--------|
| Cash sales          | 223 000 | Accounts payable             | 10 200 |
| Capital             | 45 000  | Salary                       | 28 000 |
| Loan                | 12 500  | Drawings                     | 22 800 |
| Accounts receivable | 14 300  | Purchase of office equipment | 4 500  |
| GST receipts        | 22 300  | GST payments                 | 450    |

Make a list of all the items relevant to financing activities and calculate the net cash flow for the year in relation to financing.

# **6 CASH FLOWS FROM FINANCING ACTIVITIES**



During the year ended 30 June 2023, the owner of Shepparton Indoor Sports, Anthony Taranto, contributed assets worth \$32 000 to his business. This consisted of \$15 000 cash and a vehicle valued at \$17 000. His other receipts for the year were as follows.

|                     | \$     |
|---------------------|--------|
| Cash sales          | 90 800 |
| GST receipts        | 9 080  |
| Accounts receivable | 23 000 |
| Loan                | 15 000 |

Taranto's cash payments for the year included the following.

|                  | \$     |
|------------------|--------|
| Accounts payable | 45 600 |
| Loan repayments  | 4 850  |
| Drawings         | 5 000  |
| Insurance        | 1 200  |
| New computer     | 2 500  |
| GST payments     | 370    |

Calculate the net cash provided by (or used in) financing activities over the year ended 30 June 2023.

# **7 CASH FLOW STATEMENT**



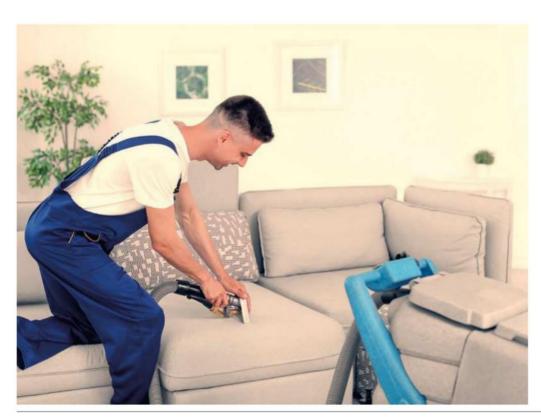


Brayden Stepien is the owner of Stepien Steam Cleaning. He's prepared a simple statement of receipts and payments but is unsure how to prepare a formal cash flow statement. He has asked for your help in relation to the following prepared report.

# STEPIEN STEAM CLEANING: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 31 MAY 2023

| Receipts                             | \$     | \$      |
|--------------------------------------|--------|---------|
| Receipts from cash clients           | 132000 |         |
| Collections from accounts receivable | 28700  |         |
| GST collections                      | 13200  |         |
| Loan from bank                       | 15000  | 188 900 |
| Less: Payments                       |        |         |
| Payments to accounts payable         | 52000  |         |
| Wages                                | 27 600 |         |
| Cleaning materials                   | 13000  |         |
| Purchase of service vehicle          | 29 200 |         |
| Advertising expenses                 | 1 200  |         |
| Purchase of office equipment         | 6500   |         |
| GST payments                         | 4990   |         |
| Loan repayments                      | 4300   |         |
| Drawings                             | 46 000 | 184790  |
| Excess of receipts over payments     |        | 4110    |
| Bank balance as at 1 June 2022       |        | (4 500) |
| Bank balance as at 31 May 2023       |        | (390)   |

- a Prepare a cash flow statement, showing clearly the net cash provided by (or used in) operating, investing and financing activities.
- **b** Comment on the results achieved by this business over the last year, with reference to the three areas of cash flows.





# **8 CASH FLOW STATEMENT**



The following report has been submitted by Teresa Green, the proprietor of Thomastown Trailer Hire.

# THOMASTOWN TRAILER HIRE: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 31 DECEMBER 2023

| Receipts                             | \$      | \$       |
|--------------------------------------|---------|----------|
| Cash sales – hire of trailers        | 128 900 |          |
| Collections from accounts receivable | 32 760  |          |
| Capital                              | 15 000  |          |
| Sale of vehicle                      | 9 800   |          |
| Commission revenue                   | 2 000   |          |
| GST receipts                         | 13 090  |          |
| Loan from PLZ Finance                | 12 500  | 214 050  |
| Less: Payments                       |         |          |
| Accounts payable                     | 55 000  |          |
| Interest                             | 1 200   |          |
| Stationery expenses                  | 2 200   |          |
| Repairs to trailers                  | 10 400  |          |
| Office cleaning                      | 2 200   |          |
| Wages                                | 44 300  |          |
| GST payments                         | 1 480   |          |
| Loan repayments                      | 4 300   |          |
| Drawings                             | 46 000  | 167 080  |
| Excess of receipts over payments     |         | 46 970   |
| Bank balance as at 1 January 2023    |         | (12 970) |
| Bank balance as at 31 December 2023  |         | 34 000   |

- a Prepare a fully classified cash flow statement for the year ended 31 December 2023.
- **b** Comment on the business's cash position at the end of 2023.

# **9 CASH FLOW STATEMENT**





John Parker, the owner of Parker Pinball, has prepared the following summary of his cash transactions.

# PARKER PINBALL: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 30 SEPTEMBER 2023

| Receipts                             | \$      | \$      |
|--------------------------------------|---------|---------|
| Cash sales                           | 230 000 |         |
| Collections from accounts receivable | 45 300  |         |
| Loan from CBA                        | 12 000  |         |
| Sale of office equipment             | 1 400   |         |
| Interest revenue                     | 1 200   |         |
| Sale of service van                  | 9 800   |         |
| GST receipts                         | 23 000  |         |
| Capital                              | 10 000  | 332 700 |
| Less: Payments                       |         |         |
| Salaries                             | 43 000  |         |
| Cash purchases of materials          | 29 000  |         |
| Accounts payable                     | 148 000 |         |
| Accounting fees                      | 4 500   |         |
| Legal expenses                       | 3 100   |         |
| Purchase of service van              | 40 300  |         |
| Promotional expenses                 | 6 350   |         |
| Loan repayments                      | 3 700   |         |
| GST payments                         | 10 115  |         |
| Purchase of tools and equipment      | 17 900  |         |
| Drawings                             | 35 000  | 340 965 |
| Excess of receipts over payments     |         | (8 265) |
| Bank balance as at 1 October 2022    |         | 3 165   |
| Bank balance as at 30 September 2023 |         | (5 100) |

- a Prepare a fully classified cash flow statement for the year ended 30 September 2023.
- **b** Comment on the business's cash position at the end of September 2023.





# 10 FROM JOURNALS TO CASH FLOW STATEMENT



The cash journals presented below have been produced by Grace Samson, the owner of Corporate Catering Services.

# **CASH RECEIPTS JOURNAL**

| Data  | Dataila             | Receipt | Amount<br>banked | Accounts<br>receivable | Disc.<br>exp. | Cash<br>sales | Sundry<br>rec. | GST<br>received |
|-------|---------------------|---------|------------------|------------------------|---------------|---------------|----------------|-----------------|
| Date  | Details             | no.     | \$               | \$                     | \$            | \$            | \$             | \$              |
| Aug 1 | Westbank            | 654     | 1 980            | 1 980                  |               |               |                |                 |
| 2     | Loan – NAB          | -       | 5 000            |                        |               |               | 5 000          |                 |
| 5     | Gilbert &<br>Sons   | 655     | 3 200            | 3 200                  |               |               |                |                 |
| 8     | Cash sales          | EFT     | 242              |                        |               | 220           |                | 22              |
| 11    | Culvenor<br>Cottage | 656     | 1 800            | 1 800                  |               |               |                |                 |
| 14    | Cash sales          | EFT     | 198              |                        |               | 180           |                | 18              |
| 16    | Hanton<br>Hotel     | 657     | 2 700            | 2 700                  |               |               |                |                 |
| 17    | Cash sales          | EFT     | 319              |                        |               | 290           |                | 29              |
| 20    | Commission          | EFT     | 220              |                        |               |               | 200            | 20              |
| 23    | Sale of equipment   | 658     | 500              |                        |               |               | 500            |                 |
| 26    | Cash sales          | EFT     | 1 760            |                        |               | 1 600         |                | 160             |
| 27    | Cash sales          | EFT     | 1 760            |                        |               | 1 600         |                | 160             |
| 29    | Sheahan Co.         | 659     | 2 600            | 2 600                  |               |               |                |                 |
| 31    | Cash sales          | EFT     | 1 925            |                        |               | 1 750         |                | 175             |
| 31    | Totals              |         | 24 204           | 12 280                 |               | 5 640         | 5 700          | 584             |

# **CASH PAYMENTS JOURNAL**

| Date  | Details                 | Cheque<br>no. | Total<br>paid<br>\$ | Accounts<br>payable<br>\$ | Wages<br>\$ | Drawings<br>\$ | Assets<br>\$ | Sundry<br>pay.<br>\$ | GST<br>paid<br>\$ |
|-------|-------------------------|---------------|---------------------|---------------------------|-------------|----------------|--------------|----------------------|-------------------|
| Aug 1 | Drawings                | 343           | 600                 |                           |             | 600            |              |                      |                   |
| 2     | JJ Catering<br>Supplies | 344           | 4 600               | 4 600                     |             |                |              |                      |                   |
| 3     | Catering equipment      | 345           | 13 200              |                           |             |                | 12 000       |                      | 1 200             |
| 6     | Wages                   | 346           | 600                 |                           | 600         |                |              |                      |                   |
| 9     | Stationery              | 347           | 253                 |                           |             |                |              | 230                  | 23                |
| 11    | Pendulum<br>Fruit Co.   | 348           | 2 300               | 2 300                     |             |                |              |                      |                   |
| 13    | Wages                   | 349           | 650                 |                           | 650         |                |              |                      |                   |
| 16    | Drawings                | 350           | 1 000               |                           |             | 1 000          |              |                      |                   |
| 19    | Cooking equipment       | 351           | 4 950               |                           |             |                | 4 500        |                      | 450               |
| 19    | Wages                   | 352           | 600                 |                           | 600         |                |              |                      |                   |
| 25    | Loan r/p                | 353           | 400                 |                           |             |                |              | 400                  |                   |
| 26    | Wages                   | 354           | 640                 |                           | 640         |                |              |                      |                   |
| 29    | Drawings                | 355           | 2 000               |                           |             | 2 000          |              |                      |                   |
| 31    | Mitchell<br>Meats       | 356           | 2 600               | 2 600                     |             |                |              |                      |                   |
| 31    | Totals                  |               | 34 393              | 9 500                     | 2490        | 3 600          | 16 500       | 630                  | 1 673             |

# **Additional information:**

On 1 August 2023 the business had the following cash reserves: cash on hand – \$500; cash at bank – \$5400.

- a Prepare a fully classified cash flow statement for the month ended 31 August 2023.
- **b** Comment on the changes in the cash position of the business during August 2023.

# 11 FROM JOURNALS TO CASH FLOW STATEMENT





The owner of Brunswick Sound Systems, Neil Young, provides the following cash journals from his business.

# **CASH RECEIPTS JOURNAL**

| Date  | Details              | Receipt no. | Amount<br>banked<br>\$ | Accounts receivable | Disc.<br>exp.<br>\$ | Cash<br>sales<br>\$ | Sundry<br>rec.<br>\$ | GST<br>received<br>\$ |
|-------|----------------------|-------------|------------------------|---------------------|---------------------|---------------------|----------------------|-----------------------|
| Sep 2 | Cash sales           | 911         | 770                    |                     |                     | 700                 |                      | 70                    |
| 2     | Cash sales           | 912         | 1 210                  |                     |                     | 1 100               |                      | 110                   |
| 5     | Deluxe<br>Night Club | EFT         | 2 100                  | 2 150               | 50                  |                     |                      |                       |
| 6     | Cash sales           | 913         | 440                    |                     |                     | 400                 |                      | 40                    |
| 9     | Cash sales           | 914         | 1 650                  |                     |                     | 1 500               |                      | 150                   |
| 12    | Hernandez<br>Hotel   | EFT         | 2 100                  | 2 140               | 40                  |                     |                      |                       |
| 14    | Cash sales           | 915         | 3 300                  |                     |                     | 3 000               |                      | 300                   |
| 16    | Cash sales           | 916         | 770                    |                     |                     | 700                 |                      | 70                    |
| 18    | Interest<br>revenue  | EFT         | 500                    |                     |                     |                     | 500                  |                       |
| 21    | Sale of computer     | EFT         | 950                    |                     |                     |                     | 950                  |                       |
| 22    | Capital              | EFT         | 8 000                  |                     |                     |                     | 8 000                |                       |
| 24    | Cash sales           | 917         | 1 540                  |                     |                     | 1 400               |                      | 140                   |
| 26    | Celtic Club          | EFT         | 3 200                  | 3 200               |                     |                     |                      |                       |
| 27    | Central<br>Hotel     | EFT         | 1 270                  | 1 300               | 30                  |                     |                      |                       |
| 29    | Cash sales           | 918         | 1 870                  |                     |                     | 1 700               |                      | 170                   |
| 30    | Totals               |             | 29 670                 | 8 790               | 120                 | 10 500              | 9 450                | 1 050                 |

# **CASH PAYMENTS JOURNAL**

| Date  | Details                    | Cheque<br>no. | Total<br>paid<br>\$ | Accounts payable | Equipment repairs | Drawings<br>\$ | Assets<br>\$ | Sundry<br>pay.<br>\$ | GST<br>paid<br>\$ |
|-------|----------------------------|---------------|---------------------|------------------|-------------------|----------------|--------------|----------------------|-------------------|
| Sep 1 | J Walsh &<br>Co.           | 641           | 1 200               | 1 200            |                   |                |              |                      |                   |
| 3     | Computer                   | 642           | 2 200               |                  |                   |                | 2 000        |                      | 200               |
| 5     | Repairs                    | 643           | 4 400               |                  | 4 000             |                |              |                      | 400               |
| 7     | Drawings                   | 644           | 1 400               |                  |                   | 1 400          |              |                      |                   |
| 10    | Elsternwick<br>Electricals | 645           | 3 400               | 3 400            |                   |                |              |                      |                   |





| 12 | Sound equipment   | 646 | 3 520  |       |       |       | 3 200 |       | 320   |
|----|-------------------|-----|--------|-------|-------|-------|-------|-------|-------|
| 14 | Loan r/p          | 647 | 1 650  |       |       |       |       | 1 650 |       |
| 17 | Drawings          | 648 | 800    |       |       | 800   |       |       |       |
| 20 | Advertising       | 649 | 550    |       |       |       |       | 500   | 50    |
| 24 | Equipment repairs | 650 | 880    |       | 800   |       |       |       | 80    |
| 27 | Insurance         | 651 | 990    |       |       |       |       | 900   | 90    |
| 28 | Billy Hyde        | 652 | 1 230  | 1 230 |       |       |       |       |       |
| 28 | Loan r/p          | 653 | 1 650  |       |       |       |       | 1 650 |       |
| 30 | Totals            |     | 23 870 | 5 830 | 4 800 | 2 200 | 5 200 | 4 700 | 1 140 |

# **Additional information:**

The business maintains two bank accounts. On 1 September 2023, the accounts had the following balances: account #1-\$1500; account #2- bank overdraft (\$1960).

- a Prepare a fully classified cash flow statement for the month ended 30 September 2023.
- **b** Comment on the changes in the cash position of the business during September 2023.



# 12 FROM JOURNALS TO CASH FLOW STATEMENT



Millie Demidenko, owner of Cherry Lake Canoe Hire, has prepared the following cash journals. She has also advised that her cash balance on 1 November 2023 was \$5460.

# **CASH RECEIPTS JOURNAL**

| Date  | Details         | Receipt<br>no. | Amount<br>banked<br>\$ | Accounts<br>receivable<br>\$ | Cash<br>sales<br>\$ | Sundry<br>rec.<br>\$ | GST<br>received<br>\$ |
|-------|-----------------|----------------|------------------------|------------------------------|---------------------|----------------------|-----------------------|
| Nov 2 | Cash sales      | 09-20          | 638                    |                              | 580                 |                      | 58                    |
| 7     | Cash sales      | 21-36          | 825                    |                              | 750                 |                      | 75                    |
| 8     | Cash sales      | 37-48          | 605                    |                              | 550                 |                      | 55                    |
| 11    | Cash sales      | 48-60          | 726                    |                              | 660                 |                      | 66                    |
| 14    | National Bank   | EFT            | 1 320                  | 1 320                        |                     |                      |                       |
| 16    | Cash sales      | 61-78          | 979                    |                              | 890                 |                      | 89                    |
| 22    | Mallesons       | EFT            | 1 540                  | 1 540                        |                     |                      |                       |
| 23    | Sale of trailer | EFT            | 1 200                  |                              |                     | 1 200                |                       |
| 26    | Cash sales      | 79-94          | 825                    |                              | 750                 |                      | 75                    |
| 30    | Capital         | _              | 5 000                  |                              |                     | 5 000                |                       |
| 30    | Totals          |                | 13 658                 | 2 860                        | 4 180               | 6 200                | 418                   |







# **CASH PAYMENTS JOURNAL**

| Date  | Details          | Cheque<br>no. | Total paid<br>\$ | Wages<br>\$ | Drawings<br>\$ | Petrol<br>expenses<br>\$ | Sundry<br>pay.<br>\$ | GST<br>paid<br>\$ |
|-------|------------------|---------------|------------------|-------------|----------------|--------------------------|----------------------|-------------------|
| Nov 4 | Petrol           | 1243          | 242              |             |                | 220                      |                      | 22                |
| 9     | Wages            | EFT           | 550              | 550         |                |                          |                      |                   |
| 10    | Drawings         | EFT           | 870              |             | 870            |                          |                      |                   |
| 12    | Advertis-<br>ing | 1244          | 1 760            |             |                |                          | 1 600                | 160               |
| 15    | Canoes           | 1245          | 4 400            |             |                |                          | 4 000                | 400               |
| 16    | Wages            | EFT           | 580              | 580         |                |                          |                      |                   |
| 18    | Drawings         | EFT           | 2 000            |             | 2 000          |                          |                      |                   |
| 22    | Wages            | EFT           | 600              | 600         |                |                          |                      |                   |
| 25    | Petrol           | 1246          | 418              |             |                | 380                      |                      | 38                |
| 28    | Wages            | EFT           | 620              | 620         |                |                          |                      |                   |
| 28    | Trailer          | 1247          | 4 950            |             |                |                          | 4 500                | 450               |
| 30    | Totals           |               | 16 990           | 2 350       | 2 870          | 600                      | 10 100               | 1 070             |

- a Prepare a fully classified cash flow statement for the month ended 30 November 2023.
- **b** The owner is concerned about the cash flows of the business. Comment on the cash position of the business and the results revealed by your report in relation to the three areas of cash flows.

# 13 ANALYSIS OF CASH FLOW STATEMENTS



The following cash flow statements relate to the business of Caulfield Cosplay.

# CAULFIELD COSPLAY: CASH FLOW STATEMENTS FOR YEARS ENDED 31 DECEMBER

|   | 2022     | 2023     |
|---|----------|----------|
| Cash flows from operating activities      | \$       | \$       |
| Receipts from customers                   | 88 000   | 96 000   |
| Payments to suppliers and employees       | (47 000) | (52 000) |
| Net cash provided by operating activities | 41 000   | 44 000   |
| Cash flows from investing activities      |          |          |
| Proceeds from sale of non-current assets  | 3 400    | 2 300    |
| Purchase of non-current assets            | (12 000) | (3 200)  |
| Net cash used in investing activities     | (8 600)  | (900)    |
| Cash flows from financing activities      |          |          |
| Loan repayments                           | (10 000) | (10 000) |
| Capital injection                         | 20 000   | _        |
| Proprietor's drawings                     | (35 000) | (33 000) |
| Net cash used in financing activities     | (25 000) | (43 000) |
| Net increase in cash held                 | 7 400    | 100      |
| Cash held at beginning of year            | 2 340    | 9 740    |
| Cash held at end of year                  | 9 740    | 9 840    |

Comment on the changes that have taken place over the period covered by the two reports shown above. Your comments should consider the changes that have occurred in operating, investing and financing activities.

# 14 ANALYSIS OF CASH FLOW STATEMENTS



The following cash flow statements relate to the business of City Catering, owned by Eddy Marmay.

# CITY CATERING: CASH FLOW STATEMENTS FOR YEARS ENDED 30 JUNE

|   | 2022     | 2023     |
|---|----------|----------|
| Cash flows from operating activities      | \$       | \$       |
| Receipts from customers                   | 119 000  | 116 000  |
| Payments to suppliers and employees       | (53 000) | (56 000) |
| Net cash provided by operating activities | 66 000   | 60 000   |
| Cash flows from investing activities      |          |          |
| Proceeds from sale of non-current assets  | 1 500    | 1 200    |
| Purchase of non-current assets            | (12 000) | (29 500) |
| Net cash used in investing activities     | (10 500) | (28 300) |
| Cash flows from financing activities      |          |          |
| Bank loans                                | 15 000   | 20 000   |
| Loan repayments                           | (5 000)  | (15 000) |
| Proprietor's drawings                     | (25 000) | (40 000) |
| Net cash used in financing activities     | (15 000) | (35 000) |
| Net increase in cash held                 | 40 500   | (3 300)  |
| Cash held at beginning of year            | (15 000) | 25 500   |
| Cash held at end of year                  | 25 500   | 22 200   |

The owner is concerned about his business, as it generated \$60 000 in operating activities but he ended up with a net decrease in cash held. Do you share the owner's concerns? Prepare a report for the owner, explaining the changes in his cash flows over the last two years.

# **CHAPTER CHECKLIST**

Now that you have finished Chapter 11, double-check your progress.

Are you ready for your Unit 1 assessment?

# I have ...

- ompleted all 'Check Your Understanding' questions
- completed all exercises
- Manded in my workbook for marking.

# I understand ...

- ourrent and non-current assets, and current and non-current liabilities
- accounting reports and information used to assist in judging the success or failure of a business
- the distinction between cash and profit
- disclassified accounting reports for a service business:
  - Cash Flow Statement.

### I can ...

- use correct accounting terminology
- identify, classify and record financial data manually and through the use of ICT
- of analyse the effect of financial transactions on the accounting equation
- of prepare accounting reports manually and using ICT, including spreadsheets, for a service business.

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# **READ**

Make sure you skim this chapter one more time when preparing for



# **PREPARE**

Read back over the chapter now, then complete the online revision activity.



### \M/ATCH

Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



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# 12

# PRICE-SETTING STRATEGIES

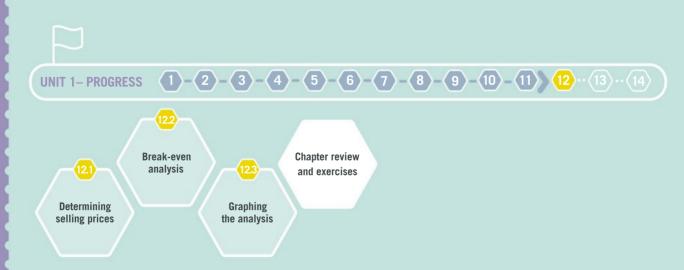
Prices charged to customers have a direct impact on the success of a business. Too much, and customers won't buy; too little, and the business won't make enough money to survive. While you need to think about many factors, the most important starting point is an analysis of costs versus revenue, so that the business owner has a clear mathematical basis for decisions.

In this chapter you will consider multiple methods for setting prices, with an emphasis on break-even analysis. You'll then learn how to conduct that analysis, calculate break-even points and produce your analysis in graph form for interpretation.

# **LEARNING OBJECTIVES**

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

- describe various methods of setting selling prices [12.1]
- define terms such as 'break-even point', 'fixed costs', 'variable costs' and 'contribution margin' [12.2]
- calculate a break-even point for a business proposal[12.2]
- prepare a break-even graph [12.3].



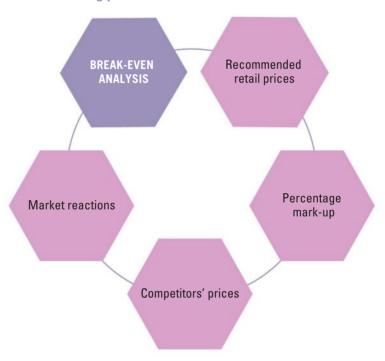
# 12.1 DETERMINING SELLING PRICES

When a business owner decides to sell goods, one of the most important decisions they need to make is the selling price of those goods.

Many service businesses (e.g. doctors) have a system of recommended fees, and their charges to customers don't vary much. However, the prices of some types of service businesses can vary greatly. Car repairers, building contractors, plumbers and carpenters may quote prices that are very different from those of their competitors.

For any of these businesses, prices may also vary depending on a range of factors. This chapter lists a few factors, but others may also be relevant.

FIGURE 12.1 Factors affecting prices



# recommended retail price

a suggested retail price set by a supplier

# percentage mark-up

a percentage added to a product's cost price to determine the selling price

Recommended retail price: Wholesalers often recommend a selling price as a guide to retailers. These prices are recommendations only, and don't have to be followed. But they provide a good starting point, especially if a retailer isn't sure about what to charge when they're starting a new business.

Some suppliers include their recommended retail prices on their invoices. Managers should refer to these prices from time to time to make sure their selling prices are adjusted for increases in cost prices.

Percentage mark-up: A mark-up is the amount added to a cost price to determine a selling price. A percentage mark-up determines the profit margin made on an individual item. For example, a business may add 100% to everything it sells; if an item was purchased for \$3, the profit margin would be \$3 (100% of \$3), and it would sell for \$6.

Take a look at the examples in Table 12.1, which show how some other percentage mark-ups are applied.

**TABLE 12.1 Percentage mark-ups** 

Mark-up of 50%

| Cost    | Profit margin            | Selling price               |
|---------|--------------------------|-----------------------------|
| \$5.00  | 50%  of  \$5.00 = \$2.50 | \$5.00 + \$2.50 = \$7.50    |
| \$10.00 | 50% of \$10.00 = \$5.00  | \$10.00 + \$5.00 = \$15.00  |
| \$20.00 | 50% of \$20.00 = \$10.00 | \$20.00 + \$10.00 = \$30.00 |

# Mark-up of 125%

| Cost    | Profit margin             | Selling price               |
|---------|---------------------------|-----------------------------|
| \$5.00  | 125% of \$5.00 = \$6.25   | \$5.00 + \$6.25 = \$11.25   |
| \$10.00 | 125% of \$10.00 = \$12.50 | \$10.00 + \$12.50 = \$22.50 |
| \$20.00 | 125% of \$20.00 = \$25.00 | \$20.00 + \$25.00 = \$45.00 |

Competitors' prices: Whether a business bases its initial prices on recommended retail or fixed mark-ups, it may adjust those prices from time to time because of competition from other similar businesses. If a competitor charges much lower prices, this will have a significant impact on the business charging higher prices. Some industries are highly competitive and prices can change daily. Petrol stations are a good example; management must set the most appropriate price for the day, or sales may suffer. In more stable industries, prices may be adjusted every few months. Special promotions, such as weekly specials, may also be introduced as a reaction to what competitors are doing.

Market reactions: Even if there's little competition in a particular town or suburb, management must always be alert to changes in buyers' tastes. A small business's success often depends on management's ability to 'read' the market accurately. In an economy such as Australia's, all business operators are competing for a share of the dollars available for spending. Different markets change over time; some businesses die out, while others become successful. Managers must react to changes in the market and/or the needs of their customers, or their business won't last in the long run. Flexibility is the key to success in small business, including in the way prices are set.

Break-even analysis: This technique for setting prices is based on the relationship between costs, volume (number of units sold) and profit. It can be used to calculate a particular selling price in order to produce a certain level of profit. This analysis is a key tool, so we'll cover it in depth for the rest of this chapter.

# CHECK YOUR UNDERSTANDING



- 1 Explain why a business owner may use recommended retail prices when setting selling prices.
- 2 Explain what a 'percentage mark-up' is.
- 3 Discuss the type of business that uses a mark-up.
- 4 Suggest two reasons why a business might vary the mark-up on its goods.

# 12.2

# BREAK-EVEN ANALYSIS

Break-even analysis is a tool that prospective business owners can use to evaluate a business proposal. Established businesses can also use it to set selling prices to generate a certain level of profit.

# **TERMINOLOGY**

You should know the following terms to understand how break-even analysis works.

- The break-even point is when revenue (income) equals expenses (costs), so no profit or loss is made.
- **Fixed costs** are expenses that remain constant, regardless of the number of units sold in a period. For example, the rent of a shop may be \$800 per week. It doesn't matter if the shop sells 1 or 1000 units in a given week; the cost of rent doesn't change.
- Variable costs are expenses that vary directly with a change in the volume of sales. For example, if the packaging of a product costs \$5 per unit, this cost increases with every unit sold. If one unit is sold, the cost is \$5; for two units the cost is \$10; three cost \$15, and so on.
- Semi-variable costs are expenses that have both a variable and a fixed component. For example, sales staff salaries may be fixed at \$60 000 per annum plus a commission of \$2 for every unit sold.
- **Contribution margin** is the difference between the selling price and the variable cost of a product; that is, the amount one unit contributes towards a firm's profit. This is also known as the variable profit per unit.

# break-even point

the point at which a business's revenue is exactly equal to its total expenses

### fixed costs

expenses that don't change, regardless of the volume of goods sold

### variable costs

expenses that change directly in line with a change in sales volume

# semi-variable costs

expenses that have both a variable and a fixed component

# contribution margin

the value that each unit sold contributes towards profit

# CALCULATING THE BREAK-EVEN POINT

When evaluating a business proposition, break-even analysis can be used to calculate the number of units that need to be sold to achieve break-even.

To calculate this, we use the break-even formula.

# **EXAMPLE 12.1**

Josie Papaleo is thinking about opening a pizza shop, which she will call Josie's Pizza Parlour. She has an initial breakdown of expenses.

| Cost of making a pizza  | \$7 per unit   |       |
|-------------------------|----------------|-------|
| Selling price per pizza | \$12 per unit  |       |
| Weekly costs            | – rent of shop | \$600 |
|                         | – wages        | \$400 |

The break-even formula provides the following calculation.

Break-even (in units) = 
$$\frac{\$1000}{\$12-\$7} = \frac{\$1000}{\$5} = 200 \text{ pizzas}$$

This calculation tells Papaleo that, to break even, she must sell 200 pizzas in a week.

So, to earn a profit, she would have to sell more than this number.

This calculation can be checked by preparing a simple income statement.

|                      |                   | \$    |
|----------------------|-------------------|-------|
| Sales revenue        | 200 pizzas × \$12 | 2 400 |
| Less: Variable costs | 200 pizzas × \$7  | 1 400 |
| Gross profit         |                   | 1 000 |
| Less: Fixed costs    |                   |       |
| Rent                 | 600               |       |
| Wages                | 400               | 1 000 |
| Net profit           |                   | 0     |

The income statement is proof that the break-even point in units is 200 pizzas. In terms of sales dollars, the break-even point is \$2400 (200 pizzas at \$12 each).

Another way to prove the break-even point is to use the following mathematical equation.

Profit = 
$$(SPx \text{ units sold}) - (VCx \text{ units sold}) - FC$$

Where:

SP = selling price; VC = variable cost; FC = fixed costs.

Using the data from Josie's Pizza Parlour, the calculation would be as follows.

Profit = 
$$(\$12 \times 200) - (\$7 \times 200) - \$1000$$
  
=  $(\$2400) - (\$1400) - \$1000$   
= 0

# MODIFYING THE FORMULA

Of course, no business owner is willing to work long hours and risk losing their own money simply to break even. They're more likely to have a profit target in mind for every trading period.

The break-even formula can be modified to include a desired profit figure.

# **EXAMPLE 12.2**

Josie Papaleo wants her shop to earn a profit of \$2000 per week.

Break-even + profits (in units) = 
$$\frac{\$1000 + \$2000}{\$12 - \$7} = \frac{\$3000}{\$5} = 600 \text{ pizzas}$$

A simple income statement can again be used to prove the answer.

|                      |                   | \$    |
|----------------------|-------------------|-------|
| Sales revenue        | 600 pizzas × \$12 | 7 200 |
| Less: Variable costs | 600 pizzas × \$7  | 4 200 |
| Gross profit         |                   | 3 000 |
| Less: Fixed costs    |                   | 1 000 |
| Net profit           |                   | 2 000 |

# **WORKING FROM UNITS TO PRICE**

These calculations can be very useful to a business owner, but one important question still needs to be answered: can the shop actually sell the numbers required to earn the desired profit?

By working backwards through the income statement, from net profit up, the owner can start with the expected number of sales, then use that to determine how much they need to charge per unit or item in order to reach the desired profit.

### **EXAMPLE 12.3**

Josie Papaleo estimates that in her local market the maximum sales she could expect would be 500 pizzas a week. This means a target of 600 pizzas for a profit of \$2000 may never happen. The question becomes: at what price must she sell 500 pizzas to earn a profit of \$2000?

By working backwards through the statement (from net profit up), she can determine the required selling price.

|                      |                  | \$    |
|----------------------|------------------|-------|
| Sales revenue        | 500 pizzas × \$? | 6 500 |
| Less: Variable costs | 500 pizzas × \$7 | 3 500 |
| Variable profit      |                  | 3 000 |
| Less: Fixed costs    |                  | 1 000 |
| Net profit           |                  | 2 000 |

This statement shows that if Papaleo can sell only 500 pizzas a week, she must sell them for \$13 each ( $$6500 \div 500$  pizzas) to earn the required revenue of \$6500.

# **BREAK-EVEN ASSUMPTIONS**

Break-even analysis is based on several assumptions, and the results of break-even calculations are valid *only* if these assumptions hold true. The assumptions are as follows.

- All goods made are sold.
- Expenses can be divided into fixed and variable.
- The selling price of goods will remain constant.
- All costs are known and will remain constant.

If any one of these assumptions fails to hold true, break-even calculations become invalid.

Similarly, if any factor in the break-even formula changes, all figures need to be updated for currency, and a new break-even point will have to be determined.

# 12.2 CHECK YOUR UNDERSTANDING



- 1 Define the term 'break-even point'.
- 2 Distinguish between fixed costs and variable costs. (Use an example to explain your answer.)
- 3 Define the term'contribution margin'.

# 12.3

### **GRAPHING THE ANALYSIS**

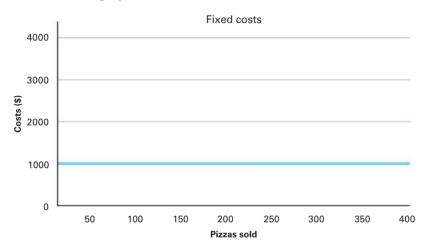
Break-even calculations are often repetitive. Rather than requiring multiple calculations, break-even data can be shown on a graph. In a graph, the relationship between units sold, costs and profit can be seen at a glance. Several different graphs can be prepared. These should all show the number of units on the *x*-axis and dollars on the *y*-axis.

We can use the original data from Josie's Pizza Parlour to illustrate the relevant graphs. Papaleo had variable costs of \$7, a selling price of \$12 and fixed costs of \$1000 per week.

#### **FIXED COSTS GRAPH**

The first graph that can be prepared is for fixed costs. Figure 12.2 shows the relationship between units sold and fixed costs.

FIGURE 12.2 Fixed costs graph

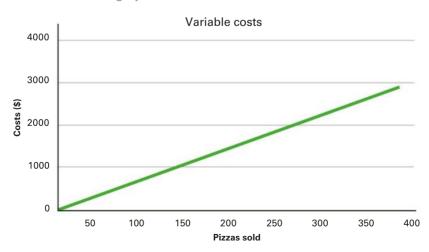


Fixed costs remain at a constant amount, regardless of the number of pizzas sold.

#### VARIABLE COSTS GRAPH

The next graph, Figure 12.3, illustrates the relationship between units sold and variable costs. The variable cost line always starts at the coordinates (0, 0) and increases at the rate of cost per unit – \$7 per pizza in the case of Papaleo's business.

FIGURE 12.3 Variable costs graph



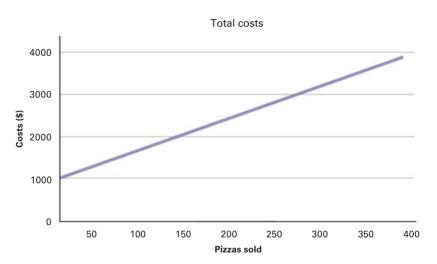
Variable costs increase in *direct proportion* to the number of units being sold: the greater the sales, the higher the costs.

#### **TOTAL COSTS GRAPH**

The fixed and variable costs can be joined to prepare a graph showing the relationship between units sold and **total costs**. Figure 12.4 shows the total costs line for Josie's Pizza Parlour.

total costs the total of fixed and variable costs at a specific level of sales

FIGURE 12.4 Total costs graph

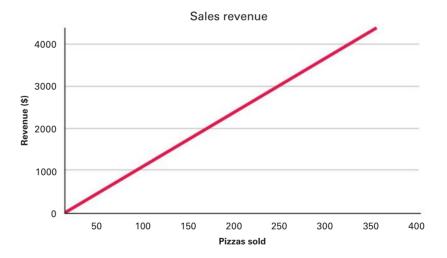


Do you notice the point at which the total cost line starts? If zero units are sold, fixed costs are still paid, so the total cost line *always* starts at the value of fixed costs (in this case, \$1000).

#### **SALES REVENUE GRAPH**

Sales revenue can also be plotted on the same type of graph. Figure 12.5 shows the relationship between the number of units sold and sales revenue earned.

FIGURE 12.5 Sales revenue graph



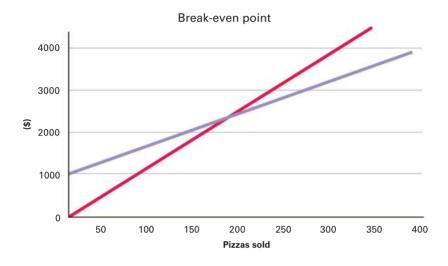
Note how the revenue line starts at (0, 0) and increases at the rate of \$12 for every pizza sold.

#### **BREAK-EVEN GRAPH**

While it's important to understand all of these graphs, a break-even graph relies *only* on the use of the total costs line and the sales revenue line. By comparing these two lines on the same set of axes, the effect of a change in sales volume can be easily seen. This graph can be used to give a profit or loss figure for all levels of turnover.

Figure 12.6 shows the break-even graph for Josie's Pizza Parlour.

FIGURE 12.6 Break-even graph



The point where the two lines intersect is (200, 2400): 200 units and \$2400 sales. This is the break-even point; once Josie's Pizza Parlour sells 200 pizzas and makes \$2400 in sales, it has broken even.

Once the break-even point is passed, the margin between sales and costs increases with every additional unit sold. Similarly, the lower the sales figure is below the break-even point, the greater the loss made.

Remember, this break-even graph is relevant only if the data remains unchanged. If even one item changes (e.g. if variable costs rise to \$9), a new graph will need to be prepared.

#### 12.3 CHECK YOUR UNDERSTANDING



- 1 Describe how a fixed cost line looks when graphed.
- 2 Two different lines start at the coordinates (0, 0) when using break-even analysis. State the names of these two lines and explain why they start at (0, 0).
- 3 The intersecting point between two lines determines the break-even point. Which two lines are used to determine this result? Explain your answer fully.

# 12 CHAPTER REVIEW

#### **KEY CONTENT**

- **[12.1]**
- The selling price of goods, or the fees for a service, may vary depending on a range of factors. Business owners may use recommended retail prices as-is or apply a percentage mark-up to cost prices; they may also adjust their prices in reaction to competitors or market factors. A key consideration in setting prices is the break-even point, which should be calculated and analysed.
- **[12.2]**
- The break-even point is the point at which revenue (income) equals expenses (costs), so no profit or loss is made. For a business to make a profit it must exceed this point. By calculating the break-even point, the business can determine how many units it needs to sell at a specific price, or the price that needs to be set to sell a specific number of units.
- [12.3]
- Break-even calculations can be created as graphs. By graphing the total costs and the sales revenue on the same set of axes, the break-even point can be found at the point where the lines intersect. Once the break-even point is passed, the margin between sales and costs increases with every additional unit sold.

#### **CHAPTER 12 EXERCISES**

#### 1 PERCENTAGE MARK-UPS



A clothing store is considering using a fixed percentage mark-up on the goods it sells. It currently sells three lines of stock with the following cost prices.

| Jeans         | \$40 |
|---------------|------|
| T-shirts      | \$10 |
| Baseball caps | \$5  |

Calculate the selling prices for each of the items if the following mark-ups were used.

- a 50%
- **b** 90%
- c 150%

#### **2 PERCENTAGE MARK-UPS**



Jack Slavich owns a bookstore. He sometimes follows the recommended retail prices when setting his prices. However, he believes that these prices are too high on some products, so he reduces them to what he feels comfortable with.

A friend suggests that he maintain a fixed mark-up on all goods sold. Slavich says he already does this on the more expensive lines, as he makes \$11 clear profit on all items over \$20.

He has supplied the following information.

| Inventory item | Cost price | Selling price |
|----------------|------------|---------------|
| Novels         | \$4.50     | \$9.95        |
| Dictionaries   | \$12.90    | \$19.95       |
| Thesauruses    | \$18.00    | \$29.00       |
| Biographies    | \$22.00    | \$33.00       |
| World atlases  | \$38.00    | \$49.00       |

- a Do you agree that Slavich has applied a fixed mark-up on all items selling for \$20 or more? Explain your answer.
- **b** Calculate the actual mark-up being applied on the five types of stock being sold.
- c State one advantage to Slavich of maintaining a fixed mark-up on all goods sold.
- d State one disadvantage of Slavich's method of estimating selling prices.
- e What other factors should Slavich take into account when setting his selling prices?

#### 3 DETERMINING BREAK-EVEN POINT





A school's students' representative council (SRC) is considering selling a range of commemorative goods to Year 12 students. The principal believes that students should learn about the costs of running a business, so has agreed to rent the SRC a room for \$60 per week from which to run their new business.

The first item will be a rugby top. The estimated cost price per rugby top is \$45, and the students have decided to sell them for \$50. If they can make a profit, they will use the extra funds to buy other items.

- a If the SRC went ahead with its plan, how many rugby tops would have to be sold in a week to break even?
- **b** Prepare a simple income statement to prove your answer to part **a**.
- c How many rugby tops would have to be sold to earn a weekly profit of \$100?
- **d** If the SRC increased its selling price to \$55, what effect would it have on the break-even point?
- e If the principal increased the rent to \$70, what is the new break-even point? (Assume that the selling price is \$50.)

#### **4 BREAK-EVEN POINT**





Matthew Hewitt is the owner of Exclusive Gaming Tables. He rents a workshop at a cost of \$450 per week. The timber for each table costs \$45 and stain costs him \$15 per table. Hewitt is thinking of selling the gaming tables for \$150 each.

- a What are Hewitt's total fixed costs per week?
- **b** What are the total variable costs per gaming table?
- c Calculate the contribution margin per table.
- d How many gaming tables does Hewitt have to sell in a week to break even?
- e How many gaming tables would Hewitt have to sell in a week to earn a profit of \$1000?
- f Prepare income statements to prove your answers to parts d and e.

#### **5 BREAK-EVEN POINT**



Mazira Templar owns Carlton Tablet City, which sells computer tablets for \$450 each. She pays a part-time assistant weekly wages of \$430 and rents her shop at a cost of \$950 per week. Each tablet costs \$220.

- a Calculate the break-even point in units and in sales dollars for Templar's business.
- b How many tablets does the shop have to sell in a week to earn a profit of \$2300?
- c If Templar drops the selling price to \$400 per tablet, what would be the new break-even point?
- **d** Using the original data, if the shop sells 12 tablets a week, what selling price must Templar charge to earn a profit of \$2300?
- e Prepare a graph showing fixed costs and variable costs for Carlton Tablet City. Use the horizontal axis to show units ranging from zero to 30 tablets.

#### **6 INCOME STATEMENTS AND BREAK-EVEN**



The following information relates to Reliable Golf Buggies, a small business owned by Petros Ghalie.

# RELIABLE GOLF BUGGIES: INCOME STATEMENT FOR MONTH ENDED 31 MARCH 2023

|                       | \$    | \$      |
|-----------------------|-------|---------|
| Sales of buggies      |       | 9 600   |
| Less: Cost of buggies |       | 6 400   |
| Gross profit          |       | 3 200   |
| Less: Other expenses  |       |         |
| Salaries              | 1 600 |         |
| Cleaning              | 400   |         |
| Rent                  | 2 400 | 4 400   |
| Net profit (loss)     |       | (1 200) |

Ghalie sells his golf buggies for \$120 each.

- a How many golf buggies did he sell during March?
- **b** What is the variable cost per golf buggy?
- c Calculate the break-even point for Reliable Golf Buggies.
- d Explain why the business suffered a loss in March 2023.
- e Given the number of units sold during March, what selling price was necessary to achieve break-even during this month?
- If 200 buggies were sold in a month, what selling price would need to be charged to earn a profit of \$4000?
- g Using the original data, complete the following table.

| Units<br>sold | Sales<br>revenue \$ | Fixed<br>costs \$ | Variable<br>costs \$ | Total<br>costs \$ | Profit<br>(loss) \$ |
|---------------|---------------------|-------------------|----------------------|-------------------|---------------------|
| 50            |                     |                   |                      |                   |                     |
| 70            |                     |                   |                      |                   |                     |
| 90            |                     |                   |                      |                   |                     |
| 110           |                     |                   |                      |                   |                     |
| 130           |                     |                   |                      |                   |                     |
| 150           |                     |                   |                      |                   |                     |
| 170           |                     |                   |                      |                   |                     |

h Using the information in the table completed in part g, prepare a graph showing sales revenue, total costs and the break-even point for Reliable Golf Buggies.

#### 7 INCOME STATEMENTS AND BREAK-EVEN



Elana Rea, a small business owner, supplies the following information about her firm.

# SUPERB SPICE RACKS: INCOME STATEMENT FOR MONTH ENDED 31 MAY 2023

|                      | \$    | \$    |
|----------------------|-------|-------|
| Sales of racks       |       | 7 200 |
| Less: Cost of racks  |       | 3 840 |
| Gross profit         |       | 3 360 |
| Less: Other expenses |       |       |
| Wages                | 2 000 |       |
| Electricity          | 130   |       |
| Telephone            | 120   |       |
| Advertising          | 200   | 2 450 |
| Net profit           |       | 910   |

According to her records, Rea sold 48 spice racks during May.

- a What price was Rea charging per spice rack?
- b How much did Rea pay per spice rack?
- c Calculate the contribution margin per spice rack.
- d Calculate the break-even point in units and in sales dollars for the business.
- e List any assumptions you made in calculating your answer to part d.
- f If Rea wants to earn a profit of \$4000 per month, how many spice racks must she sell?
- g If Rea could produce and sell only 75 spice racks per month, what selling price must she charge to earn a profit of \$4000?
- h If the cost of spice racks went up by 10%, what would be the new break-even point? (Assume that the current selling price is maintained.)
- i Prepare a break-even graph for Superb Spice Racks using the data from May's income statement. Draw a revenue line and a total cost line, and indicate the break-even point in units and in sales dollars.
- j Redraw the break-even graph in part i, taking into account the 10% increase in the cost of the spice racks as specified in part h.

#### **8 BREAK-EVEN ANALYSIS**



Darren Berry makes and sells cricket bats from his rented shop, trading under the business name Berry's Bats. His monthly rent is \$2400. He has one assistant who receives a weekly wage of \$650. His insurance expenses for the year total \$1440. Each cricket bat costs \$280 to make. Berry is currently selling his bats for \$440 each.

- a How many bats does Berry have to sell per month to break even?
- **b** Prove your answer to part **a** by preparing an income statement.
- **c** Berry aims to make a profit of \$4000 per month. How many bats would he need to sell to earn this profit?
- d Prove your answer to part c by preparing an income statement.
- e If Berry could produce and sell only 20 cricket bats per month, what selling price must he charge to earn his profit of \$4000?
- f If Berry could increase production and make 40 bats per month, he would require a second assistant and therefore his wages expense would increase to about \$1000 per week. What price would he now need to charge per bat in order to earn his desired profit of \$4000 per month?
- g Prepare a break-even graph for Berry's Bats using the original data.



#### Part 1: January 2023

Nicole Stevenou runs a small business in addition to working full-time as a receptionist at the local veterinary clinic. She manufactures dog kennels to a standard design and sells them at the local craft market for \$59 each.

Stevenou hires a workshop each Saturday at a cost of \$52. This fee covers the use of the premises, as well as all the tools she requires. She plans on using the workshop



every Saturday of the year to keep up with demand for her product. She feels confident about this because her grandfather has retired recently and has offered to help her out on weekends. He doesn't expect payment for his assistance.

On Saturdays, Stevenou and her grandfather construct the kennels and complete all the painting work. On Sundays, she has to pay \$14 to gain a site at the market.

The local council has advised her that the market will be closed for four weeks during the winter period. She isn't too worried about this, as it will provide an opportunity to catch up with production if she falls behind.

To make one dog kennel, Stevenou incurs the following costs.

| Timber for frame and sides   | \$24 |
|------------------------------|------|
| Fibreglass sheeting for roof | \$12 |
| Paint                        | \$8  |
| Nails, screws and glue       | \$2  |

- **a** Make a list of the factors that Stevenou should consider when determining the selling price of her kennels.
- **b** Calculate the total fixed costs that she will incur in a full year of trading.
- **c** How many kennels will she have to sell in a year to break even? (Assume that she only sells her standard model.)
- **d** Once her business is established, Stevenou would like to make a profit of about \$5000 over a full year. How many kennels would she need to make and sell to achieve this objective?
- **e** Stevenou is confident that she can produce eight kennels per week. This will allow her time for both construction and painting. Does this create a problem for her business? Explain your answer fully.
- **f** If production were restricted to a maximum of eight kennels per week, how much would Stevenou have to sell a kennel for to achieve her profit objective?

#### Part 2: January 2024

Nicole Stevenou's business is now operating fairly successfully, although she hasn't achieved all of her objectives. During 2023, Stevenou sold 320 kennels, after she decided that she should keep her selling price at \$59 per kennel. However, she's receiving numerous enquiries for custom-made kennels. Prospective customers are bringing along their own designs and asking Stevenou for quotes.

One customer has requested that she make a double kennel, designed to house two dogs together. She is considering their design and is trying to work out if it is feasible to make, but she is unsure about what price to charge. Stevenou has been working on the following specifications.



|       | Timber   | Fibreglass   | Other  |
|-------|--|--|--|
| Items | <ul> <li>Cost of timber for frame: \$2 per metre</li> <li>Timber required: 14 metres</li> <li>Extra timber panelling: \$14 per kennel</li> </ul> | <ul> <li>Cost of fibreglass<br/>sheeting: \$12 per sheet</li> <li>Fibreglass required:<br/>1.5 sheets</li> </ul> | <ul> <li>Cost of paint: \$12 per<br/>kennel</li> <li>Nails, screws and glue:<br/>\$4 per kennel</li> </ul> |

- **a** Before considering new designs, Stevenou would like a precise report on how her business performed in 2023. Prepare an income statement to determine her profit or loss for the year.
- **b** Stevenou has asked you to help her prepare a quote for the double kennel. What price would you recommend she quote for this kennel as a one-off sale? Show all of your workings and justify why you chose your recommended price.
- **c** Stevenou is prepared to make a few double kennels to see if they sell. Make a list of the factors that she should consider before starting on the production of a new design.

#### **ETHICAL CONSIDERATIONS**



Barack Jahmal owns a small menswear shop in his local area. He usually applies a 100% mark-up to all his products, but his sales have slumped lately.

Rick, a friend of Jahmal's, asks him why a business shirt hanging on the rack has a price tag of \$49.99. Jahmal says the shirt cost him \$25, so it has a selling price of \$50, but he uses '\$49.99' because it sounds cheaper. Jahmal mentions that he is now thinking of selling the shirts at cost price, just to get his money back. Rick tells him about a 'little trick' he has seen used by another small business operating as a retail outlet.

The next day, Rick arrives at the shop with a new sign for Jahmal. He suggests that he uses it as part of a 'special' display.



Jahmal explains to Rick that the sign isn't accurate, because he's been selling the shirts for \$49.99, not \$80. Rick replies: 'Well, mate, you said you need to make some sales. Try it and see what happens.'

Jahmal is unsure if he should agree to the plan.

Write a report to discuss both sides of this issue. Is it a case of 'sales at any cost'? Is it the right thing to do? What are the potential financial benefits and potential financial costs of this decision?

Conclude your report by advising Jahmal on what he should do.

#### **CHAPTER CHECKLIST**

Now that you have finished Chapter 12, double-check your progress.

Are you ready for your Unit 1 assessment?

#### I have ...

- completed all 'Check Your Understanding' questions
- completed all exercises
- completed the end-of-chapter activities
- Manded in my workbook for marking.

#### l understand ...

- of price-setting methods such as recommended retail price, mark-up and cost-volume-profit analysis
- accounting reports and information used to assist in judging the success or failure of a business
- graphical representations of accounting information.

#### I can ...

- use correct accounting terminology
- apply and use different methods of price setting
- of identify, classify and record financial data manually and through the use of ICT
- of analyse the effect of financial transactions on the accounting equation
- of prepare accounting reports manually and using ICT, including spreadsheets, for a service business.





#### PREPARE

Read back over the chapter now, the complete the online revision activity



Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



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# 13

# EVALUATING THE PERFORMANCE OF A SERVICE BUSINESS

There are a huge variety of service businesses in Australia – from traditional businesses such as cleaners, gardeners and auto repair shops to modern firms such as food trucks, personal shoppers and dog walkers.

Despite the differences in what these businesses offer, you can apply the same accounting processes and concepts when evaluating their financial performance.

In this chapter, you will learn how to prepare, analyse and evaluate income statements for service businesses, and how to present that data for the report user. You'll also consider key financial indicators that can be applied for a service business, and what they mean for that business's future.

#### **LEARNING OBJECTIVES**

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

- analyse an income statement for a service business[13.1]
- use alternative means of presentation of performance data, including graphs [13.1]
- evaluate the results reported in an income statement[13.2]
- calculate net profit margin and return on investment indicators [13.2]
- evaluate liquidity using a working capital ratio [13.3]
- evaluate financial stability using the debt ratio [13.3]
- identify a range of non-financial evaluation tools[13.3].



# 13.1 INCOME STATEMENTS FOR SERVICE BUSINESSES

Most small service businesses have the same accounting needs as small traders, and make the same use of single entry accounting systems. They use the two cash journals as the main tool for recording transactions. The information from these cash records is summarised and then used to prepare an income statement at the end of the reporting period.

Figure 13.1 shows an example of an income statement for a service business.

FIGURE 13.1 Income statement for a service business

#### CLARKE'S CLEANING SERVICES: INCOME STATEMENT FOR YEAR ENDED 30 JUNE 2023

| Revenue            | \$     | \$     |
|--------------------|--------|--------|
| Sales              |        | 90 000 |
| Less: Expenses     |        |        |
| Cleaning materials | 30 000 |        |
| Office expenses    | 3 000  |        |
| Insurance          | 2 000  |        |
| Vehicle expenses   | 5 000  | 40 000 |
| Net profit         |        | 50 000 |

This report is designed to satisfy the needs of the owner of a service business. It's simple, with basically only two parts to the report. Revenue items are listed at the top of the report, followed by expense items. The end result, which is the profit or loss for the period, is shown at the bottom of the report.

We'll use the information in this statement as an example to help evaluate the performance of a service business.

#### ADDING PERCENTAGES

One of the important qualitative characteristics of accounting is understandability. Accounting information in a report should be presented in a way that the users of the report can easily understand. Income statements such as the one in Figure 13.1 should be easy to read, set out with headings, subtotals and all key figures labelled.

Despite the simple layout, however, some users may still find it hard to understand exactly what all the numbers mean. So, accountants sometimes present financial information in different ways to improve understanding.

One way to do this is to present dollar figures in percentage terms of overall expenses or revenues. Figure 13.2 represents the information for Clarke's Cleaning Services but also shows percentages, with all the expenses expressed as a percentage of the total sales revenue.

FIGURE 13.2 Income statement with percentage breakdown

CLARKE'S CLEANING SERVICES: INCOME STATEMENT FOR YEAR ENDED 30 JUNE 2023

| Revenue            | \$     | %     |
|--------------------|--------|-------|
| Cleaning fees      | 90 000 | 100.0 |
| Less: Expenses     |        |       |
| Cleaning materials | 30 000 | 33.3  |
| Office expenses    | 3 000  | 3.3   |
| Insurance          | 2 000  | 2.2   |
| Vehicle expenses   | 5 000  | 5.5   |
| Total expenses     | 40 000 | 44.4  |
| Net profit         | 50 000 | 55.6  |

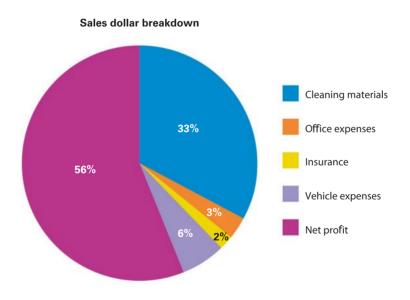
These percentages represent what happened to the average sales dollar earned by the business during the period. For example, for every sales dollar Clarke's Cleaning Services earned, it spent 44.4% (i.e. 44.4 cents) on running the business. The most significant expense item was cleaning materials, which absorbed 33% of the firm's sales revenue. After taking all the expense items into account, the business still had 55.6% of each sales dollar remaining as net profit.

#### **PIE CHARTS**

Alternative forms of presentation include graphs or charts, since graphs may show more clearly what a page of numbers doesn't.

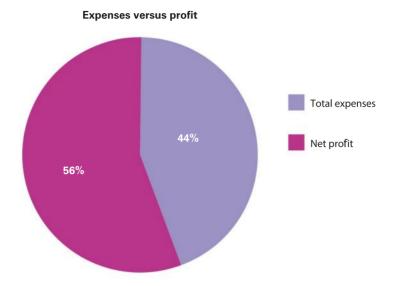
When the dollar values are converted to percentages, it's much easier to present this data as a pie chart. This information can be presented as shown in Figure 13.3.

FIGURE 13.3 Pie chart showing the breakdown of the sales dollar



Rather than showing every individual expense item, a simplified graph can be used to show only total expenses for a given period. Figure 13.4 shows total expenses and net profit in a pie chart.

FIGURE 13.4 Percentage breakdown of sales dollar showing total expenses



There are no set rules for graphs or charts in accounting. However, if they are used to try to satisfy *understandability*, they should show all the key information.

Figure 13.4 shows that 44% of sales was consumed by expenses. However, because all expenses have been added together to make up a total of 44% of sales, the chart doesn't show the importance of cleaning materials. As the amount for cleaning materials was significant (\$30 000), it probably needs its own segment in the pie chart, which will highlight its impact on the profit of the business.

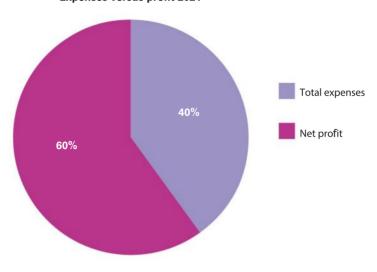
Comparisons over several reporting periods form the basis of trend analysis, where the general trend in the performance of a business over several consecutive periods is identified. A series of pie charts can be used to make trend analysis easier. As the charts show the breakdown of the sales dollar, changes in the firm's operations can easily be identified.

The pie charts in Figure 13.5 show the breakdown of the sales dollar into two segments – expenses and net profit. They are based on the data shown below for Clarke's Cleaning Services.

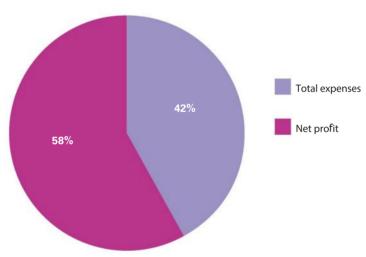
|            | 2021   |       | 2022   |       | 2023   |       |
|------------|--------|-------|--------|-------|--------|-------|
|            | \$     | %     | \$     | %     | \$     | %     |
| Revenue    | 75 000 | 100.0 | 83 000 | 100.0 | 90 000 | 100.0 |
| Expenses   | 30 000 | 40.0  | 35 000 | 42.2  | 40 000 | 44.4  |
| Net profit | 45 000 | 60.0  | 48 000 | 57.8  | 50 000 | 55.6  |

FIGURE 13.5 Percentage breakdown of sales dollar over three consecutive periods

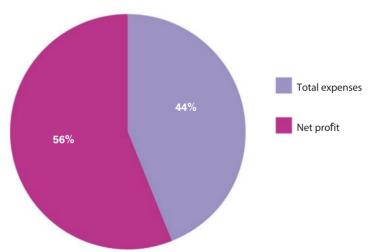




#### Expenses versus profit 2022



#### Expenses versus profit 2023



The three-year comparison in dollar terms may not present a clear picture of what's happened in this business. However, by presenting the percentage data graphically, we can see that the percentage of sales that remains as net profit has been shrinking over the three years.

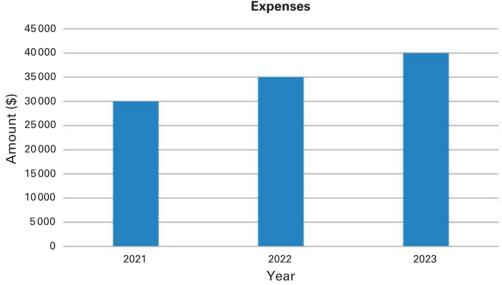
This is an important aspect of using graphs in accounting. Changes can be identified easily when graphs are prepared on a consistent basis, with good use of colour or shading. Most people can identify such changes when information is presented graphically, even if they don't fully understand accounting reports.

#### OTHER GRAPHS

Other graphs and charts may also be used to present accounting information. For example, bar graphs allow a business's various expense items to be compared easily.

Using the three-year data for Clarke's Cleaning Services used to generate Figure 13.5, the expenses of the business could be shown as in Figure 13.6.

FIGURE 13.6 Bar graph showing comparative spending on expense items



Remember, one role of accounting is to provide information to the users of financial reports. Charts or graphs that improve the quality and understandability of the information being presented are useful ways to get the message across.

#### 13.1 CHECK YOUR UNDERSTANDING



- 1 Some business owners prepare their income statements using percentages rather than dollar amounts. Explain why they do this.
- **2** The use of graphs and charts may partly satisfy the qualitative characteristic of *understandability*. Explain how this is achieved.
- 3 Explain why it is useful to consider a trend in profit results, rather than the results of a single reporting period.

# 13.2 EVALUATING AN INCOME STATEMENT

Once an income statement has been prepared, the next step is to assess what it means in terms of the final profit result.

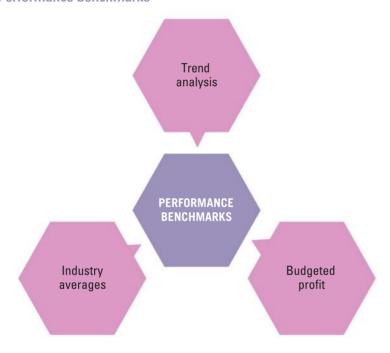
The first point to consider when evaluating a net profit figure is the length of the accounting period. (This should be stated in the heading of the report.) For example, a \$20 000 profit may be disappointing if the period covered by the report is a full year. However, if the period covered is one month, the owner may be happy with the result.

#### PERFORMANCE BENCHMARKS

In addition to the period covered, there are several financial benchmarks or standards that accountants and management can use to evaluate performance.

FIGURE 13.7 Performance benchmarks

benchmark a standard used to assess the performance of a husiness



#### TREND ANALYSIS

Comparing one period's profit to previous results provides management with a trend in the profit results over time. The trend may indicate improving performance or declining profit. The results from several accounting periods may provide the owner with a better idea of performance than one period's results.

Consider the profit results of the two firms shown in the table below.

| Net profit results: | 2019<br>\$ | 2020<br>\$ | 2021<br>\$ | 2022<br>\$ | 2023<br>\$ |
|---------------------|------------|------------|------------|------------|------------|
| Business A          | 2 000      | 8 000      | 16 000     | 28 000     | 48 000     |
| Business B          | 90 000     | 78 000     | 65 000     | 56 000     | 48 000     |

If you look at 2023 only, you might think that the two businesses earned the same net profit. However, when you take the trend into account, you get a different picture of events. Business A has been improving its profit every year, while Business B's profit has been steadily declining. Trend analysis should always be considered because it may help predict a business's likely future results.

#### **BUDGETED (OR EXPECTED) PROFIT**

The past trend in a firm's profit results may be used to evaluate performance. However, even if profit has improved compared to previous results, it may still be considered unacceptable if it didn't meet management's expectations.

Looking at Business A in the earlier example, imagine if the budgeted profit for 2023 was \$52 000 (\$4000 more than the actual profit). Even though the business increased its profit from the previous year, if its target for the period was \$52 000, management would be disappointed.

#### **INDUSTRY AVERAGES**

An accountant may be able to advise a business owner about how their business compares to other similar businesses. If industry statistics are available, the owner can see how their business performed compared to the industry average. Did it perform better than most similar businesses? Has the business been falling behind in recent years? Questions such as these help a business owner understand their firm's financial performance.

#### **KEY FINANCIAL INDICATORS**

While benchmarks are generally dollar amounts, there are also a number of financial indicators that are calculated as a ratio or simple number. Accountants may use several different financial indicators when evaluating a net profit result.

Other financial indicators are covered in detail in Unit 2, but here we'll look at the net profit margin and the return on owner's investment.

the percentage of sales revenue left as profit after all expenses have been taken into account

net profit margin

industry average typical industry results.

used to assess the

performance of a husiness

#### return on owner's investment (ROI)

the return earned on the funds invested by a business owner

#### **NET PROFIT MARGIN**

This indicator, also known as the return on sales ratio, compares the net profit for a period to the amount of sales revenue generated. It determines the percentage of the sales dollar that remains after all expenses have been considered.

This indicator has already been introduced in the pie charts in Figures 13.3, 13.4 and 13.5, which show how much of the sales dollar was consumed by expenses and how much remained as profit.

If a business has total sales of \$50 000 and net profit was \$5000, the net profit margin would be as follows.

Net profit margin = 
$$\frac{\text{Net profit}}{\text{Total sales}}$$

$$= \frac{\$5\ 000}{\$50\ 000} = 0.1:1 \text{ or } 10\%$$

This shows the owner that 10% of the sales dollar was ultimately earned as net profit. Another way of interpreting this result is that, out of every sales dollar earned, only 10 cents of profit was earned.

If expenses increase and the prices charged to customers remain the same, the net profit margin will decrease. This will happen because expenses are eating away more of the sales dollar.

The opposite is also possible: if a business increases its prices and expenses remain constant, the net profit margin will increase.

#### **RETURN ON OWNER'S INVESTMENT**

This financial indicator was introduced earlier in Chapter 10 to demonstrate the potential benefits of borrowing money to purchase assets for a business. It compares the profit earned by a business to the funds contributed by its owner. The formula used in Chapter 10 was simpler, based on one input of capital from the owner. An owner may contribute additional funds or may withdraw assets during an accounting period. Rather than using owner's capital at the start or at the end of the period, an average figure is usually used. This provides a more accurate picture of the owner's return when their contribution has changed during a period.

Most small business owners invest their capital in order to maximise their return. They could put their money into term deposits in a bank and have a secure, low-interest return. When they go into business the risks are greater, but so are the potential rewards. A business proprietor can use the return on owner's investment ratio to decide whether it is still worthwhile to continue with their business investment.

#### **EXAMPLE 13.1**

This information is extracted from the records of Paw & Path Dog Walking.

|                                | \$     |
|--------------------------------|--------|
| Capital as at 1 January 2023   | 70 000 |
| Capital as at 31 December 2023 | 90 000 |
| Net profit for 2023            | 20 000 |

Return on owner's investment = 
$$\frac{\text{Net profit}}{\text{Average capital}}$$
= 
$$\frac{\$20\ 000}{\left(\frac{\$70\ 000 + \$90\ 000}{2}\right)}$$
= 
$$\frac{\$20\ 000}{\$80\ 000} = 0.25:1 \text{ or } 25\%$$

For every dollar invested by the owner, they earned a return of 25 cents. To compare the return with other possible investments, we can just state that the owner earned a return of 25% per annum.

An owner's return on investment isn't just about a simple percentage return. Small business owners take a considerable risk by investing their personal funds into a business venture. They also tend to work long hours. While it's difficult to put a value on the risk taken and the hours worked, the return on an owner's investment should be substantially more than that available in the financial markets.

#### RATE OF RETURN ON ASSETS

Another financial indicator used by some business owners is the **rate of return on assets**. Rather than comparing profit to the owner's capital, the net profit for a period can be compared to investment made in the assets of the business.

#### **EXAMPLE 13.2**

rate of return

the return earned

on the investment made in the assets of a business

on assets

More information can be drawn from the records of Paw & Path Dog Walking.

# Total assets as at 1 January 2023 190 000 Total assets as at 31 December 2023 210 000 Net profit for 2023 20 000

Rate of return = 
$$\frac{\text{Net profit}}{\text{Average total assets}}$$

$$= \frac{\$20\ 000}{\left(\frac{\$190\ 000 + \$210\ 000}{2}\right)}$$

$$= \frac{\$20\ 000}{\$200\ 000} = 0.10: 1 \text{ or } 10\%$$

This indicator shows that for every dollar invested in the assets of the business, a profit of 10 cents was earned. Alternatively, the assets of the business provided a return of 10% to the business over the accounting period.

This rate of return provides additional information about the profitability of the business. It can be compared to:

- the rate of return earned in previous periods
- the rate of return achieved by similar businesses
- the budgeted, or expected, rate of return as set by the owner.

#### 13.2 CHECK YOUR UNDERSTANDING



- 1 When evaluating a net profit result, why is it important to consider the length of the accounting period? Explain your answer fully.
- 2 State and describe three different ways of evaluating an income statement.
- 3 Explain what the net profit margin measures.
- **4** Rate of return and the return on owner's investment are two evaluation tools. How do they differ?
- 5 An investor may earn 5% on investments in the money market. Why should a business owner expect to earn a higher return on their investment in a small business? Explain your answer.

# 13.3 ADDITIONAL INDICATORS

There's really no end to the ways in which a business owner might evaluate performance. Some indicators may be very personal, or unique to a particular industry.

That said, there are a number of other common indicators a business owner might consider about how their business is performing.

#### LIQUIDITY

In addition to learning how profitable a business has been, an owner may want information about its liquidity. Liquidity is the ability of a business to meet its short-term debts, or obligations, when they fall due. In other words, will the business be able to meet its debts on time?

A classified balance sheet provides information about liquidity, as it can be used to show a business's current assets and current liabilities. Current assets are assets that are expected to be used up or turned into cash within 12 months, while current liabilities are obligations that are due to be met within 12 months.

So, it makes sense to compare the current assets and current liabilities of a business at a point in time. This is called the working capital ratio.

Consider the following information.

|            | Current assets | Current liabilities |
|------------|----------------|---------------------|
|            | \$             | \$                  |
| Business A | 100 000        | 80 000              |
| Business B | 210 000        | 220 000             |

The working capital ratios for the two businesses are as follows.

**Business A** = 
$$\frac{\$100\ 000}{\$80\ 000}$$
 = 1.25 : 1 or 125%  
**Business B** =  $\frac{\$210\ 000}{\$220\ 000}$  = 0.95 : 1 or 95%

Business A has the better liquidity, as it has \$1.25 of current assets for every \$1 of current liabilities. While Business B has more current assets, it actually has less liquidity, as it only has \$0.95 of current assets for every \$1 of current liabilities. In the next 12 months, Business A will be able to meet its debts on time, while Business B may run into liquidity problems.

Although other factors may have an effect, the working capital ratio provides a basic measure that can be used to evaluate a business's ability to meet its debts on time.

#### liquidity the ability of a

business to meet its short-term obligations as they fall due

#### working capital ratio

a financial indicator comparing current assets to current liabilities

#### **STABILITY**

Chapter 10 introduced the concept of gearing. Stability is also a matter to consider, because most businesses will borrow money at some time. Sometimes short-term finance (e.g. a bank overdraft) is available, while other forms of finance require a long-term commitment to making repayments (e.g. long-term loans).

Borrowing money can be a very positive experience for business owners, as loans enable them to acquire more assets for their business. These assets can then generate additional revenue, which will help the business increase its overall profit.

However, loans can also lead to a negative experience if too much money is borrowed. The more loans a business has, the higher its repayments will be. If a business suffers from a downturn in revenue, it may have trouble making its repayments on time. The ultimate risk is that the business may collapse completely.

The **debt ratio** measures the risk a business faces by showing how dependent it is on borrowed funds compared to owner's equity.

Consider the following examples.

|            | Total liabilities | Total assets |
|------------|-------------------|--------------|
|            | \$                | \$           |
| Business A | 20 000            | 400 000      |
| Business B | 280 000           | 500 000      |

The debt ratio for these two businesses would be as follows.

Business A = 
$$\frac{$20\ 000}{$400\ 000}$$
 = 5%  
Business B =  $\frac{$280\ 000}{$600}$  = 56%

These two businesses are financed in completely different ways. Business A is lowly geared, as it has very low reliance on borrowed funds. Only 5% of its assets are funded by liabilities, so the owner has funded 95% of the total assets. This is a low-risk business, and its repayments to liabilities would be very low.

\$500 000

Business B is more highly geared, with more than half (56%) of its assets being funded by liabilities. Business B would have higher repayments of debt and the owner faces a much greater risk in taking on so many liabilities.

#### NON-FINANCIAL INDICATORS

In addition to a range of financial indicators, business owners may use non-financial information to evaluate their business performance.

For a service business, non-financial indicators could include the following.

- The number of jobs completed in a period: Rather than just a dollar value of sales, the number of completed jobs can be used to measure performance.
- The number of complaints/follow-up calls required. Once jobs are completed, the level of customer satisfaction can be measured by how many times a service provider is called back to finish a job or fix problems.

debt ratio

a financial indicator comparing total liabilities to total assets

STOMER SATISFAC scale of 1 to 5 where 1 represents would you rate your level of overall sati How likely are you to recommend our C

Non-financial surveys, help performance of their business.

- Customer satisfaction surveys: Some businesses ask customers to complete a survey once the services have been provided and the bill has been paid. Many restaurants do this on a regular basis.
- The number of quotes provided to jobs completed: There's little point in quoting for customers if a business doesn't actually gain the clients. The percentage of quotes that are turned into actual customers would be an excellent indicator for some business owners.
- *Hits on the business website*: If services are being gained through online bookings, a business owner may count the number of website hits as a guide to how well the business is performing.
- Repeat customers: How many customers come back as return clients?
- Referrals: How many customers refer their friends as future clients?
- The number of hours worked: Some business owners work much longer hours than a 'normal' working week. They would usually expect to be well rewarded for this.
- Tracking of postcodes: Businesses that seek customers across a range of suburbs may keep track of customers' postcodes. This can be reviewed regularly to see how well the range of customers is progressing. Owners can see if new suburbs are being picked up or if some have been lost to competitors.

Many successful business owners use a combination of financial and non-financial indicators as tools to measure business performance. Some use the traditional accounting reports of income statements, balance sheets and cash flow statements. Others prefer a simplified approach, such as tracking the number of customers per period and reviewing customer satisfaction surveys.

Customer satisfaction is a non-financial indicator that can be used to evaluate performance.

#### 13.3 CHECK YOUR UNDERSTANDING



- 1 What is liquidity? Explain how the working capital ratio helps to measure the liquidity of a business.
- 2 'A good business is one that doesn't borrow money. Borrowing is risky and owners should contribute all the capital they need.' Do you agree? Discuss.
- 3 Non-financial indicators can provide useful information about business performance. If you were running a small business, which three non-financial indicators would you use to help evaluate performance? Explain why you have selected each indicator.
- 4 Consider the following statement, made by a small business proprietor: 'My business is unique, so industry averages are of little use to me when assessing performance.' Do you agree with this business owner? Explain your answer fully.

# 13 CHAPTER REVIEW

#### **KEY CONTENT**

- [13.1] For a service business using a single entry accounting system, the income statement is one of the most important accounting reports for assessing overall financial performance. The data in the income statement can also be presented using graphs, which may be easier for some business owners to analyse.
- Service businesses may be evaluated against several performance benchmarks, such as an analysis of profit trends, budgeted revenues or industry averages. Key mathematical indicators can also be calculated, such as the net profit margin, the return on owner's investment and the rate of return on assets.
- Business owners may want to analyse their business's liquidity (the ability to pay debts on time) and financial stability as additional indicators. They may also want to consider non-financial indicators, which could provide further information about strengths, weaknesses and opportunities for improvement.

#### **CHAPTER 13 EXERCISES**

#### 1 PREPARING AN INCOME STATEMENT





Lydia Cromwell owns South Yarra Book Binders. She provides the following details of her trading results for the year ended 31 March 2023.

|                   | \$     |                   | \$     |
|-------------------|--------|-------------------|--------|
| Cash sales        | 85 000 | Credit sales      | 15 000 |
| Cost of materials | 45 000 | Wages – assistant | 25 000 |
| Advertising       | 2 000  | Interest expense  | 1 200  |
| Postage expenses  | 800    | Insurance         | 1 300  |

- a Prepare an income statement for the year ended 31 March 2023.
- **b** Comment on the performance of the business for the year.



#### **2 PREPARING AN INCOME STATEMENT**



David Foss is the owner of the Dynamic Gym in Essendon. He provides the following details from his records for the year ended 31 August 2023.

| From the cash journals: |        | From the sales journal: |        |
|-------------------------|--------|-------------------------|--------|
|                         | \$     |                         | \$     |
| Cash receipts:          |        | Credit sales            | 32 600 |
| Cash sales              | 95 400 |                         |        |
| Capital                 | 20 000 |                         |        |
| Loan                    | 10 000 |                         |        |
| GST collected           | 9 540  |                         |        |
| Cash payments:          |        |                         |        |
| Casual wages            | 18 800 |                         |        |
| Interest on loans       | 1 200  |                         |        |
| Laptop computer         | 2 600  |                         |        |
| Office expenses         | 3 400  |                         |        |
| Drawings                | 2 000  |                         |        |
| Rent                    | 35 000 |                         |        |
| GST paid                | 4 100  |                         |        |

- a Several items listed are not relevant to an income statement. List these items, and write a brief note explaining why they're irrelevant to this report.
- **b** Using the relevant information, prepare an income statement for the year ended 31 August 2023.
- c Make a brief comment on the profit performance of this business.

#### SPREADSHEET

# 3 BREAKDOWN OF AN INCOME STATEMENT USING PERCENTAGES



The manager of FX DJ Hire supplies the information below, which relates to the period ended 30 June 2023.

|          | \$      |                   | \$      |                   | \$     |
|----------|---------|-------------------|---------|-------------------|--------|
| Sales    | 102 000 | Courier fees      | 1 250   | Insurance         | 570    |
| Rent     | 20 000  | Capital (1/7/22)  | 132 000 | Advertising       | 1 680  |
| Cleaning | 940     | Postage           | 450     | Equipment repairs | 27 600 |
| Wages    | 17 000  | Accounting costs  | 540     | Telephone expense | 620    |
| Rates    | 1 230   | Interest on loans | 980     | Drawings          | 4 300  |

- a Prepare an income statement for the year ended 30 June 2023, showing clearly the dollar value of all items and the percentage breakdown of the sales dollar.
- **b** Prepare a pie chart showing the breakdown of the sales dollar.
- **c** Prepare an extract from the firm's balance sheet to show the owner's equity section of the report.
- **d** The owner works 60–80 hours a week. Comment on the performance of this business, taking into account this information and the amount of capital invested.

#### 4 BREAKDOWN OF THE SALES DOLLAR



The following information relates to Warrnambool Trailer Hire.

|                 | \$      |
|-----------------|---------|
| Sales revenue   | 125 000 |
| Trailer repairs | 56 250  |
| Wages           | 31 250  |
| Office expenses | 10 000  |

- a Calculate the business's net profit.
- **b** Calculate the net profit margin.
- **c** Comment on the results of your calculation in part **b**, explaining clearly what this financial indicator shows.
- **d** Prepare a pie chart, showing the breakdown of the sales dollar into the various expense items and the net profit that remains. (*Hint*: use the chart wizard in Microsoft Excel® to prepare your pie chart.)
- e Prepare a bar graph for all expense items so that the owner can compare spending in the various areas.

#### **5 TREND ANALYSIS**



Johnny Truong is the owner of JT's Car Repairs. He has asked you to analyse the performance results of his business over the past three years, based on the following information.

|                   | 2021    | 2022    | 2023    |
|-------------------|---------|---------|---------|
|                   | \$      | \$      | \$      |
| Cash sales        | 120 000 | 132 000 | 138 000 |
| Credit sales      | 40 000  | 48 000  | 62 000  |
| Cost of materials | 80 000  | 93 600  | 110 000 |
| Sales staff wages | 18 000  | 23 760  | 27 600  |
| Advertising       | 6 000   | 10 560  | 13 800  |

If possible, use financial spreadsheets for this question.

- a Calculate the net profit for each of the three reporting periods.
- **b** Calculate the net profit margin for each of the three years.
- c Comment on the trend in the net profit margin over the three-year period.
- **d** Using a spreadsheet, prepare pie charts for each of the three years, showing clearly the breakdown of total sales revenue.

#### **6 COMPARISONS OF PERFORMANCE**



The following information relates to two similar businesses.

|                   | Dandenong School of Tennis | Cranbourne Tennis Coaching |  |
|-------------------|----------------------------|----------------------------|--|
|                   | \$                         | \$                         |  |
| Net profit        | 55 200                     | 56 000                     |  |
| Capital (1/7/22)  | 220 000                    | 210 000                    |  |
| Capital (30/6/23) | 240 000                    | 190 000                    |  |

- a Calculate the return on owner's investment for the two business owners.
- **b** Comment on the results from part **a**, indicating clearly which owner has the better return.
- c State three benchmarks that may be used to evaluate a return on the owner's investment.

#### 7 TREND ANALYSIS – RETURNS ON INVESTMENT



Davinda Lee is the proprietor of Lee's Therapeutic Massage. She provides the following details from the most recent accounting periods.

|                                | 2021    | 2022    | 2023    |
|--------------------------------|---------|---------|---------|
|                                | \$      | \$      | \$      |
| Sales revenue                  | 180 000 | 160 000 | 200 000 |
| Net profit                     | 27 000  | 28 800  | 30 000  |
| Capital (start of period)      | 96 000  | 100 000 | 110 000 |
| Capital (end of period)        | 100 000 | 110 000 | 120 000 |
| Total assets (start of period) | 270 000 | 300 000 | 280 000 |
| Total assets (end of period)   | 300 000 | 280 000 | 320 000 |

- a Calculate the net profit margin for each of the three reporting periods and comment on the trend in the ratio.
- **b** Calculate the return on owner's investment for each of the accounting reporting periods and comment on your results.
- c 'The return on owner's investment should be approximately the same as that available on term deposits.' Do you agree? Explain your answer fully.
- **d** Calculate the rate of return on assets for each of the three periods. Comment on the trend revealed by this financial indicator.

#### **8 RATE OF RETURN ON ASSETS**



Consider the following financial information, which relates to two electrical contractors.

|                      | Ernie's Electricals | Eva's Electricals |  |
|----------------------|---------------------|-------------------|--|
|                      | \$                  | \$                |  |
| Net profit           | 135 000             | 124 000           |  |
| Average total assets | 750 000             | 620 000           |  |

- a Calculate the return on assets for the two businesses.
- **b** Which business has used its assets most effectively to earn profit? Explain your answer fully.
- Explain one other way the owners could evaluate the profit performance of their businesses.

#### 9 RATE OF RETURN - TREND ANALYSIS



The owner of Bendigo Tractor Repairs has provided the following information about her business. The owner is quite pleased, as net profit has increased every year.

|              | 31 Dec 2020 | 31 Dec 2021 | 31 Dec 2022 | 31 Dec 2023 |
|--------------|-------------|-------------|-------------|-------------|
|              | \$          | \$          | \$          | \$          |
| Net profit   | 80 000      | 90 000      | 110 000     | 120 000     |
| Capital      | 400 000     | 400 000     | 450 000     | 460 000     |
| Total assets | 600 000     | 620 000     | 700 000     | 800 000     |

- a Calculate the return on owner's investment and the return on assets for the years ended 31 December 2021, 2022 and 2023.
- **b** Comment on the trends in the financial indicators, considering the owner's comments about profit going up every year.
- c Identify and discuss three non-financial indicators that the owner of Bendigo Tractor Repairs could use to evaluate the performance of her business.

#### 10 WORKING CAPITAL RATIO



The following information has been extracted from the balance sheets of two similar businesses.

|                     | Bill's Mowing | Lucy's Lawn Services |  |
|---------------------|---------------|----------------------|--|
|                     | \$            | \$                   |  |
| Current assets      | 24 000        | 38 000               |  |
| Current liabilities | 16 000        | 29 000               |  |

- **a** Which business has the better liquidity? Calculate the working capital ratio to support your answer.
- **b** Explain why it is important to have sufficient liquidity in a business.

#### 11 TRENDS IN LIQUIDITY



Jimmy lles has provided the following data relating to his barbeque food truck business.

|                     | 2020   | 2021   | 2022   | 2023   |
|---------------------|--------|--------|--------|--------|
|                     | \$     | \$     | \$     | \$     |
| Current assets      | 12 000 | 14 000 | 18 000 | 20 000 |
| Current liabilities | 6 000  | 8 000  | 11 000 | 15 000 |

- a Calculate the working capital ratio for each year.
- **b** Comment on the trend in the ratio over the four years. Should less be concerned about the trend you have identified? Explain your answer fully.

#### 12 DEBT RATIO



The following information has been provided for two businesses.

|                   | City Car Hire | Suburban Car Hire |  |
|-------------------|---------------|-------------------|--|
|                   | \$            | \$                |  |
| Total liabilities | 330 000       | 350 000           |  |
| Total assets      | 550 000       | 800 000           |  |

- a Calculate the debt ratio for each business.
- **b** Which business has the greater financial risk? Explain your answer fully.

#### 13 TRENDS IN GEARING



The owner of Carnegie Car Wash has calculated the following data for her business.

|            | 2021 | 2022 | 2023 |
|------------|------|------|------|
| Debt ratio | 45%  | 67%  | 75%  |

The owner is happy with the performance of the business, as profit has been steady over the past few years.

- a Explain to the owner what the trend in the debt ratio indicates.
- **b** Describe one advantage of increasing the debt ratio for a small business.
- c Describe one disadvantage of increasing the debt ratio.

#### CASE STUDY



Superior Graphic Design Studio provides freelance design services to both private and corporate customers. It has been established for a number of years. The owner, Bree Semini, keeps cash journals and a credit sales journal.

At the end of the previous accounting period, the balance sheet for the business included the following.

#### SUPERIOR GRAPHIC DESIGN STUDIO: BALANCE SHEET AS AT 30 SEPTEMBER 2022

| Assets           | \$      | Liabilities      | \$      | \$      | \$      |
|------------------|---------|------------------|---------|---------|---------|
| Cash at bank     | 3 210   | GST debt         |         | 2 000   |         |
| Debtors          | 4 320   | Mortgage loan    |         | 473 000 | 475 000 |
| Business vehicle | 45 300  | Owner's equity   |         |         |         |
| Equipment        | 12 000  | Capital          | 415 430 |         |         |
| Office furniture | 8 600   | Plus: Net profit | 28 000  | 443 430 |         |
| Premises         | 820 000 | Less: Drawings   |         | 25 000  | 418 430 |
|                  | 893 430 |                  |         |         | 893 430 |

Semini prepares the following summary at the end of the current period, 30 September 2023.

| From cash journals:         | \$     | From credit sales journal:         | \$     |
|-----------------------------|--------|------------------------------------|--------|
| Cash sales                  | 86 400 | Credit sales                       | 21 400 |
| Accounts receivable         | 12 340 | GST charged to accounts receivable | 2 140  |
| Capital                     | 10 000 |                                    |        |
| Loan from NAB               | 12 000 |                                    |        |
| GST received                | 8 640  |                                    |        |
| Cartage inwards             | 1 210  |                                    |        |
| Cash purchases of materials | 15 000 |                                    |        |
| Wages                       | 52 400 |                                    |        |
| Advertising                 | 1 470  |                                    |        |
| Loan repayments             | 10 400 |                                    |        |
| Electricity                 | 1 620  |                                    |        |
| Drawings                    | 37 000 |                                    |        |
| Office expenses             | 2 180  |                                    |        |
| Interest on loans           | 9 800  |                                    |        |
| Purchase of equipment       | 4 300  |                                    |        |
| GST paid                    | 5 720  |                                    |        |

#### Additional information:

- The mortgage loan is repayable at the rate of \$400 per week.
- The loan from NAB is an interest-only loan. The total amount borrowed is due for repayment on 30 June 2028.
- The firm's bankers have approved an overdraft facility to cover short-term shortages of cash.
- a Prepare a statement of receipts and payments for the year ended 30 September 2023.
- **b** Using the results from your statement in part **a**, comment on the firm's cash position at the end of the period.
- c Prepare an income statement for the year ended 30 September 2023.
- **d** Using a spreadsheet, prepare a pie chart to show the breakdown of the sales dollar. Divide the chart into two sections: total expenses and net profit.



- **e** Using your statement in part **c**, plus your chart in part **d**, comment on the profit performance of the business.
- **f** Prepare a classified balance sheet as at 30 September 2023. (*Hint*: you will need to calculate how much is owed by debtors as at 30 September 2023 and the GST liability of the business.)
- **g** Using the data from the previous period's balance sheet, calculate the owner's return on investment.
- **h** Using the balance sheet prepared as at 30 September 2023, calculate the owner's return on investment.
- i Write a brief comment on the trend in the owner's return on investment over the two years.
- **j** Calculate the debt ratio as at 30 September 2023 and comment on the financial stability of the business.
- **k** Semini is confused. She's certain that her business made a profit again this year, but is worried about the shortage of cash the firm is experiencing. Explain to her why she has run out of cash but has been able to report a profit again in the current period. Your explanation should state the items that affect cash on hand but don't affect profit.

#### **CHAPTER CHECKLIST**

Now that you've finished Chapter 13, double-check your progress.

Are you ready for your Unit 1 assessment?

#### I have ...

- completed all 'Check Your Understanding' questions
- completed all exercises
- completed the end-of-chapter activities
- Manded in my workbook for marking.

#### l understand ...

- of accounting reports and information used to assist in judging the success or failure of a business
- materials and supplies required by a service business
- indicators of business performance (financial and non-financial)
- old classified accounting reports for a service business: Income Statement
- graphical representations of accounting information.

#### I can ...

- we correct accounting terminology
- describe and use accounting information presented in written reports and graphical representations to make a judgment on the success or failure of a business
- ✓ use ICT, including spreadsheets, to construct appropriate graphical representations
- of analyse the effect of financial transactions on the accounting equation
- of prepare accounting reports manually and using ICT, including spreadsheets, for a service business.





#### PREPARE

Read back over the chapter now, then complete the online revision activity



Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



mea.digital/vceacc12\_13



# INTERNAL CONTROL

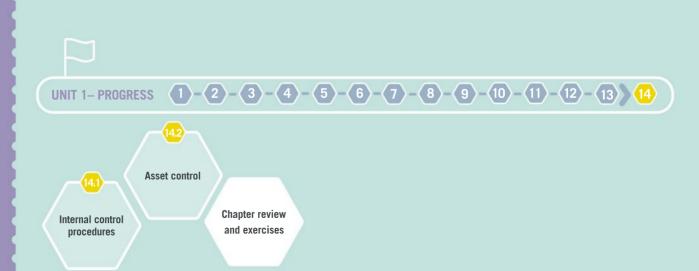
Part of the role of accounting is to provide control mechanisms to protect a business's economic resources. The assets of a business may be at risk because of misuse or theft by dishonest individuals. However, steps can be taken to reduce the likelihood of theft by either employees or outsiders.

In this final chapter of Unit 1, you will consider different internal control procedures that a small business might implement, and how effective they can be. You'll also examine procedures used to control record keeping, not just security.

#### LEARNING OBJECTIVES

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

- explain the meaning of the term 'internal control' [14.1]
- outline how internal control is achieved in a business situation [14.1]
- describe procedures that help to achieve control over cash [14.2]
- outline security measures that business owners may use [14.2].



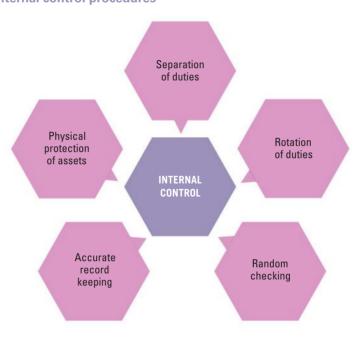
#### 14 1 INTERNAL CONTROL PROCEDURES

No business owner likes to consider the possibility of their cash or assets being stolen, but the truth is that it happens in almost all industries, businesses and enterprises. But deliberate theft is not the only thing that can put assets at risk. Poor record keeping, human error or even bad luck can mean that assets go missing and money gets lost.

Accounting helps to protect the assets of a business by providing the means for checking what it owns. A system of internal control involves setting up procedures within the structure of a business to protect its assets.

Figure 14.1 shows some typical internal control procedures.

FIGURE 14.1 Internal control procedures



Business owners and managers could try the following internal control procedures.

- Separation of duties: Don't leave staff in charge of one area for an extended period, or in total control of all processes. For example, staff involved in receiving cash shouldn't also count the cash or do the banking. The system should require several staff members to be involved in any one process, to reduce opportunities for staff to commit a fraud against the business.
- Rotation of duties: Rotate the duties of employees occasionally to prevent one staff member creating a situation where they can carry out a fraud undetected. Job rotation also ensures that correct procedures are followed. For example, if one staff member has done the banking for several months, they should be moved to another task and another employee should be trained to carry out banking duties. Alternatively, you could have more than one person involved in the banking.
- Random checking: Carry out checks occasionally, without warning, to ensure that no goods or money are missing. If cash on hand is accessible to staff, it must be watched carefully and checked regularly. Such checking can be a sensitive issue but it should be carried out as part of a normal routine. Making sure that all registers have sufficient change is a good excuse for checking register tills.

internal control a system of procedures

that protect the assets of a business and ensure the accuracy of its accounting system



Rotating banking duties, such as the regular depositing or withdrawal of funds at ATMs, helps a business protect its assets.

- Accurate record keeping: In any accounting system, ensure that records of all cash receipts and payments, and references to their source documents, are up to date and accurate; otherwise, they can't be used as control mechanisms against fraud. Care should also be taken with receipt books and cheque books. These documents are pre-printed with sequential numbers and must all be accounted for. Of course, record keeping is a vital part of any good accounting system and the requirements of verifiability should always be kept in mind.
- Physical protection of assets: Take steps to prevent the physical removal of a firm's assets. Management should consider the use of security cameras and alarm systems to protect assets. If management becomes too relaxed about security, it may create temptation in dishonest staff or customers, and theft may occur when least expected.

Some of these internal control procedures won't be relevant to all firms. For example, in a small business with one or two employees, it may not be possible to rotate duties. However, as a business grows and takes on more employees, the demand for more internal control procedures also grows. The procedures put in place must respond to the needs of the business and its assets.

At the same time, managers need to consider the ethical ramifications of some of these procedures. Is it appropriate to treat your staff as potential thieves? In a large business, staff may not take these procedures personally – but in a small business, overly strict internal control procedures could alienate the very people who keep the business running.

#### 14.1 CHECK YOUR UNDERSTANDING



- 1 What is the aim of internal control?
- 2 State, and describe, three different examples of internal control procedures.
- 3 Describe some control mechanisms that you have seen in place at each of these locations.
  - a A cinema
  - **b** A bookstore
  - c A car park

### 14.2 ASSET CONTROL

#### **CASH**

The asset most likely to be the target of fraudulent behaviour is cash. It's almost impossible to prove ownership of notes and coins. A firm must take steps to ensure that the cash coming into the business ends up in the business bank account. Similarly, money leaving the account should only be for legitimate, business purposes.

Every business owner needs to consider how best to control the cash that moves through the business on a day-to-day basis. The following are some common procedures.

- All cash receipts should be evidenced by a receipt (either handwritten or cash. register docket) or by bank documents when accepting EFTPOS payments. Documentation is essential when trying to verify the total cash receipts for a day's trading.
- Clear cash registers regularly to avoid having large sums of money in the registers at any time. This helps to prevent theft, because large notes (\$100 and \$50 notes) don't accumulate in the cash registers.
- In larger firms, or where the business deals in large sums of cash, two staff members should clear registers together. The money should be counted immediately and recorded against the specific register.
- Don't leave large sums of money on business premises overnight or on weekends. Most banks provide a night safe as an alternative. This allows businesses such as restaurants to deposit cash after hours. Some businesses have their own safe on their premises, but these must be securely fixed and hidden, if possible. There have been cases of theft when the entire safe has been stolen from business premises!
- Bank daily takings intact, to allow checking against cash register tapes. It's not acceptable for employees to borrow from the till to buy their lunch or for a 24-hour loan. Money put in the till should remain in the till until it is counted and verified with the appropriate documents.
- Don't make payments using cash from cash registers. Make all payments by cheque or by EFT, as these modes of payment can be supported by documentation.
- When large amounts of cash need to be carried, two staff should go to the bank together, or a security firm should be employed.
- Maintain formal cash receipts and cash payments journals for recording all document numbers and amounts.
- Prepare a bank reconciliation statement regularly. This involves comparing the statement prepared by the bank with the cash journals maintained by the business. This check helps in picking up any recording errors made. It also updates the business records with additional transactions such as bank fees and interest.

These steps don't guarantee protection from all forms of fraud and theft, but they can reduce the likelihood of theft. Following such steps will result in a more accurate set of accounting records, which will hopefully protect the assets of the business.

#### bank reconciliation checking the cash records kept by a business against the records kept by a bank

#### MATERIALS AND INVENTORY

Management may require further control measures when a business holds large amounts of materials (in the case of service firms) or inventory (for trading firms).

Materials are often purchased in advance so that work can start quickly when quotes are accepted. They may be stored in garages, in warehouses or at the business premises. Building materials and tools are often targets for thieves, and the loss of such items can have a significant effect on a small business. Owners of small businesses need to be aware of the potential for such losses and must act to secure their assets.

Depending on the nature of the materials or inventory being held, management may consider using some of the following security measures.

- Security personnel: Some businesses employ guards during trading hours, while others use security patrols at night. Depending on the needs of the business and the level of security required, security personnel can be a great deterrent to potential thieves.
- Undercover security: Some larger businesses (e.g. large retail outlets) employ staff
  who appear to be shoppers but are actually undercover guards who watch out for
  shoplifters.
- *Video surveillance*: Many business owners install closed circuit television cameras to cut down on theft from their business premises.
- Security tags: Used mainly in trading firms, security tags attached to products help cut down on losses through shoplifting.
- Two-way mirrors: Many businesses have two-mirrors behind their counters where
  customers are served, so that managers can see what is happening on the shop
  floor. They are used successfully in both service and trading environments.
- Dye bombs: This security device is used mainly in retail outlets.
- *Electronic security gates*: Security gates can be used in a range of businesses and help prevent thefts of a variety of items.

Again, there can be ethical concerns to consider. Customers have a right to privacy, and devices such as cameras must not be used to monitor people inappropriately.

Single-owner businesses can't always afford, or may not need, some of these security measures. Management should consider what security is required for their business and respond on that basis. Of course, if losses by theft are getting out of control, something different should be attempted or additional security measures may be required.

#### 14.2 CHECK YOUR UNDERSTANDING



- 1 State six different ways of ensuring that control is maintained over cash.
- 2 Make a list of security techniques or devices you have noticed in businesses in some shopping centres you have visited. State the name of the business, and describe briefly the types of security measures being used.
- 3 The owner of Williamstown Plumbing doesn't believe that he needs to take security measures in relation to his business, as he isn't running a retail store. He stores his plumbing materials in the garage at home, and his tools are always in a locked toolbox in the back of his van. Do you agree with this business owner? Give reasons for your answers.

## 14

#### **CHAPTER REVIEW**

#### **KEY CONTENT**

- [14.1]
- Accounting helps to protect the assets of a business by providing the means of checking what it owns. A system of internal control involves setting up procedures within the structure of a business to protect its assets.
- **[14.2]**
- A range of specific procedures can be used to monitor cash, inventory, materials and other assets. Some of these procedures target customers, staff, or both.

#### **CHAPTER 14 EXERCISES**

#### 1 INTERNAL CONTROL - CASH



Nick Louder is the owner of the Happy Valley Amusement Park. The park operates six different rides at \$6 per ride, and one employee looks after each ride. Louder has told his workers to collect the cash when the customers first get on the rides, as this eliminates the cost of tickets. As he wants to know how much each ride earns, Louder has instructed the ride attendants to count the money at the end of the day and write the total received in an exercise book in the office. The attendants then put the money in the top drawer of Louder's desk.

Louder is satisfied with his system, which has helped him to identify and replace the least popular rides. His workers also appear to be quite happy to work as required.

- a Make a list of some internal control problems with the way Louder is running his business.
- **b** Write a plan for how you think the business should be operated. Your plan should include a step-by-step approach, from the selling of tickets to the banking of money.

Operating a cash business without careful attention to internal control of cash can lead to serious problems for a business owner.



#### 2 INTERNAL CONTROL - GOODS



Rhonda Roma is a tomato grower from Yarrawonga. When her fruit is ready to sell, she employs six people to work at several local markets. They're all provided with 100 kg of tomatoes, plus some display equipment and a cash float for the day. As the markets have several vendors competing for business, Roma allows her workers to set the price for the day so that they stay competitive. At the end of a day's trading, they add up the day's takings and return everything to Roma. As the markets are held throughout summer, there is some spoilage and her workers are permitted to throw out any damaged produce. As there is no power available at the market sites, a cash register cannot be used, so no receipts are issued.

Roma is a little concerned. In the past week, the takings from one market were significantly lower than the others. The worker explained that the market was very quiet; however, she only returned 20 kg of tomatoes at the end of the day, saying that most of the fruit was affected by the sun.

- a In regard to internal control, are you satisfied with the way Roma operates her business? If not, make a list of areas of concern that you have identified.
- **b** If this were your business, how would you improve the internal control procedures? Prepare a report for Roma, outlining your recommended changes for her business.



Internal control of goods is crucial if business owners wish to maximise profits.

#### 3 INTERNAL CONTROL - SERVICE BUSINESS



Kamala Khan operates a hair salon in a regional shopping centre. She employs four hairdressers. She has been worried about the control over cash moving through her business, and has decided not to accept cash transactions from now on. With the support of her bank, she sets up an EFTPOS terminal and all customers can use contactless card payments (e.g. Visa payWave) to record their transactions.

As the bank keeps records of everything going through the EFTPOS terminal, Khan no longer sees the need to keep any documentation at all. She tells her employees to use the EFTPOS facility and to no longer accept cash from customers. Now that there's no cash on the premises at all, Khan feels that she can stop worrying and catch up with her friends at the local café on a regular basis, knowing that the system will take care of everything.

- a Do you agree with Khan that the system she has put in place can now run itself? Discuss the advantages and disadvantages of the new system.
- **b** Does Khan need to refine the system to ensure that it achieves internal control? Explain your answer fully.



#### **CHAPTER CHECKLIST**

Now that you have finished Chapter 14, double-check your progress.

Are you ready for your Unit 1 assessment?

#### I have ...

- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- Manded in my workbook for marking.

#### I understand ...

- or internal control procedures to safeguard resources against theft and fraud
- dethical considerations when recording and reporting transactions.

#### I can ...

- use correct accounting terminology
- of apply theoretical knowledge to actual and simulated situations
- or explain and apply appropriate internal control procedures
- of analyse the effect of financial transactions on the accounting equation
- discuss ethical considerations faced by business owners when recording and reporting transactions.

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#### **PREPARE**

Read back over the chapter now, then complete the online revision activity.



#### WATCH

Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



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## ACCOUNTING AND DECISION-MAKING FOR A TRADING BUSINESS

Unit 1 of VCE Accounting mostly focused on service businesses. These businesses are generally easier to account for, because few transactions involve the buying and selling of physical items. Those transactions are the lifeblood of trading firms, and Unit 2 focuses specifically on the accounting needs of these businesses, which are significantly more complex.

In this unit, you will learn about:

- recording and reporting on the purchase and sale of inventory
- preparing historical and budgeted accounting reports
- managing a trading business
- strategies to improve business performance.

#### Area of Study 1: Accounting for inventory

On completion of this unit the student should be able to record and report for inventory and discuss the effect of relevant financial and non-financial factors, and ethical considerations, on the outcome of business decisions.

#### Area of Study 2: Accounting for and managing accounts receivable and accounts payable

On completion of this unit the student should be able to record and report for accounts receivable and accounts payable, and analyse and discuss the effect of relevant decisions on the performance of the business including the influence of ethical considerations.

#### Area of Study 3: Accounting for and managing non-current assets

On completion of this unit the student should be able to record and report for non-current assets and depreciation.

CHAPTERS

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## THE TWO-FOLD EFFECT OF TRANSACTIONS

Items that are bought and sold by trading firms are usually referred to as inventory. Accounting for inventory is complex, and multiple accounts and journals are affected with each transaction. This is why trading firms need more reports and records than service firms.

In this chapter, you'll revise the effect of transactions on the balance sheet of different small businesses. However, rather than prepare numerous reports one after another, you'll use a worksheet to summarise the information.

#### **LEARNING OBJECTIVES**

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

- explain the 'two-fold effect of transactions' [15.1]
- state the two-fold effect of a variety of transactions for a trading business [15.2]
- prepare a worksheet for a trading firm, showing the two-fold effect of transactions [15.2]
- prepare a balance sheet for a trading firm from a worksheet [15.2]
- describe the link between balance sheets and the qualitative characteristics of accounting [15.3].



#### 15.1 TRANSACTIONS IN SERVICE FIRMS

In Chapter 3, you learnt about balance sheets. These accounting reports show the financial position of an entity, with information on assets, liabilities and owner's equity.

In that chapter, balance sheets were prepared after every business transaction. Of course, this isn't a realistic approach to accounting for a small business. However, it clarified how every transaction affected at least two items in the balance sheet. Sometimes assets were affected, sometimes liabilities; on other occasions, the owner's equity changed in the report.

This is known as the two-fold effect - for every transaction, at least two items are affected on balance sheets. (If GST is involved, a third item will be affected by each transaction.)

Let's consider the example of Speed-E Couriers to demonstrate and revisit how transactions affect the balance sheet prepared for a service business. Table 15.1 shows the transactions that occur in the business's first week of operations, and their two-fold effect on the firm's balance sheet.

business, at least two items are affected on the balance sheet

two-fold effect (of

transactions)

where, for every

transaction in a

TABLE 15.1 The two-fold effect of transactions on the balance sheet

|       | Transaction  | First effect  | Second effect   |
|-------|--|---|---|
| Jun 1 | Owner deposited<br>\$50 000 to commence<br>business as Speed-E<br>Couriers | Increase Cash at Bank<br>(asset) by \$50 000  | Increase Capital (owner's equity) by<br>\$50 000  |
| Jun 2 | Took out an interest-only loan of \$20 000 from Total Finance              | Increase Cash at Bank<br>(asset) by \$20 000  | Increase Loan (liability) by \$20 000   |
| Jun 3 | Bought motorcycle<br>for cash \$10 000, plus<br>GST of \$1000              | Decrease Cash at Bank<br>(asset) by \$11 000  | Increase Motorcycle (asset) by<br>\$10 000<br>AND<br>Decrease GST debt (liability) by<br>\$1000   |
| Jun 4 | Purchased computer<br>on credit for \$4000,<br>plus GST of \$400           | Increase Computer<br>(asset) by \$4000<br>AND<br>Decrease GST debt<br>(liability) \$400 | Increase Accounts Payable (liability)<br>by \$4400  |
| Jun 5 | Banked courier fees<br>\$15 000, plus GST of<br>\$1500                     | Increase Cash at Bank<br>(asset) by \$16 500  | Increase Capital (owner's equity) by<br>\$15 000, as courier fees are classified<br>as revenue<br>AND<br>Increase GST debt (liability) by<br>\$1500 |
| Jun 6 | Paid wages for the week \$1000   | Decrease Cash at Bank<br>(asset) by \$1000  | Decrease Capital (owner's equity) by<br>\$1000, as wages are classified as an<br>expense  |

As you can see, regardless of the nature of the transaction, there are always at least two items affected in the balance sheet.

The transactions listed for 5 and 6 June show the effect of revenues and expenses on owner's equity. When a business receives revenue, the effect on owner's equity is an increase, as revenues increase profits and profits are added to owner's equity at the end of the period. On the other side of the report, the Cash at Bank value also increases.

When an expense is paid (e.g. wages), the opposite occurs. As expenses decrease profit, they lead to a *decrease* in the owner's equity. On the assets side of the report, Cash at Bank *decreases* when the wages are paid.

Always remember: revenue items will lead to an increase in owner's equity, while expense items will decrease the owner's equity, as reported in the balance sheet.

Note also the effect of GST on the balance sheet. If services are provided for cash, Cash at Bank increases. The corresponding effect is an increase in the firm's revenue, plus an increase in the GST debt of the business. If a business pays GST on the purchase of an item, the payment decreases its GST debt.

#### **USING A WORKSHEET**

A second way to show the effect of transactions on the balance sheet is to use a worksheet. This accounting table is a much simpler alternative to preparing numerous reports, one after another.

This worksheet is based on the accounting equation, with *assets* on the left side and *liabilities* and *owner's equity* on the right side. It takes its format from the T-form balance sheet.

The worksheet in Figure 15.1 has been prepared using the transactions shown in Table 15.1. The difference this time is that you can see how each individual transaction affects the items in the balance sheet.

FIGURE 15.1 Worksheet approach: transactions and the two-fold effect on a service business

|   |                 | Assets     |          | Liabilities      |           |               | Owner's equity |
|---|-----------------|------------|----------|------------------|-----------|---------------|----------------|
| Transaction   | Cash at<br>bank | Motorcycle | Computer | Accounts payable | Loan      | GST<br>debt   | Capital        |
| Jun 1 Owner deposited \$50 000 to commence business as Speed-E Couriers | +\$50 000       |            |          |                  |           |               | +\$50 000      |
| Jun 2 Took out an interest-only loan of \$20 000 from Total Finance     | +\$20 000       |            |          |                  | +\$20 000 |               |                |
| Jun 3 Bought motorcycle for cash \$10 000, plus GST of \$1000           | -\$11000        | +\$10000   |          |                  |           | -\$1000       |                |
| Jun 4 Purchased computer on credit for \$4000, plus GST of \$400        |                 |            | +\$4000  | +\$4400          |           | <b>-\$400</b> |                |



|  | Assets          |            |          | Liabilities      |          |             | Owner's equity   |
|--|-----------------|------------|----------|------------------|----------|-------------|------------------|
| Transaction  | Cash at<br>bank | Motorcycle | Computer | Accounts payable | Loan     | GST<br>debt | Capital          |
| Jun 5 Banked courier fees \$15 000, plus GST of \$1500 | +\$16500        |            |          |                  |          | +\$1500     | +\$15000         |
| Jun 6 Paid wages for the week \$1000                   | -\$1000         |            |          |                  |          |             | <b>-</b> \$1 000 |
|  | \$74500         | \$10000    | \$4000   | \$4400           | \$20 000 | \$100       | \$64000          |

Figure 15.1 clearly shows the two-fold effect of each transaction. Some items have increased, while others have decreased, but two items have been affected every time. The results can then be tallied at the bottom of the worksheet, ready to be listed in a formal balance sheet.

The results from these six transactions would be reported as in the balance sheet in Figure 15.2.

FIGURE 15.2 Balance sheet derived from worksheet totals

#### SPEED-E COURIERS: BALANCE SHEET AS AT 6 JUNE 2023

| Assets       | \$     | Liabilities        | \$     | \$     |
|--------------|--------|--------------------|--------|--------|
| Cash at bank | 74 500 | Accounts payable   | 4400   |        |
| Motorcycle   | 10000  | Loan Total Finance | 20 000 |        |
| Computer     | 4000   | GST debt           | 100    | 24 500 |
|              |        | Owner's equity     |        |        |
|              |        | Capital            |        | 64000  |
|              | 88 500 |                    |        | 88 500 |

Note that the balance sheet is still based on the accounting equation (assets = liabilities + owner's equity), so it must still balance.

#### 15.1 CHECK YOUR UNDERSTANDING



- 1 Explain the meaning of the 'two-fold effect of transactions'.
- 2 Provide an example of a business transaction that affects a balance sheet by:
  - a increasing one asset and decreasing another asset.
  - **b** increasing an asset and increasing a liability.
  - c decreasing an asset and decreasing a liability.
  - d increasing an asset and increasing owner's equity.
- 3 A service business receives cash fees of \$1000 and GST of \$100, and it pays wages of \$400. Explain how these events affect the balance sheet.

#### 15.2 TRANSACTIONS IN TRADING FIRMS

Trading businesses have many of the same transactions as service firms. Both types of businesses have owners that contribute capital. They both may take out loans, and both pay regular expenses such as advertising and wages.

The main difference between the two types of businesses is the frequent transactions involving the buying and selling of inventory. The basic purpose of a trading firm is to buy and sell goods as quickly as possible to generate a profit. Inventory could be anything - cars, house plants, vitamins, sneakers - that is bought and sold.

#### inventory

goods purchased by a trading firm for resale

#### **PURCHASING INVENTORY**

There are two ways a trading firm may purchase its inventory: using cash or on credit.

Cash purchases are those that the business pays for at the time of purchase. Business owners do this in some industries because substantial discounts may be offered to cash clients. For example, retail outlets may have inventory delivered to their door on a COD (cash on delivery) basis. A cheque is written out when the goods arrive, or an Electronic Funds Transfer (EFT) may be done immediately. The inventory is then placed on the shelves, ready for sale.

The second method of buying inventory is via a credit facility. Trade credit is when a supplier offers a customer a period to pay for the goods purchased. A typical trade credit arrangement is for the buyer to have 30 days to pay the account. This gives the retail store time to try to sell the goods to its customers before it pays the supplier.

Table 15.2 shows the two-fold effect of these two types of purchases for Geelong Glassware.

TABLE 15.2 Two-fold effect of purchase transactions by a trading business

|       | Transaction  | First effect  | Second effect                                      |
|-------|--|---|--|
| Jul 1 | Bought inventory for<br>cash for \$1000, plus<br>GST of \$100  | Increase Inventory (asset)<br>by \$1000<br>AND<br>Decrease GST Debt<br>(liability) by \$100 | Decrease Cash at Bank (asset)<br>by \$1100         |
| Jul 2 | Bought inventory on<br>credit for \$2000, plus<br>GST of \$200 | Increase Inventory (asset)<br>by \$2000<br>AND<br>Decrease GST Debt<br>(liability) by \$200 | Increase Accounts Payable<br>(liability) by \$2200 |

In both these transactions, the asset Inventory increased. Regardless of whether goods are purchased for cash or on credit, inventory will always increase because of these transactions.

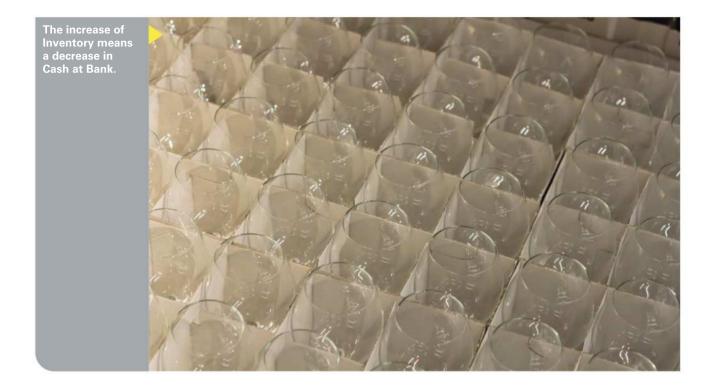
The GST debt is also reduced by both transactions, because the business must pay GST to its suppliers. These amounts may be deducted from the GST collected from customers, which reduces the firm's GST debt.

The difference between the two types of purchases is that the cash purchase decreased an asset (Cash at Bank), while the credit purchase increased a liability (Accounts Payable).

when cash is paid for goods at the point of delivery, rather than paying later when an invoice is received

accounts payable

suppliers that a business owes money to after obtaining goods or services on credit



#### **SELLING INVENTORY**

Having purchased inventory, the owner of a trading firm will then try to sell it as soon as possible. Once again, there are two possibilities: cash and credit sales.

However, there is a further complication. When inventory is sold, two transactions actually occur.

- First, inventory is sacrificed (used up) to make a sale. As inventory has future economic benefits and is controlled by the business, it is classified as an *asset*.
- However, when it is sold, it's no longer an asset. The inventory has been used up and should be written off as an *expense*.

This change in the nature of the inventory is one transaction. The asset Inventory turns into an expense, **Cost of sales**.

The second transaction is that of the revenue created by the sale. Once again, the two possibilities are a cash sale or a credit sale.

Table 15.3 shows both transactions that arise when Geelong Glassware sells their inventory.

TABLE 15.3 Two-fold effect of selling goods in a trading business

|       | Transaction  | First effect   | Second effect   |
|-------|--|--|---|
| Jul 3 | Sold goods for cash<br>for \$800, plus GST of<br>\$80 (cost price \$500) | Increase Cost of Sales (expense) by \$500, the cost price of the goods sacrificed AND Increase Cash at Bank (asset) by \$880, because this is the amount actually received | Decrease Inventory (asset) by \$500, the cost price of the goods sacrificed AND Increase Owner's equity, as revenue of \$800 has been earned AND Increase GST Debt (liability) by \$80, as this has been collected from customers |









| Transaction |   | First effect   | Second effect  |
|-------------|---|--|--|
| Jul 4       | Sold goods on credit<br>for \$800, plus GST of<br>\$80 (cost price \$500) | Increase Cost of Sales (expense) by \$500, the cost price of the goods sacrificed AND Increase Accounts Receivable (asset) by \$880, as they now owe this amount | Decrease Inventory (asset) by \$500, the cost price of the goods sacrificed AND Increase Owner's equity, as revenue of \$800 has been earned AND Increase GST Debt (liability) by \$80, as this has been charged to credit customers |

Whenever inventory is sold, the asset account Inventory must decrease, and the cost price of the goods sold is transferred to the expense (Cost of Sales).

Note that in these examples the cost price entry is the same, regardless of whether goods are sold for cash or on credit. The effect on the GST debt is also the same, regardless of whether the goods were sold for cash or on credit.

The difference between the two types of sales relates to the asset that is increased when a sale is made.

- If inventory is sold for cash, the Cash at Bank account naturally increases.
- If customers are provided with inventory on a credit basis, then Accounts Receivable will be created in the balance sheet.

**Accounts receivable** are customers that have been provided credit, on the expectation that they will pay sometime in the near future. As accounts receivable have a legal obligation to pay the business, they are expected to have future economic value and are therefore classified as a current asset.

It's important to note that the amount owed by accounts receivable includes the 10% GST charged on the sale. When a credit sale is made, the invoice price should be stated, plus the 10% GST, and then the total amount owing.

#### accounts receivable

customers that owe a business money because they have obtained goods or services on credit



#### **RECORDING SALES AND PURCHASES IN A WORKSHEET**

As with a service business (pages 247–8), purchases and sales of inventory can be recorded in a worksheet, which will show the two-fold effect of the transactions.

Figure 15.3 shows the combined purchases and sales already noted for Geelong Glassware. It has one additional transaction, before these transactions, made to establish the business. There are also two further transactions involving the firm's accounts receivable and accounts payable; these help provide a full picture of the events faced by the managers of a trading firm.

FIGURE 15.3 Worksheet approach: transactions and the two-fold effect on a trading business

|  |                  | Assets         |                     | Liabi            | lities         | Owner's<br>equity |
|--|------------------|----------------|---------------------|------------------|----------------|-------------------|
|  | Cash<br>at bank  | Inventory      | Accounts receivable | Accounts payable | GST<br>debt    | Capital           |
| Jul 1<br>Owner deposited \$40 000<br>to commence<br>business                       | +\$40 000        |                |                     |                  |                | +\$40 000         |
| Jul 1 Bought inventory for cash for \$1000, plus GST \$100                         | <b>-</b> \$1 100 | +\$1000        |                     |                  | <b>-</b> \$100 |                   |
| Jul 2 Bought invento- ry on credit for \$2000, plus GST \$200                      |                  | +\$2000        |                     | +\$2200          | <b>-</b> \$200 |                   |
| Jul 3<br>Sold goods for<br>cash \$800, plus<br>\$80 GST (cost<br>price of \$500)   | +\$880           | <b>-</b> \$500 |                     |                  | +\$80          | +\$300            |
| Jul 4<br>Sold goods on<br>credit for \$800,<br>plus \$80 GST<br>(cost price \$500) |                  | <b>-</b> \$500 | +\$880              |                  | +\$80          | +\$300            |
| Jul 5 Paid accounts payable \$600 of amount owing                                  | -\$600           |                |                     | -\$600           |                |                   |
| Jul 6 Received \$200 from accounts receivable                                      | +\$200           |                | -\$200              |                  |                |                   |
|  | \$39380          | \$2000         | \$680               | \$1600           | - \$140        | \$40600           |



Remember: Inventory can be bought using cash or on credit, and can be sold for cash or on credit.

Figure 15.3 demonstrates that all sales from a trading business:

- increase either Cash at Bank or Accounts Receivable (with selling price)
- decrease Inventory (with cost price)
- increase owner's equity by the difference between cost and selling price (i.e. the profit made on the deal)
- increase the liability shown as the GST Debt.

When inventory is sold, an expense item, Cost of Sales, is created. Because expenses decrease profit, the ultimate impact of this item is a reduction in the owner's equity in the balance sheet. The worksheet therefore deducts the cost of sales from the sales revenue and adds the profit on the deal to the owner's equity.

The results from the worksheet can then be presented in a balance sheet in the usual fashion, as shown in Figure 15.4.

FIGURE 15.4 Trading business balance sheet derived from worksheet totals

#### **GEELONG GLASSWARE: BALANCE SHEET AS AT 6 JULY 2023**

| Assets              | \$     | Liabilities      | \$   | \$     |
|---------------------|--------|------------------|------|--------|
| Cash at bank        | 39 380 | Accounts payable | 1600 |        |
| Inventory           | 2000   | GST debt         | -140 | 1 460  |
| Accounts receivable | 680    |                  |      |        |
|                     |        | Owner's equity   |      |        |
|                     |        | Capital          |      | 40 600 |
|                     | 42 060 |                  |      | 42060  |

#### 15.2 CHECK YOUR UNDERSTANDING



- 1 Describe one benefit for a trading firm of paying COD for its inventory purchases.
- 2 Describe an advantage of buying inventory using a trade credit facility.
- 3 State the effect on a balance sheet when a trading business buys inventory for cash and pays GST.
- **4** Would your answer to Question **3** change if the purchase of inventory was on credit? Explain your answer fully.

## 15.3

## BALANCE SHEETS AND THE QUALITATIVE CHARACTERISTICS

You learnt about the six qualitative characteristics of accounting reports in Chapter 2. It's worth revisiting those here, at the start of Unit 2, and considering how they're reflected in the balance sheet.

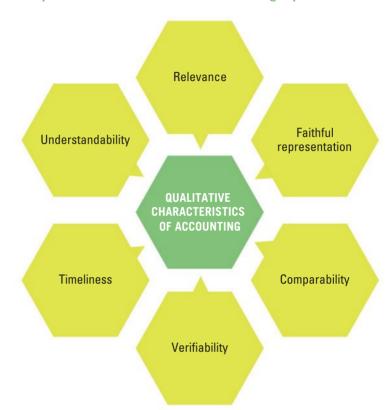


FIGURE 15.5 The qualitative characteristics of accounting reports

The main difference between service businesses and trading businesses is accounting for the asset known as Inventory.

As the examples in this chapter have shown, all assets, including inventory, are usually recorded at their original purchase price, which is also referred to as their original cost. This cost can be verified with a business document such as an invoice, a cheque butt or an EFT record. This meets the demands of the characteristic of *verifiability*, as the value of the asset can always be checked with these documents.

The selling prices of inventory are not relevant to the value shown for this asset in a balance sheet. The cost price of inventory satisfies the demands of *faithful representation* in terms of the value reported in a balance sheet. The real-world economic event is the buying of the inventory, and supporting documents should always be available to provide evidence of the cost price of this asset. The *relevant* amount to be reported is the cost of the inventory, and this satisfies both *faithful representation* and *verifiability*.

The inventory remains as an asset until it is sold. At this point in time, a second transaction takes place and the selling price of the stock sold can be recorded as a revenue item. When this event takes place, the asset Inventory should decrease (at cost price), as the inventory sold is no longer under the control of the entity. (It has been used to help generate revenue for the business.)

## 15 CHAPTER REVIEW

#### **KEY CONTENT**

- Balance sheets list the assets, liabilities and owner's equity for a business at the end of a period. Every transaction made by that business affects at least two items in the balance sheet. This is known as the two-fold effect of transactions. Using a worksheet to summarise all transactions, then transferring that summary to the balance sheet, is an easy way to create balance sheets that accurately reflect this effect.
- **[15.2]** Trading businesses buy and sell inventory to generate profit. Inventory is an asset, and buying and selling inventory (whether on a cash or credit basis) causes the value of that asset to rise and fall. Buying inventory is a single transaction, but selling it is two transactions a drop in value for the asset (recorded as an expense called Cost of Sales) and an increase in owner's equity due to the revenue of the sale.
- [15.3] The purchase price of inventory should be recorded by a business document, to meet the demands of *verifiability*. Balance sheets show the cost of that inventory, satisfying *relevance*, but not the selling price, which is not relevant. Recording the cost price also satisfies the demands of *faithful representation* in terms of the value reported in a balance sheet.

#### **CHAPTER 15 EXERCISES**

#### 1 WORKSHEET ANALYSIS: SERVICE BUSINESS





Jimmy Isles is the owner of South Isles Security Services. He provides you with the following list of transactions in his first week of business.

#### 2023

Jul 1 Isles invested \$25 000 cash to commence the business



- 3 Provided security services at a nightclub and received \$1900 cash, plus \$190 GST
- 4 Purchased a laser printer on credit for \$1200 (GST \$120)
- 5 Isles contributed office furniture to the business valued at \$500. He previously used the furniture at his private home but it is no longer required
- 6 Provided security at a high school formal and received \$1200, plus \$120 GST. Paid advertising \$100, plus GST \$10
- 7 Isles withdrew \$200 for personal use
- a Prepare a worksheet to show the two-fold effect of each of the above transactions. Use the following headings in your worksheet: Cash at bank, Office equipment, Office furniture, GST liability, Accounts payable, Capital.
- **b** Use the final results of your worksheet from part **a** to prepare a balance sheet as at 7 July 2023.



#### **2 WORKSHEET ANALYSIS: SERVICE BUSINESS**



Altona Meadows Landscaping Services is a small business serving both commercial and domestic clients. It is owned and managed by Michelle Faulkner and has been in business for several periods. Michelle uses the accrual method of accounting and recognises GST at the time services are provided.

On 31 July 2023 the balance sheet prepared for this business showed the following values: Cash at bank \$1200, Vehicle \$35 000, Equipment \$18 000, Accounts receivable \$800, Accounts payable \$400, GST liability \$1200, Loan \$4400, Capital \$49 000.

During the first week of August the following events occur.



- 2 Received cash fees from clients amounting to \$1800, plus GST \$180, and paid petrol expenses of \$200, plus GST of \$20
- 3 Paid \$900 off the business loan
- 4 Purchased new equipment on credit to the value of \$2000, plus GST of \$200
- 5 Charged a commercial client \$1000 for services provided, plus GST of \$100, and paid wages of \$400
- 6 Received cash fees of \$800, plus \$80 GST, and paid advertising \$200, plus \$20 GST
- 7 Paid accounts payable \$400 on account
- a Prepare a worksheet to show the two-fold effect of each of the above transactions. Use the headings in the list of opening balances. (*Hint:* include the opening balances at the top of the worksheet.)
- **b** Using the final results of your worksheet from part **a**, prepare a balance sheet as at 7 August 2023.

#### SPREADSHEET

#### **3 WORKSHEET ANALYSIS: TRADING BUSINESS**



Darryl Holland decides to open a new business trading under the name Dutchy's Paints & Wallpapers. He aims to make a profit through buying and selling a range of paints, wallpapers and assorted accessories. Holland uses the accrual method of recognising GST.

The following events take place in the early stages of his business.

## Sep 1 Holland contributed cash of \$50 000 and a vehicle valued at \$20 000 to start the business



- 3 Made an EFT payment for new display equipment costing \$15 000, plus GST of \$1500
- 4 Bought inventory for \$18 000 COD, plus \$1800 GST
- 5 Purchased inventory on credit for \$12 000 from Paints 'R' Us (plus GST of \$1200)
- 6 Sold goods for \$2000 cash, plus \$200 GST (cost price of goods sold \$800)
- 7 Sold goods for \$1000 on credit, plus \$100 GST (cost price of goods sold \$500)
- 8 Repaid \$200 to Mutual Finances
- 9 Sold goods for \$600 cash, plus \$60 GST (cost price \$300), and paid \$100 for office expenses, plus \$10 GST
- 10 Collected \$300 from accounts receivable
- Prepare a worksheet to show the two-fold effect of each transaction listed above. Use the results to prepare a balance sheet as at 10 September 2023.
- **b** What source documents would Holland use in relation to the transactions on the following dates: 4, 5, 6 and 7 September?

#### **4 WORKSHEET ANALYSIS: TRADING BUSINESS**





Chapel Street Clearance Fashion is a retail store owned by Laura Magill. The business has traded successfully for three years and its most recent balance sheet (prepared 30 June 2023) included the following dollar values: Cash at bank \$13 200, Accounts receivable \$9200, Inventory \$48 000, Office furniture \$6000, Accounts payable \$12 000 and GST liability \$2500.

The transactions listed below occurred during July 2023.



- 2 Received \$2200 cash from accounts receivable on account
- 3 Sold clothing for \$3000 cash, plus \$300 GST (cost of sale \$1400)
- 4 Magill withdrew inventory for personal use. The inventory cost \$2000
- 5 Paid accounts payable \$4000
- 6 Sold clothing on credit for \$6000, plus \$600 GST (cost of sale \$2900)
- 7 Paid weekly wages of \$500 to assistant
- 8 Magill contributed an additional \$5000 cash to the business
- 9 Borrowed \$6000 from NAB
- 10 Cash sale of \$3000, plus \$300 GST (cost price \$1600), and paid for cleaning of shop \$100, plus \$10 GST
- 11 Purchased inventory for cash \$2900, plus \$290 GST
- 12 Paid for website expenses \$150, plus \$15 GST
- 13 Bought a second-hand business vehicle for \$19 000
- 14 Credit sale of \$5000, plus \$500 GST (cost price \$2600), and paid wages of \$500
- a Complete a worksheet to show the two-fold effect of all transactions listed above. (*Hint:* you will need to calculate the owner's capital as at 1 July.)
- b Prepare a balance sheet as at 14 July 2023.

#### 5 WORKSHEET ANALYSIS: TRADING BUSINESS





Luke Mastromanno owns and operates Mastro's Massive Market. On 1 August 2023 the balance sheet of his business included the following items: Cash at bank \$3290, Inventory \$54 300, Accounts receivable \$7800, Shop fittings \$22 500, Accounts payable \$3780 and GST debt \$1800.

During August the following transactions occurred.

- Aug 2 Sold goods for cash \$3000 (GST \$300) cost price of sales \$1300
  - 4 Purchased additional shop fittings costing \$2500 for cash, plus GST of \$250
  - 7 Bought inventory on credit for \$3400, plus \$340 GST
  - 11 Mastromanno withdrew \$800 from the business via EFT
  - 13 Made a credit sale for \$2400 (plus \$240 GST) cost price \$1100
  - 16 Made an EFT payment to accounts payable for \$1280
  - 19 Paid advertising of \$200 (plus \$20 GST) and insurance \$660 (plus \$66 GST)
  - 23 Purchased inventory for \$500, plus \$50 GST, paying by EFT
  - 25 Collected \$1600 from accounts receivable
  - 28 Made a cash sale via EFT for \$2300, plus GST of \$230 (cost of sale \$1100)
- a Complete a worksheet to show the effect of all transactions listed above on the assets, liabilities and owner's equity of Mastro's Massive Market.
- **b** Prepare a balance sheet as at 31 August 2023.
- c State the source document that Mastromanno would use to evidence the transactions that occurred on the following dates: 2, 4, 7, 13 and 19 August.
- **d** Explain how the documents you listed in part **c** help satisfy the qualitative characteristics of accounting.
- e Explain two benefits of using an EFTPOS terminal in a retail outlet.

#### **CHAPTER CHECKLIST**

Now that you have finished Chapter 15, double-check your progress.

Are you ready for your Unit 2 assessment?

#### I have ...

- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- Manded in my workbook for marking.

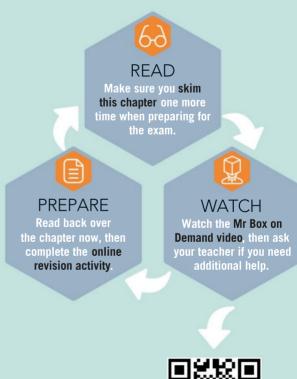
#### l understand ...

- of characteristics of a trading business
- of accounting assumptions and qualitative characteristics as applicable
- of the accounting elements: assets, liabilities, owner's equity, revenues and expenses
- of reporting of accounts receivable and accounts payable in the Balance Sheet
- documents used by a business to record financial transactions

#### I can ...

- use correct accounting terminology
- of explain and apply relevant qualitative characteristics and accounting assumptions
- Manually prepare accounting reports for a trading business

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# CASH RECORDS FOR TRADING FIRMS

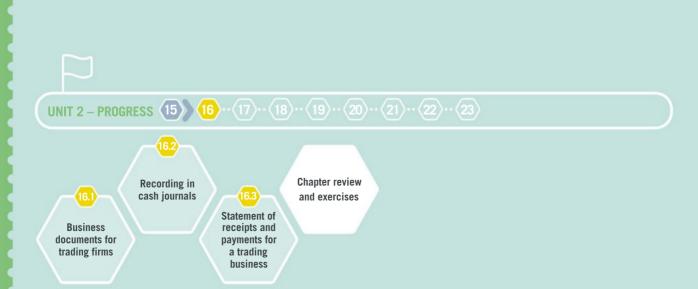
In Chapters 4 and 7, you learnt about the core concepts and documents used in a single entry accounting system. Those chapters used service businesses as their examples. The single entry accounting requirements of a trading business are very similar, but with a few small yet important differences.

In this chapter, you'll examine the cash records and documents used by trading businesses. This information builds on the material in Chapter 4 and Chapter 7; if you're not sure about anything, revise the content in those chapters and then come back here.

#### **LEARNING OBJECTIVES**

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

- identify documents used by a trading business [16.1]
- modify cash journals for use by a trading business[16.2]
- design multi-column cash journals for a trading business [16.2]
- modify cash journals to record cash flows for accounts receivable and accounts payable [16.2]
- prepare a statement of receipts and payments for a trading business [16.3].



## 16.1

## BUSINESS DOCUMENTS FOR TRADING FIRMS

While a service firm earns its revenue by providing services to its customers, trading firms earn revenue by dealing in physical goods, referred to as inventory. The business purchases inventory to sell to customers, hopefully at a higher price than it cost to buy.

The cost of inventory bought for this purpose is called **purchases**. The revenue earned from this transaction is called **sales**. These two terms, purchases and sales, relate to the two basic transactions experienced by trading firms on a continuous basis. Both purchases and sales may occur on a cash or credit basis.

The basic financial documents used by service firms are also used by trading businesses, with some occasional differences.

#### purchases

transactions involving a trading firm acquiring inventory for resale

#### sales

the revenue a trading firm earns by providing goods to its customers

#### purchase invoice

a business document received by a trading firm from accounts payable when it purchases inventory on credit

#### **INVOICES**

A **purchase invoice** is used to provide evidence of a credit purchase of inventory. The supplier of the goods provides the purchase invoice to the trading firm.

FIGURE 16.1 Purchase invoice



**P&F Golf Co.** 365 Fairway Drive Bogieville VIC 3916

Sold to: Watson's Golf Shop 12 Eagle Road Huntingdale VIC 3166 TAX INVOICE No: 81250

Date: 27/8/23

| Quantity | Quantity Description          |     | Total \$ |  |
|----------|-------------------------------|-----|----------|--|
| 5        | Full sets – Never Slice clubs | 400 | 2000.00  |  |

| Plus 10% GST  |  | 200.00  |
|---------------|--|---------|
| TOTAL CHARGED |  | 2200.00 |

TERMS: Strictly 30 days



A **sales invoice** is issued by the trading firm to a customer when a credit sale has been made. Its format is very similar to the purchase invoice, but in this case the trading firm issues the sales invoice to the customer. The firm should keep a copy for its own records.

sales invoice a business document issued by a trading firm to accounts receivable when it sells inventory on credit

#### FIGURE 16.2 Sales invoice



R. Interdonato 3 Norman Avenue Melbourne VIC 3000

#### TAX INVOICE No: 60012

Date: 3/9/23

| Quantity | Description       | Value \$ | Total \$ |
|----------|-------------------|----------|----------|
| 1 set    | Never Slice clubs | 750      | 750.00   |
| 1 doz    | Top-Flite balls   | 30       | 30.00    |

| Sub-total     |  | 780.00 |
|---------------|--|--------|
| Plus 10% GST  |  | 78.00  |
| TOTAL CHARGED |  | 858.00 |

CREDIT TERMS: Strictly 30 days

#### **CHEQUES AND CHEQUE BUTTS**

Trading firms use cheques and cheque butts in exactly the same way as service firms. Cheques may be used for all payments of cash – to pay expenses, buy assets, repay loans and pay accounts payable – and for cash withdrawals by the owner.

#### FIGURE 16.3 Cheque butt

Date: 04/9/23

Payee: PGF Golf Co

For: Accounts payable (Inv. 81250)

Bal b/f: 5000.00

This chq: 2200.00

Bal c/f: \$2800



#### **EFT PAYMENTS**

With the ease of online banking, Electronic Fund Transfers (EFT) are very popular. Most trading businesses now rarely use cheques.

The movement of cash from business to business via EFT is very efficient and fast. Transactions made by EFT can be easily checked, as all transactions will be listed on the bank statement issued to the business owner at the end of each month. The business owner can also print a copy of EFT transactions made via their online account.

#### FIGURE 16.4 A copy of a payment from an EFT transaction

ACME BANK

**CONFIRMATION OF PAYMENT** 

Transfer to: BSB 004-310 A/c number: 2834-112-900

Date/time: 04/09/23 11.01.45

Authorisation: 39288

TOTAL: AUD \$2200.00 Reference: PGF Golf Co Inv. 81250

#### **CASH RECEIPTS**

Trading firms use cash receipts in the same way as service firms.

Receipts are issued when cash flows into the business. This will usually occur as a result of a cash sale, or when a debt from an earlier credit sale is collected from accounts receivable.

In the case of Watson's Golf Shop, when R. Interdonato paid the amount owing on invoice number 60012, the cash receipt shown in figure 16.5 was issued.

Date: 5/9/23

\$ 858.00

#### FIGURE 16.5 Cash receipt



Received from: R Interdonato

The amount of: Eight hundred and fifty-eight dollars

For: On account Inv. 60012

Signed: T Watson

#### **EFTPOS TRANSACTIONS**

Just as cheque books have been replaced by EFT transfers, EFTPOS has replaced cash sales in many businesses. More and more customers carry little or no cash, and choose to use a credit or debit card linked to their personal bank accounts.

EFTPOS is also preferred by many business owners. Although they have to pay bank fees on every transaction and a monthly fee to the bank to hire the terminal, EFTPOS avoids the security issues that come with handling large amounts of cash. Business owners also don't have to chase up accounts receivable that are late with their payments. Instead, it becomes the bank's job to chase up late credit card payments.

Both the customer and the business owner get a copy of the EFTPOS receipt, which covers the documentation requirement.

#### FIGURE 40.0 FETDOO

#### FIGURE 16.6 EFTPOS receipt

ACME BANK

WATSON'S GOLF SHOP 12 Eagle Road Huntingdale VIC 3166

CUSTOMER COPY
Merchant number: 31255
Terminal number: UZ927

DEBIT MasterCard XXXX1291 Date/time: 07/09/23 14:20 Authorisation: 82818

TOTAL: AUD \$550.00

#### 16.1 CHECK YOUR UNDERSTANDING



- 1 Explain the basic difference between the operations of a service firm and a trading firm.
- 2 What is the difference between a sales invoice and a purchase invoice? Explain your answer using names of trading firms.
- 3 Ace Computers buys in bulk from Oz Computer Suppliers. It sells a computer on credit to Brunswick Primary School. In relation to both purchase and sales invoices, would Ace Computers have original documents or copies of the two types of invoices? Explain your answer.



EFTPOS transactions have become very popular, replacing or equalling cash sales in many businesses.

#### 16.2 RECORDING IN CASH JOURNALS

As well as business documents, Chapter 4 presented the two core elements of a single entry accounting system – the cash receipts journal and the cash payments journal.

As with any accounting record, the cash receipts journal for a trading firm should be designed to suit the needs of the business. So, a few changes need to be made to the journals shown in Chapter 4 to make them suitable for a trading business.

#### RECORDING CASH RECEIPTS

Service businesses charge service fees, while trading businesses make money from sales. This means that the cash receipts journal for a trading business records sales rather than fees.

A cash receipts journal may be simple in design, or it may be prepared as a multi-column record. Either design must be able to accommodate the GST collected on the sale of goods. Figure 16.7 shows a simple cash receipts journal for a trading business.

FIGURE 16.7 Cash receipts journal: simple version

#### WATSON'S GOLF SHOP: CASH RECEIPTS JOURNAL (BASIC VERSION)

|       |                         |             | Amount<br>banked | Amount received | GST<br>received |
|-------|-------------------------|-------------|------------------|-----------------|-----------------|
| Date  | Details                 | Receipt no. | \$               | \$              | \$              |
| Oct 1 | Capital                 | EFT         | 6000             | 6000            |                 |
| 2     | Cash sale – clubs       | EFT         | 660              | 600             | 60              |
| 4     | Cash sale – accessories | 4001        | 88               | 80              | 8               |
| 6     | Cash sale – clothing    | 4002        | 77               | 70              | 7               |
| 9     | Cash sale – clubs       | 4003        | 715              | 650             | 65              |
| 11    | Loan – EZ Finance       | EFT         | 5000             | 5 000           |                 |
| 13    | Cash sale – clothing    | 4004        | 165              | 150             | 15              |
| 14    | Cash sale – clubs       | EFT         | 825              | 750             | 75              |
| 15    | Cash sale – clothing    | 4005        | 330              | 300             | 30              |
| 17    | Cash sale – accessories | 4006        | 110              | 100             | 10              |
| 19    | Cash sale – accessories | 4007        | 88               | 80              | 8               |
| 21    | Cash sales – clubs      | EFT         | 572              | 520             | 52              |
| 24    | Cash sale – clubs       | 4008        | 198              | 180             | 18              |
| 27    | Cash sale – clothing    | 4009        | 99               | 90              | 9               |
| 31    | Cash sale – accessories | EFT         | 88               | 80              | 8               |
| 31    | Totals                  |             | 15015            | 14650           | 365             |

You can see that the cash receipts journal shown in Figure 16.7 is very similar to the one shown in Chapter 4 for a service business (p. 38).

The obvious difference is in the 'Details' column. Rather than recording fees received, the journal records a variety of cash sales. The GST collected on these sales has been recorded (where appropriate) and the total cash actually received has been shown. As with all accounting records, the source document should always be noted, if one is available.

When an owner contributes cash as capital, or when a loan is taken out (see 1 and 11 October in Figure 16.7), a receipt wouldn't normally be issued. However, such transactions may be completed via EFT.



In larger firms, a cash register summary may be prepared and the abbreviation 'CRS' may be entered in the receipts journal as a total for the day.

Although this simple cash receipts journal serves a basic purpose, small business owners usually prefer a multi-column journal. The journal in Figure 16.7 can be redesigned with special columns to provide a summary of key transactions.

FIGURE 16.8 Cash receipts journal: multi-column version

#### WATSON'S GOLF SHOP: CASH RECEIPTS JOURNAL

|       |                      |                |                        |             | Sales          |                        |                          |                       |
|-------|----------------------|----------------|------------------------|-------------|----------------|------------------------|--------------------------|-----------------------|
| Date  | Details              | Receipt<br>no. | Amount<br>banked<br>\$ | Clubs<br>\$ | Clothing<br>\$ | Acces-<br>sories<br>\$ | Sundry<br>receipts<br>\$ | GST<br>received<br>\$ |
| Oct 1 | Capital              | EFT            | 6000                   |             |                |                        | 6000                     |                       |
| 2     | Cash sales           | EFT            | 660                    | 600         |                |                        |                          | 60                    |
| 4     | Cash sales           | 4001           | 88                     |             |                | 80                     |                          | 8                     |
| 6     | Cash sales           | 4002           | 77                     |             | 70             |                        |                          | 7                     |
| 9     | Cash sales           | 4003           | 715                    | 650         |                |                        |                          | 65                    |
| 11    | Loan – EZ<br>Finance | EFT            | 5 000                  |             |                |                        | 5000                     |                       |
| 13    | Cash sales           | 4004           | 165                    |             | 150            |                        |                          | 15                    |
| 14    | Cash sales           | EFT            | 825                    | 750         |                |                        |                          | 75                    |
| 15    | Cash sales           | 4005           | 330                    |             | 300            |                        |                          | 30                    |
| 17    | Cash sales           | 4006           | 110                    |             |                | 100                    |                          | 10                    |
| 19    | Cash sales           | 4007           | 88                     |             |                | 80                     |                          | 8                     |
| 21    | Cash sales           | EFT            | 572                    | 520         |                |                        |                          | 52                    |
| 24    | Cash sales           | 4008           | 198                    | 180         |                |                        |                          | 18                    |
| 27    | Cash sales           | 4009           | 99                     |             | 90             |                        |                          | 9                     |
| 31    | Cash sales           | EFT            | 88                     |             |                | 80                     |                          | 8                     |
| 31    | Totals               |                | 15015                  | 2700        | 610            | 340                    | 11 000                   | 365                   |

You already know that multi-column cash journals have many benefits. The obvious benefit is the summarised data available at the bottom of the record. The owner of Watson's Golf Shop can find totals for sales of clubs, clothing and accessories very quickly, particularly if this journal is prepared on a spreadsheet.

The second advantage of the multi-column journal is that the totals at the bottom can be added and checked against the total of the 'Amount banked' column. This ensures that basic recording errors haven't been made in preparing the journal.

#### **RECORDING CASH PAYMENTS**

As with the cash receipts journal, a cash payments journal may be designed as a simple record, or it may contain special columns for frequently occurring transactions.

There may appear to be only a very small difference between a payments journal for a trading firm and one for a service firm. The difference lies in the *purpose* of the purchases made. For a service business, purchases are usually materials or tools. For a trading business, the term 'purchases' is used for those products that are intended to be resold in the normal course of business.

Figure 16.9 shows a simple version of a cash payments journal for a trading firm.

FIGURE 16.9 Cash payments journal: simple version

#### WATSON'S GOLF SHOP: CASH PAYMENTS JOURNAL

| Date  | Details       | Cheque no. | Total paid<br>\$ | Amount paid<br>\$ | GST paid<br>\$ |
|-------|---------------|------------|------------------|-------------------|----------------|
| Oct 1 | Advertising   | 34001      | 550              | 500               | 50             |
| 2     | Wages         | EFT        | 450              | 450               |                |
| 3     | Stationery    | 34002      | 110              | 100               | 10             |
| 5     | Drawings      | EFT        | 500              | 500               |                |
| 7     | Inventory     | 34003      | 880              | 800               | 80             |
| 9     | Wages         | EFT        | 450              | 450               |                |
| 9     | Advertising   | 34004      | 550              | 500               | 50             |
| 10    | Computer      | 34005      | 3 300            | 3000              | 300            |
| 16    | Wages         | EFT        | 500              | 500               |                |
| 17    | Advertising   | 34006      | 660              | 600               | 60             |
| 19    | Inventory     | 34007      | 770              | 700               | 70             |
| 23    | Wages         | EFT        | 450              | 450               |                |
| 24    | Drawings      | EFT        | 650              | 650               |                |
| 25    | Shop fittings | 34008      | 1 540            | 1 400             | 140            |
| 26    | Advertising   | 34009      | 660              | 600               | 60             |
| 28    | Drawings      | EFT        | 400              | 400               |                |
| 30    | Wages         | EFT        | 500              | 500               |                |
| 31    | Totals        |            | 12920            | 12100             | 820            |

This cash payments journal provides the absolute bare essentials in terms of an accounting record. It provides for both cheque numbers and EFT payments to be noted, and the type of payment can also be shown.

Figure 16.10 uses the same data, but records the transactions under the special headings.

FIGURE 16.10 Cash payments journal: multi-column version

#### WATSON'S GOLF SHOP: CASH PAYMENTS JOURNAL

| Date  | Details       | Cheque no. | Total<br>paid<br>\$ | Adver-<br>tising<br>\$ | Wages<br>\$ | Inventory<br>\$ | Other expenses | Drawings<br>\$ | Assets<br>\$ | Sundry<br>payments<br>\$ | GST<br>paid<br>\$ |
|-------|---------------|------------|---------------------|------------------------|-------------|-----------------|----------------|----------------|--------------|--------------------------|-------------------|
| Oct 1 | Advertising   | 34001      | 550                 | 500                    |             |                 |                |                |              |                          | 50                |
| 2     | Wages         | EFT        | 450                 |                        | 450         |                 |                |                |              |                          |                   |
| 3     | Stationery    | 34002      | 110                 |                        |             |                 | 100            |                |              |                          | 10                |
| 5     | Drawings      | EFT        | 500                 |                        |             |                 |                | 500            |              |                          |                   |
| 7     | Inventory     | 34003      | 880                 |                        |             | 800             |                |                |              |                          | 80                |
| 9     | Wages         | EFT        | 450                 |                        | 450         |                 |                |                |              |                          |                   |
| 9     | Advertising   | 34004      | 550                 | 500                    |             |                 |                |                |              |                          | 50                |
| 10    | Computer      | 34005      | 3 300               |                        |             |                 |                |                | 3000         |                          | 300               |
| 16    | Wages         | EFT        | 500                 |                        | 500         |                 |                |                |              |                          |                   |
| 17    | Advertising   | 34006      | 660                 | 600                    |             |                 |                |                |              |                          | 60                |
| 19    | Inventory     | 34007      | 770                 |                        |             | 700             |                |                |              |                          | 70                |
| 23    | Wages         | EFT        | 450                 |                        | 450         |                 |                |                |              |                          |                   |
| 24    | Drawings      | EFT        | 650                 |                        |             |                 |                | 650            |              |                          |                   |
| 25    | Shop fittings | 34008      | 1 540               |                        |             |                 |                |                | 1 400        |                          | 140               |
| 26    | Advertising   | 34009      | 660                 | 600                    |             |                 |                |                |              |                          | 60                |
| 28    | Drawings      | EFT        | 400                 |                        |             |                 |                | 400            |              |                          |                   |
| 30    | Wages         | EFT        | 500                 |                        | 500         |                 |                |                |              |                          |                   |
| 31    | Totals        |            | 12 920              | 2 200                  | 2 350       | 1 500           | 100            | 1 550          | 4 400        |                          | 820               |

Note the use of the column headed 'Assets' in the payments journal. As non-current assets may be purchased for cash (e.g. the computer on 10 October), such payments must be accounted for in the payments journal. However, it's important that purchases of assets are not mixed up with expenses, so a separate column should be used.



Purchases often include those intended to be resold in the normal course of business. When preparing a statement of receipts and payments, it is acceptable to simply state the total cash paid out for new assets. The details of the assets aren't usually required when looking at cash flows for a period. Therefore, the total of the 'Assets' column may be shown as one item in a statement of receipts and payments. If using a spreadsheet to record cash payments, the 'Assets' column can be transferred to the statement of receipts and payments as one total, making the preparation of the report much easier.

Note also the column headed 'Other expenses'. Such a column should always be available to record the payments of expenses that only occur on an occasional basis.

#### **BUYING AND SELLING ON CREDIT**

It's common practice for many trading firms to buy and sell goods on credit. If a firm purchases goods on credit from a supplier, it's promising to make a cash payment at a later stage. When a firm sells goods on credit to a customer, it will (hopefully) receive cash at a later date from the credit customer (i.e. the accounts receivable).

However, in the cash journals you've seen so far, no provision has been made for recording the cash flows involving accounts receivable and accounts payable. Minor modifications need to be made to the cash journals if a trading firm either buys or sells on credit.

Cash purchases of inventory should be kept separate from any cash payments to accounts payable for credit purchases made at an earlier date. This requires an additional column headed 'Accounts payable'. Whenever cash is paid to accounts payable, this column is used to record the amount of cash paid out.

Figure 16.11 shows an extract from the payments journal of Watson's Golf Shop, modified with this additional column.

FIGURE 16.11 Cash payments journal with column for accounts payable (extract)

#### WATSON'S GOLF SHOP: CASH PAYMENTS JOURNAL

| Date  | Details   | Cheque<br>no. | Total<br>paid<br>\$ | Accounts<br>payable<br>\$ | Adver-<br>tising<br>\$ | Wages<br>\$ | Inven-<br>tory<br>\$ | Other expenses | GST<br>paid<br>\$ |
|-------|-----------|---------------|---------------------|---------------------------|------------------------|-------------|----------------------|----------------|-------------------|
| Nov 1 | Insurance | 34010         | 440                 |                           |                        |             |                      | 400            | 40                |
| 2     | Inventory | 34011         | 550                 |                           |                        |             | 500                  |                | 50                |
| 3     | S Roberts | 34012         | 2 500               | 2 500                     |                        |             |                      |                |                   |
| 4     | Inventory | 34013         | 660                 |                           |                        |             | 600                  |                | 60                |
|       | Breen P/L | 34014         | 1 000               | 1 000                     |                        |             |                      |                |                   |

A similar modification is necessary if a trading firm decides to provide credit to its customers. This requires adding an 'Accounts receivable' column to record receipts from credit transactions.

Figure 16.12 shows an extract from the receipts journal of Watson's Golf Shop, modified with this additional column.

FIGURE 16.12 Cash receipts journal with column for accounts receivable (extract)

#### WATSON'S GOLF SHOP: CASH RECEIPTS JOURNAL

|       |            |             |                        |                     | Sales       |                |                   |                          |                       |
|-------|------------|-------------|------------------------|---------------------|-------------|----------------|-------------------|--------------------------|-----------------------|
| Date  | Details    | Receipt no. | Amount<br>banked<br>\$ | Accounts receivable | Clubs<br>\$ | Clothing<br>\$ | Accessories<br>\$ | Sundry<br>receipts<br>\$ | GST<br>received<br>\$ |
| Nov 1 | Cash sales | 4010        | 660                    |                     | 600         |                |                   |                          | 60                    |
| 2     | Cash sales | 4011        | 110                    |                     |             | 100            |                   |                          | 10                    |
| 3     | E Cartman  | EFT         | 1 200                  | 1 200               |             |                |                   |                          |                       |
| 4     | Cash sales | 4012        | 132                    |                     |             |                | 120               |                          | 12                    |
| 5     | S Marsh    | EFT         | 800                    | 800                 |             |                |                   |                          |                       |
| 6     | Loan       | EFT         | 5 000                  |                     |             |                |                   | 5 000                    |                       |

As with the previous cash receipts journals, it is still possible to subdivide the cash sales into special areas or departments. This provides management with additional information about the sales being made on a daily basis. The only difference is the extra column for accounts receivable.

When selling on credit, it's crucial to accurately record cash received from accounts receivable. Credit accounts must be watched closely, and unpaid debts followed up to ensure that accounts receivable pay within a reasonable time. This is the main reason many small business owners are willing to accept credit card sales via their EFTPOS terminal.

The other important point to note is that the GST charged to accounts receivable will be created when an invoice is issued. It is important that GST isn't recorded twice, so when an accounts receivable pays an amount owing, the GST column isn't used.

The recording of transactions in relation to accounts receivable and accounts payable is a topic in itself, and is covered in detail in Chapter 19.

#### 16.2 CHECK YOUR UNDERSTANDING



- 1 Describe the differences between a cash receipts journal for a service firm and a cash receipts journal for a trading firm.
- 2 'A cash payments journal for a trading firm is basically the same as that used by a service business.' Do you agree? Justify your answer.
- **3** A cash receipts journal may be a simple version or a multi-column version. Why would a business manager use the simple version of this journal?
- 4 What are two benefits of using a multi-column cash journal?

## 16.3 STATEMENT OF RECEIPTS AND PAYMENTS FOR A TRADING BUSINESS

A trading firm should prepare a statement of receipts and payments on a regular basis. As this report summarises cash inflows and outflows for a period, the manager can use it to review the inflows resulting from the sale of goods, compared to the outflow for the purchase of goods and payments for expenses.

The statement is prepared in exactly the same way as it is for service firms. The difference between the two types of businesses is simply the nature of the items included in the report.

Cash sales and cash purchases are the two key items reported in the cash flows for a trading firm. If the business buys or sells on credit, the cash flows resulting from such credit transactions would also be seen as important items.

Using the cash journals for Watson's Golf Shop, the statement of receipts and payments for the month of October 2023 would be prepared as shown in Figure 16.13 (assuming that the business had \$5000 in the bank as at 1 October 2023).

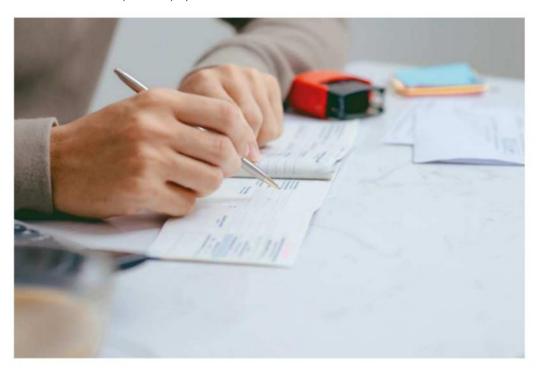
FIGURE 16.13 Statement of receipts and payments

#### WATSON'S GOLF SHOP: STATEMENT OF RECEIPTS AND PAYMENTS FOR MONTH ENDED 31 OCTOBER 2023

| Cash receipts                    | \$    | \$     |
|----------------------------------|-------|--------|
| Sales – Golf clubs               | 2700  |        |
| – Golf clothing                  | 610   |        |
| – Accessories                    | 340   |        |
| Capital contribution             | 6000  |        |
| Loan – EZ Finance                | 5 000 |        |
| GST collected                    | 365   | 15 015 |
| Cash payments                    |       |        |
| Advertising                      | 2 200 |        |
| Wages                            | 2350  |        |
| Inventory                        | 1 500 |        |
| Other expenses                   | 100   |        |
| Drawings                         | 1 550 |        |
| Purchase of assets               | 4 400 |        |
| GST paid                         | 820   | 12920  |
| Excess of receipts over payments |       | 2095   |
| Bank balance (1 October 2023)    |       | 5000   |
| Bank balance (31 October 2023)   |       | 7 095  |

Remember that the heading of this accounting report should include the name of the business and the length of the reporting period. The manager of a trading firm may prepare such a statement on a monthly basis, or perhaps even weekly, to analyse the performance of the business in terms of receipts and payments. This report provides a summary of all cash transactions and includes important information about the sources of cash receipts and the purposes for which cash was used.

Note that the items recorded in the columns headed 'Other expenses' and 'Assets' in the cash payments journal have been listed as *totals* in the statement of receipts and payments. If a spreadsheet is used to prepare the cash journals, the total of the column can simply be transferred from one cell in the journal to another cell in the statement of receipts and payments. In a manual system, the individual items in a column headed 'Other expenses' may be listed individually when preparing a statement of receipts and payments.



#### 16.3 CHECK YOUR UNDERSTANDING



- 1 Matthew Cooke opens a retail business selling furniture. Which headings do you recommend Cooke uses in his cash receipts journal and cash payments journal?
- 2 Jill Ryan is the new owner of a clothing store. Will she be able to use the same headings as those you suggested for Cooke's business in Question 1? Explain fully.
- 3 If a trading firm buys and sells on credit, describe the modifications that are necessary to its cash journals.
- 4 How often should the manager of a trading firm prepare a statement of receipts and payments? Give reasons for your answer.

## 16 CHAPTER REVIEW

#### **KEY CONTENT**

- **[16.1]**
- Trading firms earn revenue by dealing in inventory. The cost of inventory is called purchases, while the revenue earned from selling inventory is called sales. The basic financial documents used by trading businesses reflect the fact that their revenue comes from selling inventory, while distinguishing between purchases and other expenses.
- **[16.2]**
- The cash receipts journal for a trading business records all cash receipts that result from selling inventory. The cash payments journal records all cash payments, which may include both purchasing inventory and paying for other expenses. Businesses that buy or sell on credit need to include additional columns to record cash flows for accounts payable and accounts receivable.
- **[16.3]**
- A statement of receipts and payments is a report that summarises cash receipts and cash payments over a period of time. Cash sales and cash purchases are the two key items reported in the cash flows for a trading firm. If the business buys or sells on credit, the cash flows resulting from such credit transactions would also be seen as important items.

#### **CHAPTER 16 EXERCISES**

#### SPREADSHEET

#### 1 CASH JOURNALS - SIMPLE VERSIONS



The following transactions relate to Whaleed's Scooters for the first two weeks of July 2023.

#### Receipts

| Jul | 1  | Capital                 | \$10 000 (EFT)      |
|-----|----|-------------------------|---------------------|
|     | 3  | Cash sale (Rec. 101)    | \$800 plus \$80 GST |
|     | 4  | Cash sale (EFT)         | \$500 plus \$50 GST |
|     | 5  | Cash sale (Rec. 102)    | \$640 plus \$64 GST |
|     |    | Cash sale (Rec. 103)    | \$820 plus \$82 GST |
|     | 6  | Loan – YQ Finance (EFT) | \$6500              |
|     | 8  | Cash sale (Rec. 104)    | \$810 plus \$81 GST |
|     | 9  | Cash sale (Rec. 105)    | \$670 plus \$67 GST |
|     | 11 | Cash sale (EFT)         | \$750 plus \$75 GST |
|     | 14 | Cash sale (Rec. 106)    | \$900 plus \$90 GST |

#### **Payments**

| Jul | 1  | Cash purchases of inventory (Chq. 5401) | \$2500 plus \$250 GST |
|-----|----|---|-----------------------|
|     | 2  | Shop fittings (Chq. 5402)               | \$1800 plus \$180 GST |
|     | 3  | Wages (EFT)                             | \$490                 |
|     | 4  | Drawings (EFT)                          | \$500                 |
|     | 5  | Advertising (Chq. 5403)                 | \$350 plus \$35 GST   |
|     | 8  | Cash purchases of inventory (Chq. 5404) | \$2300 plus \$230 GST |
|     | 10 | Wages (EFT)                             | \$480                 |

\$800

14 Drawings (EFT)

- a Prepare a simple cash receipts journal with columns for Date, Details, Receipt number, Amount banked, Amount received and GST received.
- **b** Prepare a simple cash payments journal with columns for Date, Details, Cheque number, Total paid, Amount paid and GST paid.
- **c** Prepare a statement of receipts and payments for the two weeks ended 14 July 2023, showing a summary of the firm's cash transactions and the bank balance at that date.

#### **2 SIMPLE AND MULTI-COLUMN JOURNALS**





Ade's Outdoor Furniture is a small business that sells both furniture and barbecues. On 1 August 2023, the business had \$3400 in its bank account.

During the first two weeks of August, the following transactions take place.

- Aug 1 Received \$900, plus \$90 GST, from M Vine for a furniture setting: cash sale (Rec. 181)
  - 2 Sold a barbecue for \$450 cash, plus \$45 GST (Rec. 182), to R. O'Keefe
  - 3 Paid rent for week \$900, plus \$90 GST (EFT)
    Received \$800 (plus GST \$80) from S Walker for a furniture sale (Rec. 183) and \$550 for a barbecue sold to R Pearce, including \$50 GST (EFT)
  - 4 Cash purchases of deck chairs \$840, plus \$84 GST (Chq. 4442)
  - 5 Received \$600, plus \$60 GST, for a cash sale of furniture (EFT)
  - 7 Cash sale of furniture to J Dean \$550, including \$50 GST (Rec. 184) The proprietor withdrew \$450 for personal use (EFT)
  - 9 Purchased inventory for cash \$1480, plus \$148 GST (Chq. 4443)
  - 10 Paid weekly rent \$900, plus \$90 GST (EFT)
  - 11 Cash sale of furniture of \$160, plus \$16 GST (EFT)
  - 13 Received \$80 for sale of two chairs to S Edwards (GST received \$8, Rec. 185)
  - 14 Cash withdrawal by the owner \$250 (EFT)Sold a barbecue to L Connop for \$560 (Rec. 186, GST collected \$56)
- a Prepare simple versions of cash receipts and cash payments journals for Ade's Outdoor Furniture.
- **b** Redraft your journals in part **a** to a multi-column format.
- c Prepare a statement of receipts and payments for the fortnight ended 14 August 2023.
- d State two advantages of using multi-column cash journals.

#### 3 MULTI-COLUMN CASH JOURNALS





Connie's Computers is a small business that sells computers, printers and accessories. On 1 September 2023, the firm had a bank overdraft of \$830.

The following transactions occur during the month of September 2023.

- Sep 2 Sold a computer for \$2200 cash, plus \$220 GST (EFT)

  Purchased goods on credit from Computer Solutions for \$4200, plus \$420

  GST (Inv. 12234)
  - 3 Paid advertising \$340 + \$34 GST (Chq. 2813)
  - 4 Received \$460 for sale of a printer (GST collected \$46, Rec. 892)
  - 5 Paid weekly wages \$540 (EFT)
  - 7 Received \$2100 for cash sale of computer (Rec. 893, GST received \$210)
  - 8 Sold accessories for \$140 cash, plus \$14 GST (EFT)





- Sep 9 Purchased accessories for cash \$630, plus \$63 GST (Chq. 2814)
  - Paid supplier for last month's credit purchases \$4300 (EFT). Paid for advertising in local paper \$340, plus \$34 GST (Chq. 2815)
     Negotiated with the bank for an increase in the overdraft limit to \$8000
  - 11 Received \$600 for a printer (Rec. 894), GST collected \$60
  - 12 Sold a computer for \$2430, plus \$243 GST (Rec. 895) and a printer for \$550, including \$50 GST (EFT)
    - Paid weekly wages \$560 (EFT)
    - Bought new cash register for \$1200, plus GST of \$120 (Chq. 2816)
  - 13 The proprietor withdrew \$450 cash for personal use (EFT)
    Sold a printer for \$490 and GST \$49 (EFT) and accessories for \$110 (GST \$11, Rec. 896)
  - 14 Sold a computer for \$2500 cash, plus \$250 GST (Rec. 897)
    Cash purchases of inventory \$600, plus GST of \$60 (Chq. 2817) and paid accounts payable for purchases made on 2 September \$4620 (EFT)
    The owner withdrew \$860 (EFT)
- **a** Design multi-column cash journals for Connie's Computers and then record the above transactions in these journals.
- **b** Prepare a statement of receipts and payments to summarise the two weeks' cash transactions.



#### **4 MULTI-COLUMN CASH JOURNALS**



Vanguard Vans is a small business that specialises in caravan sales. The business sells three different models: standard, deluxe and prestige. On 1 October 2023 the business had cash at bank of \$4300.

*Note:* last year the owner decided that cash payments would no longer be made by cheque. All payments made by the business are now made via EFT using online banking.

The following transactions take place during October 2023.

#### **Credit transactions**

- Oct 1 Received invoice number 73754 from Oz Caravans for \$72 400, plus GST of \$7240
  - 3 Sold one standard van to P Camilleri on credit for \$12 800, plus \$1280 GST (Inv. 83844)
  - 12 Issued invoice 83845 to T Franklin for \$16 500 for one deluxe caravan (plus \$1650 GST)
  - 19 Purchased inventory from Oz Caravans for a total cost of \$82 600 (Inv. 73762), GST charged was \$8260

#### Cash receipts

- Oct 2 Sold a standard model for \$12 000 cash, plus \$1200 GST (Rec. 838)
  - 4 Sold one deluxe for \$16 500 + \$1650 GST (Rec. 839) and one standard for \$11 800 + \$1180 GST (Rec. 840)
  - 6 Sold one standard for \$12 000, plus GST of \$1200 (Rec. 841)
  - 7 Cash sales: one prestige model for \$22 000 + \$2200 GST (Rec. 842) and one standard for \$12 200 + \$1220 GST (Rec. 843)
  - 9 Sold one deluxe model for \$16 850, plus GST of \$1685 (Rec. 844)
  - 10 The owner contributed an extra \$5000 cash to the business (EFT)
  - 11 Received \$8000 from P Camilleri (Rec. 845)
  - 12 Sold a standard caravan for \$11 900, plus \$1190 GST (Rec. 846)
  - 14 One prestige van was sold for \$21 500 cash, plus \$2150 GST (Rec. 847)







- Oct 17 Borrowed \$10 000 from the Quick Fix Finance Co. (EFT)
  - 19 Sold one deluxe and one standard (Rec. 848 for \$16 900 + \$1690 GST and Rec. 849 for \$11 900 + \$1190 GST)
  - 22 Sold a prestige model for \$22 500 cash, plus \$2250 GST (Rec. 850)
  - 24 Collected \$5000 on debt owed by T Franklin (Rec. 851)
  - 26 Sold a deluxe van for \$16 500, plus \$1650 GST (Rec. 852)
  - 31 One prestige van was sold for \$22 600 + GST of \$2260 (Rec. 853)

#### Cash payments

- Oct 3 Paid fortnight's rent of property \$3000 plus \$300 GST
  - 5 Paid wages of assistant \$480
  - 6 Owner withdrew \$1200
  - 8 Transferred \$12 000 to Oz Caravans
  - 12 Weekly wages were paid \$520
  - 14 Advertising paid \$550, plus \$55 GST
  - 17 Paid rent \$3000 + \$300 GST
  - 19 Paid wages \$490
  - 22 Transfer of \$22 000 to Oz Caravans
  - 26 Wages of \$560 were paid
  - 27 The proprietor withdrew \$900
  - 31 Paid advertising \$550, plus \$55 GST
- Select the relevant items from those listed above and prepare cash journals for Vanguard's Vans for the month of October 2023. Use appropriate columns for recurring items.
- **b** Prepare a statement of receipts and payments for the month of October 2023.

#### 5 MULTI-COLUMN CASH JOURNALS





Bruce Waldron is the proprietor of Waldron's Tools, a small business that sells electric drills, saws and sanders. The following transactions occur during the month of August 2023.

#### Receipts

| Aug | 1  | Loan from Bonney Finance Co. (EFT)        | \$20 000 by EFT     |
|-----|----|---|---------------------|
|     | 3  | Cash sale of one drill (Rec. 555)         | \$100 plus \$10 GST |
|     | 4  | Sold a sander for cash (Rec. 556)         | \$80 plus \$8 GST   |
|     | 5  | Cash sale – one drill (Rec. 557)          | \$100 plus \$10 GST |
|     |    | Cash sale – one electric saw (Rec. 558)   | \$120 plus \$12 GST |
|     | 6  | Additional capital contributed by Waldron | \$12 500 by EFT     |
|     | 8  | Sold a sander for cash (Rec. 559)         | \$90 plus \$9 GST   |
|     | 11 | Cash sale – one drill (Rec. 560)          | \$100 plus \$10 GST |
|     | 14 | Cash sale – one sander (Rec. 561)         | \$80 plus \$8 GST   |
|     | 18 | Sold a drill for cash (Rec. 562)          | \$110 plus \$11 GST |
| 2   | 21 | Receipt 563 issued for sale of saw        | \$120 + \$12 GST    |
|     | 25 | Cash sale – electric saw (Rec. 564)       | \$130 + GST of \$13 |
|     | 29 | Sold a sander for cash (Rec. 565)         | \$90 plus \$9 GST   |
|     | 31 | Cash sale – two drills for \$210          | GST \$21 (Rec. 566) |



#### **Payments**

| Aug 1 | Cash drawings (EFT)                     | \$1200                |
|-------|---|-----------------------|
| 2     | Advertising for month (EFT)             | \$1200 plus \$120 GST |
| 4     | Cash purchases of inventory (Chq. 8890) | \$3000 + \$300 GST    |
| 7     | Paid weekly wages (EFT)                 | \$640                 |
| 10    | Bought new cash register (Chq. 8891)    | \$690 plus \$69 GST   |
| 12    | Cash purchases of inventory (Chq. 8892) | \$1800 plus \$180 GST |
| 14    | Weekly wages (EFT)                      | \$650                 |
| 17    | Owner withdrew cash (EFT)               | \$800                 |
| 20    | Chq. 8893 written out for insurance     | \$820 plus \$82 GST   |
| 21    | Wages paid for week (EFT)               | \$580                 |
| 23    | Bought inventory with Chq. 8894         | \$600 + GST of \$60   |
| 25    | Paid accounting fees (Chq. 8895)        | \$470 plus \$47 GST   |
| 28    | Paid wages (EFT)                        | \$720                 |

- **a** Design multi-column cash journals for Waldron's Tools and record the above transactions in these journals.
- **b** Prepare a statement of receipts and payments for the month ended 31 August 2023, showing a summary of the firm's cash transactions and the bank balance at that date. *Note:* the business had an overdraft of \$300 as at 1 August 2023.
- The owner of Waldron's Tools has recently acquired an EFTPOS terminal. He is unsure if transactions recorded by the EFTPOS terminal will meet the demands of verifiability. Discuss.



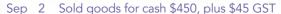
#### **6 MULTI-COLUMN CASH JOURNALS**



Claudette Dallas owns a retail outlet trading under the name Dallas Locks. She has asked you to design suitable multi-column cash journals for her business.

Dallas has \$1520 cash in the bank at the start of September 2023. She uses a summary from her cash register to record her cash sales and asks you to make the notation 'CRS' in her receipts journal.

The following events take place during September.





- 4 Paid security company weekly fee (Chq. 7155) \$80 plus \$8 GST
- 5 Sold goods for cash \$650 + \$65 GST
- 6 Bought inventory items on credit from Locks 'R' Us \$2100, plus \$210 GST (Inv. 675)
- 7 Cash sales were banked \$890 plus \$89 GST
- 9 Received interest from term deposit \$45 (EFT)
- 10 Bought inventory for cash \$560 + \$56 GST (Chq. 7156)
- 11 Cash sales amounted to \$430 plus GST of \$43 Cheque no. 7157 for security expenses \$80 + \$8 GST
- 13 Received \$508 owing from Accounts receivable J Eid (EFT)
- 14 Sold goods for cash \$450 plus \$45 GST
- 15 Dallas withdrew \$900 for personal use (EFT)
- 16 Cash sales \$880, GST collected \$88
- 17 Bought goods for cash \$760, GST paid \$76 (Chq. 7158)



- Sep 18 Paid security company \$80 plus \$8 GST (Chq. 7159)
  - 20 Purchased goods on credit from Locks Incorporated for \$1230, plus \$123 GST (Invoice 3124 was received from the supplier)
  - 22 Banked cash sales \$660, including \$60 GST
  - 23 Dallas withdrew \$500 for personal spending (EFT)
  - 24 Total sales made to cash customers were \$870, plus \$87 GST
  - 25 Security expenses paid by cheque (no. 7160) \$88, including \$8 GST
  - 27 Collected money owing from Accounts receivable L Lipsia \$1200
  - 28 Paid \$440 cash for a new colour printer for the office (Chq. 7161). The payment included GST of \$40. Dallas jumped at the opportunity as she had seen the exact same printer advertised for \$525
  - 29 Cash sales banked \$540, plus \$54 GST
  - 30 Paid Locks 'R' Us \$600 on account (Chq. 7162)
- **a** Prepare a suitably designed cash receipts journal for Dallas Locks. Select the relevant information from that listed above and enter all receipts for the month of September 2023.
- **b** Design a multi-column cash payments journal for Dallas Locks and enter the relevant transactions for September 2023.
- **c** Prepare a statement of receipts and payments for September 2023, clearly showing the final cash balance at the end of the month.
- **d** Explain how your cash journals have satisfied the demands of *verifiability*.
- **e** Explain how your statement of receipts and payments satisfies the demands of *understandability*.
- **f** State the qualitative characteristics you have followed in recording the purchase of the printer on 28 September. Explain fully.

#### **CHAPTER CHECKLIST**

Now that you've finished Chapter 16, double-check your progress.

Are you ready for your Unit 2 assessment?

#### I have ...

- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- Manded in my workbook for marking.

#### I understand ...

- documents used by a business to record financial transactions
- the purpose and use of special journals:
  - Cash Receipts Journal
  - Cash Payments Journal.

#### I can ...

- we correct accounting terminology
- dentify, classify and record financial data
- of identify, classify and manually record financial data
- use ICT, including spreadsheets, to record transactions and construct appropriate graphical representations.





#### **PREPARE**

Read back over the chapter now, then complete the online revision activity.



#### WATCH

Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



mea.digital/vceacc12\_1





# **ACCOUNTING FOR INVENTORY**

For many small trading businesses, their inventory is their most valuable asset. Inventory creates many business transactions, as the firm will usually purchase, sell, return and pay for goods, and try to get customers to pay for the sales that are made. This creates a great demand for accurate, timely information about inventory.

In this chapter, you will learn about how small businesses account for their inventory, including the use of inventory cards and methods of identifying and recording costs. You'll also examine how sales and purchases can be returned, and how to record that change in accounting records.

#### **LEARNING OBJECTIVES**

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

- describe the processes involved in a physical stocktake [17.1]
- outline what is involved in the perpetual inventory system [17.2]
- explain the difference between the identified cost and first-in-first-out methods [17.2]
- prepare an inventory card under both inventory methods [17.2]
- adjust an inventory card for an inventory loss or an inventory gain [17.3]
- describe the circumstances that exist for an inventory loss or an inventory gain to occur [17.3]
- explain the purpose of a credit note [17.4]
- record sales returns and purchases returns in an inventory card [17.4].



## 17.1 THE PHYSICAL STOCKTAKE

#### stocktake

the process of physically counting the number of units of inventory on hand on a particular date

An important process that all trading firms must undertake at least once every year is a physical stocktake. A stocktake involves physically counting all the inventory on hand on one particular date. The results of the stocktake are used to help calculate an annual profit figure, so an accurate figure is needed. It is also needed to satisfy the requirements of the taxation authorities.

There are two processes involved in a stocktake.

- The first step is to physically count the number of units of every type of inventory in the store or warehouse.
- The second is to determine the cost price of all inventory items; that is, how much the firm originally paid to purchase the goods.

Note that the selling prices of inventory aren't relevant when performing a stocktake.

The aim of a stocktake is to find a total for all inventory in a business on one particular day, so it's important to take an organised approach. A stocktake is often a long, boring and detailed process. If it's done in a haphazard manner, some goods may be counted twice or others may not be counted at all.

An inventory sheet is a simple accounting document used to record all details of inventory on hand when a stocktake is being done. Figure 17.1 shows an example of an inventory sheet for Balmain Board Game Superstore.

inventory sheet

a document used to record details of all inventory on hand during a stocktake

FIGURE 17.1 Inventory sheet

| Item                          | Quantity | Cost<br>\$ | Total<br>\$ |
|-------------------------------|----------|------------|-------------|
| Gloomhaven                    | 100      | 45         | 4 500       |
| Pandemic                      | 100      | 40         | 4 000       |
| Deluxe Scrabble               | 200      | 10         | 2 000       |
| Pokemon Legends starter decks | 100      | 7          | 700         |
| Pokemon Legends booster packs | 200      | 4          | 800         |
| Total inventory on hand       |          |            | 12 000      |

This sheet clearly doesn't show the entire inventory of the store! It's normal stocktake practice to use a different sheet for each warehouse shelf or section of the store. This makes it easier to double-check the sheet by counting again, and to spot any errors that occur.

#### **RECORDING COST PRICES**

It's easy enough to count the number of units of inventory on hand, but how is the cost price of every product recorded? One method is to locate the latest invoices received, which would show the latest purchase prices. However, this could be impractical, as the goods in inventory may be from a range of different purchase lots. Simpler alternatives are needed.

As an introduction to this area of accounting, you will learn about two simple systems for calculating the cost prices of inventory.

#### The mark-up method

The first method is a system of fixed mark-ups - a fixed percentage is added to the cost price of a good to determine its selling price.

For example, if Balmain Board Game Superstore applies a 100% mark-up to all goods being sold, it's simply a matter of halving the price to determine the cost price of each item. So a copy of Pandemic, which has a cost price of \$40, would have \$80 on its price tag, plus GST of \$8: a total of \$88.

(Note that price tags on display in shops are expected to include the GST as part of the selling price.)

Other mark-ups are not as easy to work out, which makes the following formula very useful.

#### **EXAMPLE 17.1**

Inventory with a selling price of \$66 on its price tag was found in the stocktake of a firm that marks everything up by 50%.

To determine its cost price, first remove the GST from the equation; we can do this by dividing the selling price by 11. \$66 divided by 11 is \$6, so \$6 of GST is included in the selling price. The actual selling price is \$60.

The formula then becomes:

Cost price of inventory = 
$$\frac{$60 \times 100}{100 + 50}$$
  
=  $\frac{$6000}{150}$  = 40

You can always check this answer by working from the cost price back to the selling price.

In order for such a system to work, it's assumed that the selling prices (and therefore the mark-ups) haven't changed over time. If the usual mark-up hasn't been maintained, perhaps because some inventory is being sold at a reduced price, the system must be adjusted to account for this.

#### Coded price tags

Another option is to put a code on each product that reflects its original cost price. Computer-generated barcodes do exactly this; the cost price can be read from the barcode using a scanner. However, many small businesses are run by one person, who needs a simple, inexpensive approach. These businesses owners could use simple codes they create themselves.

Consider this price tag found on a sledgehammer at Horsham Hardware, shown in Figure 17.2.

FIGURE 17.2 Price tag with coded cost price



In this case, the owner/manager has used a method that records the date of purchasing the inventory as well as the actual cost price. The string of numbers – 1210154010 – is actually the purchase date (12/10), the cost price (\$15.40) and an identification number for the supplier (10). This information can be worked out by staff but not customers.

A similar method is to use an alphabetical code to hide the cost price from the public's view. Consider the price tag in Figure 17.3.

FIGURE 17.3 Price tag with alpha-code



The letters on the tag are meaningless unless you know the code being used. In this case the owner of the business, Chris Duong, has used the letters in her name to denote particular numbers:

| С | Н | R | ı | S | D | U | 0 | N | G |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

C = 1, R = 3, S = 5 and G = 0, while the / symbol is used to separate dollars and cents. So, this price tag is for an item of inventory with a cost price of \$13.50.

Any letters can be used in such a code, as long as no letters are repeated. However, the code should be easily translated into dollars and cents, as it may be useful to know the exact cost price when dealing with customers, particularly in industries where customers often try to get the price reduced (e.g. electrical appliances).

Regardless of how cost prices are recorded, coding can simplify the task of completing a stocktake. It's common for a particular item to have been purchased at several different prices during the one period. Therefore, if 20 units of a product are in inventory at the end of the year, it may not be correct to assume that all were purchased at the same price. Coding methods allow an accurate stocktake to be achieved because they identify the actual cost price of each item of inventory, which can be entered straight into the inventory sheets.

#### 17.1 CHECK YOUR UNDERSTANDING



- 1 What is the purpose of a physical stocktake at the end of a period?
- 2 Describe the two processes involved in doing a physical stocktake.
- 3 Explain the role of inventory sheets.
- 4 Describe two methods of working out the cost price of inventory on hand.
- 5 State two benefits of having the cost price encoded on the price tags of goods.

## 17.2 THE PERPETUAL INVENTORY SYSTEM

A perpetual inventory system is a method of continuously recording inventory movements throughout a reporting period. That is, every time inventory is purchased. the event must be recorded. Similarly, every transaction involving the sale of inventory must be recorded. If this is done, management should have up-to-date information about its various inventory lines.

#### perpetual inventory system

recording movements of inventory by maintaining continuous records throughout a period

#### **INVENTORY METHODS**

The first component is a method for recording the cost price of every inventory item. There are several methods that can be used, but the VCE Accounting subject focuses on two specific types.

Systems like the ones presented on pages 280-2 are used to identify the actual cost price of an inventory item. This method is known as identified cost. It requires quite a lot of work throughout the accounting period, as the owner must constantly identify the cost price of all items in one way or another.

In some cases, it may not be possible to identify the actual cost price of each inventory item. For example, a petrol station may have 10 000 litres of fuel on hand at a cost price of \$1.00 per litre. It may receive a delivery of another 5000 litres of fuel, but the price has increased to \$1.05 per litre. When a customer purchases 50 litres of fuel, how can the owner determine the actual cost price of this sale?

The simple answer is that it is not possible to do so. As the fuel is all mixed in together in one tank, it isn't physically possible to determine the cost price of each litre. This shows that the identified cost method isn't suitable for all trading businesses.

Some owners may simply choose not to try to identify the cost price of each item. because it is so time consuming. Instead, some businesses use the first-in-first-out inventory method (also known as FIFO). The FIFO system is based on a simple assumption: the first goods bought will be the first goods sold.

This assumption about the flow of inventory may not represent the actual physical flow of goods. However, it's a fair assumption to make that most businesses attempt to sell their oldest inventory first - particularly if they're selling perishable items.

#### identified cost

an inventory system that allows the actual cost of each inventory item to be identified

#### first-in-first-out (FIFO)

a system of recording inventory movements, based on the assumption that the first goods purchased are the first goods sold

#### **INVENTORY CARDS**

In a perpetual inventory system, every transaction involving the sale of inventory must be recorded. However, the main accounting records in a single-entry accounting system remain the cash journals. The purpose of these journals is to record movements of cash, not inventory. An additional record, the inventory card, must be developed to cope with the demands of the perpetual inventory system.

#### inventory card

a document used to record all movements of a particular line of inventory A business using perpetual inventory should have an inventory card for every different type of inventory being sold. Figure 17.4 shows an example of an inventory card.

FIGURE 17.4 Inventory card

| Min: 5 | ory item: Me<br>Max: 10<br>on: South wa |     | ·     | r     | Supplier: Advanced Computers Pty Ltd<br>Product code: PC186291<br>Valuation method: FIFO |                |                |        |                |        |  |
|--------|---|-----|-------|-------|--|----------------|----------------|--------|----------------|--------|--|
|        |   |     | IN    |       |  | OUT            |                |        | BALANC         | Έ      |  |
| Date   | Reference                               | Qty | Cost  | Value | Qty  | Cost           | Value          | Qty    | Cost           | Value  |  |
| Aug 1  | Balance                                 |     |       |       |  |                |                | 5      | 1 200          | 6 000  |  |
| 2      | Inv. 2101                               | 5   | 1 300 | 6 500 |  |                |                | 5<br>5 | 1 200<br>1 300 | 12 500 |  |
| 3      | Rec. 3301                               |     |       |       | 2  | 1 200          | 2 400          | 3<br>5 | 1 200<br>1 300 | 10 100 |  |
| 4      | Rec. 3302                               |     |       |       | 2  | 1 200          | 2 400          | 1<br>5 | 1 200<br>1 300 | 7 700  |  |
| 5      | Rec. 3303                               |     |       |       | 1<br>1   | 1 200<br>1 300 | 1 200<br>1 300 | 4      | 1 300          | 5 200  |  |
| 6      | Inv. 2120                               | 6   | 1 300 | 7 800 |  |                |                | 10     | 1 300          | 13 000 |  |



Note that this inventory card has been prepared using the FIFO method of inventory recording, which assumes that the first goods to come into the business are the first out of the business.

Working day by day through the inventory card shows how it's used.

- Aug 1: Five computers were in inventory, each with a cost price of \$1200.
- **Aug 2**: Five more units were purchased on credit for \$1300 each, as noted by invoice number 2101. Note the impact on the 'Balance' column. The business now holds five units with a cost price of \$1200 and another five at a cost of \$1300 each.

- Aug 3: Two units were sold for cash (Receipt 3301). Note that because the first inventory bought cost \$1200 per unit, it's assumed that this inventory is the first sold. Therefore, two of the \$1200 inventory are moved to the 'Out' column, leaving only three at this cost price. All the \$1300 inventory remains in the business at this stage.
- **Aug 4**: Two more computers were sold (Receipt 3302). As the business still has three units left at \$1200 each, it is assumed that the two sold had a cost price of \$1200.
- Aug 5: This is where the application of the FIFO assumption is very important. Note that the business has one computer left at a cost of \$1200, with five others that cost \$1300. As two were sold on 5 August, it is assumed that one of these is from the earlier inventory purchased (\$1200). Once this assumption is made, the other one sold must have cost \$1300, because all the \$1200 inventory has now been sold.
- Aug 6: Six new computers were purchased. Note that, for this purchase, the cost price is the same as that previously charged. This means that the units can simply be added to the existing inventory. This can *only* be done if the latest cost price is the same as the last lot of inventory purchased by the firm.

When inventory is purchased at different prices, these cost prices *must* be kept in order within the inventory card. Cost prices may increase or decrease, but this doesn't affect the application of the FIFO assumption. As long as the cost prices are kept in the order in which they occur, the FIFO rule can be applied when inventory is sold.

#### 17.2 CHECK YOUR UNDERSTANDING



- 1 Explain the 'identified cost inventory method'.
- 2 State two reasons why the management of a trading firm may adopt the FIFO method of assigning cost prices to inventory sold.
- 3 Explain what is involved in a perpetual inventory system.

#### BEST PRACTICE

Remember: Identified cost records the actual cost of goods. FIFO is an assumption of stock flow.

# 17.3 ACCOUNTING FOR INVENTORY LOSSES AND GAINS

The use of inventory cards in the perpetual inventory system doesn't eliminate the need for a physical stocktake. An inventory card only lets management know how many units *should* be on hand at any point in time. The only way to find the number of units actually on hand is to physically count them, so a stocktake should be carried out from time to time to check on the number of goods still in inventory.

(If the FIFO assumption is being applied, cost prices don't have to be checked when performing a stocktake. All that must be checked is the number of units still on hand.) There are three possible outcomes from a stocktake.

- The number of units physically counted matches the number of units shown in the inventory card.
- The number of units physically counted is less than that shown in the inventory card.
- The number of units physically counted is greater than that shown in the inventory card.

Management will always be happy to find the first result! If all units are accounted for, it means that none have been stolen and that all the inventory card entries appear to be correct.

#### **INVENTORY LOSSES**

The second possible result may indicate a problem. An **inventory loss** exists if there are fewer items on hand than are shown by an inventory card.

An inventory loss may be caused by some or all of the following.

- Theft: Shoplifting is a major problem for many trading businesses. However, controls should also be kept on employees to ensure that inventory does not go missing.
- Undersupply from suppliers: When goods are delivered, the quantity shown on an invoice as being delivered should be physically checked against the goods that arrive. If this isn't done, a 'short order' may not be picked up. For example, 15 units may be charged on an invoice and be recorded on the inventory card, but if only 14 units were delivered and this error isn't picked up, it would appear that an inventory loss has occurred.
- Oversupply to customers: In this case, the problem is that too many units have left the business, compared to the amount stated on invoices. Fraudulent behaviour could involve staff members sending additional units to friends that haven't been invoiced. This problem calls for all invoiced quantities to be physically checked against the units that leave the business premises. This is particularly important for firms that send goods out by post, or that package goods ready for courier delivery.
- Double invoicing by suppliers: Some firms have experienced cases where a supplier
  has sent two invoices for one lot of inventory. If this isn't detected, an inventory loss will
  result because the inventory card will show that additional units should be on hand.
- Stocktaking errors: Stocktakes often involve boring, repetitive counting tasks. It's very difficult to guarantee that a stocktake is 100% accurate. Errors can be made, and if one section of the store hasn't been counted and this error isn't picked up, it may appear that the business has a serious inventory loss problem.

#### inventory loss

when the number of units revealed by a stocktake is less than the quantity shown on an inventory card • Recording errors: As with any accounting record, inventory cards may contain errors. There are checks that can minimise errors, but some may slip through. A common error is when the owner of a business withdraws inventory for personal use and forgets to make note of this event. Such errors may cause an inventory loss to show up at the end of the year.

#### ADJUSTING FOR AN INVENTORY LOSS

When a stocktake reveals an inventory loss, the inventory card must be adjusted to reflect the true situation.

Consider the inventory card for the Megafast computer shown previously in Figure 17.4. It shows that 10 computers were in stock on 6 August, but let's assume that a stocktake reveals only nine Megafast computers in inventory.

Figure 17.5 shows how the inventory is adjusted for an inventory loss of one unit.

FIGURE 17.5 Inventory card adjusted for an inventory loss

| Min: 5 | ory item: Me<br>Max: 10<br>on: South wa |     | •     |       | Supplier: Advanced Computers Pty Ltd<br>Product code: PC186291<br>Valuation method: FIFO |                |                |        |                |        |  |
|--------|---|-----|-------|-------|--|----------------|----------------|--------|----------------|--------|--|
| Date   | Reference                               |     | IN    |       |  | OUT            |                | Е      | BALANC         | E      |  |
|        |   | Qty | Cost  | Value | Qty  | Qty Cost Value |                |        | Cost           | Value  |  |
| Aug 1  | Balance                                 |     |       |       |  |                |                | 5      | 1 200          | 6 000  |  |
| 2      | Inv. 2101                               | 5   | 1 300 | 6 500 |  |                |                | 5<br>5 | 1 200<br>1 300 | 12 500 |  |
| 3      | Rec. 3301                               |     |       |       | 2  | 1 200          | 2 400          | 3<br>5 | 1 200<br>1 300 | 10 100 |  |
| 4      | Rec. 3302                               |     |       |       | 2  | 1 200          | 2 400          | 1<br>5 | 1 200<br>1 300 | 7 700  |  |
| 5      | Rec. 3303                               |     |       |       | 1<br>1   | 1 200<br>1 300 | 1 200<br>1 300 | 4      | 1 300          | 5 200  |  |
| 6      | Inv. 2120                               | 6   | 1 300 | 7 800 |  |                |                | 10     | 1 300          | 13 000 |  |
| 6      | Memo 101                                |     |       |       | 1  | 1 300          | 1 300          | 9      | 1 300          | 11 700 |  |



#### inventory gain

when the number of units revealed by a stocktake is greater than the quantity shown on an inventory card The document used to evidence inventory losses and **inventory gains** is a memorandum (or memo). The memo should be completed by the owner or manager, with details of the loss identified, and can be referred to if there are queries in the future.

Note that the FIFO assumption even applies to inventory losses. If there is an inventory loss and there are different cost prices shown on the inventory card, the inventory lost is assumed to be the earliest inventory purchased.

The adjustment for an inventory loss has two effects on a business's balance sheet.

- 1 Inventory on hand has decreased, which directly affects the value reported for inventory under the heading 'Current assets'.
- 2 Inventory losses represent a sacrifice of economic resources by a business, even if this sacrifice was unintentional. This means that inventory losses are actually an *expense* to the business. Therefore, expenses increase, leading to a lower profit, which leads to a lower value for owner's equity.

#### **INVENTORY GAINS**

While an inventory loss is the more likely event, it's also possible for a trading firm to experience an inventory gain.

An inventory gain could be caused by the following.

- Oversupply from suppliers: If this error isn't picked up, the quantity stated on the invoice will be entered on an inventory card. If the invoice states 12 units, but 12 dozen were delivered, an inventory gain is almost certain! This type of error should be detected at the time of delivery; to avoid embarrassment, the supplier should be notified immediately.
- Undersupply to customers: If an error is made when packing a customer's order, it may not be picked up when the goods are delivered to that customer. Perhaps the inventory card shows that 40 units left the business, but only 14 units were actually delivered.
- Stocktaking errors: If a stocktake is done carelessly, one section of a store could be counted twice, artificially inflating the value of inventory on hand. This shouldn't happen, but after several hours of mind-numbing stocktaking, anything is possible.
- Recording errors: Inventory cards can include errors that will produce either an inventory loss or an inventory gain.

#### ADJUSTING FOR AN INVENTORY GAIN

Regardless of the cause of an inventory gain, inventory cards must be adjusted to reflect the actual situation on balance day. Let's look again at the Megafast computer, but assume that 11 computers were found to be in inventory on 6 August. Figure 17.6 shows the entry to record the inventory gain.

FIGURE 47.0 Inc. (const.) and all and a figure in the second seco

FIGURE 17.6 Inventory card adjusted for an inventory gain

| Min: 5 I | ory item: Meg<br>Max: 10<br>n: South war |     | ·              | r     | Supplier: Advanced Computers Pty Ltd<br>Product code: PC186291<br>Valuation method: FIFO |                |                |        |                |        |  |
|----------|--|-----|----------------|-------|--|----------------|----------------|--------|----------------|--------|--|
| Date     | Reference                                |     | IN             |       |  | OUT            |                |        | BALANC         | Έ      |  |
|          |  | Qty | Qty Cost Value |       |  | Cost           | Value          | Qty    | Cost           | Value  |  |
| Aug 1    | Balance                                  |     |                |       |  |                |                | 5      | 1 200          | 6 000  |  |
| 2        | Inv. 2101                                | 5   | 1 300          | 6 500 |  |                |                | 5<br>5 | 1 200<br>1 300 | 12 500 |  |
| 3        | Rec. 3301                                |     |                |       | 2  | 1 200          | 2 400          | 3<br>5 | 1 200<br>1 300 | 10 100 |  |
| 4        | Rec. 3302                                |     |                |       | 2  | 1 200          | 2 400          | 1<br>5 | 1 200<br>1 300 | 7 700  |  |
| 5        | Rec. 3303                                |     |                |       | 1<br>1   | 1 200<br>1 300 | 1 200<br>1 300 | 4      | 1 300          | 5 200  |  |
| 6        | Inv. 2120                                | 6   | 1 300          | 7 800 |  |                |                | 10     | 1 300          | 13 000 |  |
| 6        | Memo 101                                 | 1   | 1 300          | 1 300 |  |                |                | 11     | 1 300          | 14 300 |  |

On balance day you can't tell which units were incorrectly recorded or wrongly supplied. Therefore, when recording inventory gains, it's assumed that the latest cost price paid for inventory most *faithfully represents* the value of the gain. Regardless of whether prices have increased or decreased during the period, the most current cost price should be used.

Inventory gains will also have a two-fold effect on a firm's balance sheet.

- **1** As inventory on hand increased, this directly affects the value reported for inventory under the heading 'Current assets'.
- 2 Inventory gains represent an inflow of resources to the business and are therefore classified as a revenue item. Therefore, inventory gains *increase total revenue*, leading to a higher profit; this then leads to a higher value for owner's equity on the balance sheet.

#### 17.3 CHECK YOUR UNDERSTANDING



- 1 How is an inventory loss identified? Explain this process fully.
- 2 List three reasons why an inventory loss may occur.
- 3 List three reasons why an inventory gain may occur.
- **4** Explain the two-fold effect that an adjustment for an inventory loss has on a balance sheet.

# 17.4

# ACCOUNTING FOR RETURNS OF INVENTORY

A further complication for trading businesses is accounting for returns of inventory. This may happen when the business needs to return goods to its supplier, which is known as a **purchases return**. The business may also have dissatisfied customers, so a **sales return** may also occur.

Returns of inventory may happen for a variety of reasons, including:

- the goods were faulty
- the products were damaged
- the items were the wrong size (e.g. clothing)
- the goods were the wrong colour or the wrong brand
- the buyer simply changed their mind.

#### **CREDIT NOTES**

When inventory is returned, the supplier issues a **credit note** as proof that the business has accepted the return of the goods.

A trading business may issue credit notes to accounts receivable when goods are returned. They may also receive credit notes when they return inventory to their supplier (i.e. accounts payable).

A credit note reduces the amount the credit customer owes, so an invoice is used to create a debt. If inventory is returned, it will decrease the debt created by the invoice.

Figure 17.7 shows an example of a credit note created by Richmond Tiles.

purchases return a return of inventory items to the supplier

sales returns

the return of goods sold to a customer

#### credit note

a business document confirming that goods have been returned and credit has been granted to the customer

#### FIGURE 17.7 Credit note

Reason: Damaged

Richmond Tiles
287 Bridge Road
Richmond VIC 3121

CREDIT NOTE no. 281

Date: 15/11/2023

Credit: Ricky the Renovator 192 Hoffman Road Elsternwick VIC 3185

| Description       | Quantity | Unit price | Subtotal | GST    | Total   |
|-------------------|----------|------------|----------|--------|---------|
| 30 mm white tiles | 20       | \$2.00     | \$40.00  | \$4.00 | \$44.00 |

Richmond Tiles – for all your tiling needs!

This credit note informs Ricky the Renovator that the goods he returned have been approved for credit. Richmond Tiles would then deduct \$44 from the amount that Ricky the Renovator owes.

#### RECORDING PURCHASES RETURNS IN INVENTORY CARDS

When a business returns inventory to a supplier, the inventory card must be adjusted. The supplier issues a credit note, which includes details of the cost price of the inventory being returned.

Consider the following example and Figure 17.8.



Jul 6 Returned one damaged shirt (purchased on 4 July) to the supplier and received credit note number 12

FIGURE 17.8 Inventory card with a purchases return recorded

| Invent | Inventory item: Shirts |     |      |       |     |      |       |         |      |       |  |  |
|--------|------------------------|-----|------|-------|-----|------|-------|---------|------|-------|--|--|
| Date   | Reference              |     | IN   |       |     | OUT  |       | BALANCE |      |       |  |  |
|        |                        | Qty | Cost | Value | Qty | Cost | Value | Qty     | Cost | Value |  |  |
| Jul 1  | Balance                |     |      |       |     |      |       | 5       | 20   | 100   |  |  |
| Jul 2  | Invoice 432            | 10  | 20   | 200   |     |      |       | 15      | 20   | 300   |  |  |
| Jul 6  | Credit note 12         |     |      |       | 1   | 20   | 20    | 14      | 20   | 280   |  |  |

As the goods have been returned to the supplier, and therefore have left the business, the purchases return is entered in the 'Out' column, reducing the number of units on hand.

Note that the supplier must approve the return in exchange for credit. The supplier will identify the cost price of the inventory and provide details on the credit note issued.

#### RECORDING SALES RETURNS IN INVENTORY CARDS

When a credit customer returns goods, the amount owing by accounts receivable should be reduced by the amount the customer was originally charged.

If a customer purchased 4 shirts at \$40 each, plus GST, the total sale would be \$160 and \$16 GST. If one shirt was returned by this customer, the seller would issue a credit note for \$40 + \$4 GST = \$44. Accounts receivable would still have a debt of  $3 \times $40 = $120$ , plus \$12 GST, for a total debt of \$132.

However, the recording of a sales return at cost price is a little more complex. The process depends on the valuation method being used for inventory. If identified cost is used, the business can identify the actual cost price of each inventory item at the time of sale.

#### **EXAMPLE 17.2**

Ultimate Bathroom Emporium uses different-coloured price tags to identify which batch of stock has been sold on each trading day. The following transactions show both the sale and sales return transactions between Ultimate Bathroom Emporium and Hanwood Hotel.

Aug 1 Inventory on hand: Towels with blue tags 10 @ \$20 Towels with red tags 15 @ \$22

Aug 2 Sold 5 towels with red tags at \$40 each, plus \$4 GST, to Hanwood Hotel (Invoice 978).

Aug 3 One towel was the wrong colour and was returned by Hanwood Hotel. Ultimate Bathroom Emporium didn't have a replacement in the correct size. Therefore, issued credit note 65 for \$44 (\$40 + \$4 GST = \$44).

Figure 17.9 shows the recording of the cost price in the inventory card.

FIGURE 17.9 Inventory card with a sales return using identified cost

| Invent | ory item: Monogr          | am Seri | es Towe | els   | Valuation method: Identified cost |      |       |          |          |            |
|--------|---------------------------|---------|---------|-------|-----------------------------------|------|-------|----------|----------|------------|
| Date   | Reference                 |         | IN      |       |                                   | OUT  |       | В        | ALANC    | Ε          |
|        |                           | Qty     | Cost    | Value | Qty                               | Cost | Value | Qty      | Cost     | Value      |
| Aug 1  | Balance                   |         |         |       |                                   |      |       | 10<br>15 | 20<br>22 | 200<br>330 |
| Aug 2  | Invoice 978<br>(red tags) |         |         |       | 5                                 | 22   | 110   | 10<br>10 | 20<br>22 | 200<br>220 |
| Διια 3 | Credit note 65            | 1       | 22      | 22    |                                   |      |       | 10       | 20       | 200        |

As this business identifies all its inventory with coloured tags, the cost price of each item can be identified both when the sale is made and when a sales return occurs. However, this requires a lot of organisation; it's easier for many businesses to simply adopt the FIFO valuation assumption.

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#### **EXAMPLE 17.3**

(red tags)

If Ultimate Bathroom Emporium adopted the FIFO system, the coloured tags would no longer be necessary. The transactions with Hanwood Hotel using the FIFO system would be recorded as shown in Figure 17.10.

FIGURE 17.10 Inventory card with a sales return using FIFO

| Invento | Inventory item: Monogram Series Towels |                |    |    |     |      | Valuation method: FIFO |          |          |            |  |  |  |
|---------|--|----------------|----|----|-----|------|------------------------|----------|----------|------------|--|--|--|
| Date    | Reference                              | IN             |    |    |     | OUT  |                        | BALANCE  |          |            |  |  |  |
|         |  | Qty Cost Value |    |    | Qty | Cost | Value                  | Qty      | Cost     | Value      |  |  |  |
| Aug 1   | Balance                                |                |    |    |     |      |                        | 10<br>15 | 20<br>22 | 200<br>330 |  |  |  |
| Aug 2   | Invoice 978                            |                |    |    | 5   | 20   | 100                    | 5<br>15  | 20<br>22 | 100<br>330 |  |  |  |
| Aug 3   | Credit note 65                         | 1              | 20 | 20 |     |      |                        | 6<br>15  | 20<br>22 | 120<br>330 |  |  |  |

When the sale is made, it is assumed that the towels came from the \$20 inventory. When a sales return occurs, the last price issued in the 'Out' column would be used as the assumed cost price of the return.

What if two cost prices were in the 'Out' column for the most recent sale? Consider the inventory card shown in Figure 17.11, which is for the bath sheets sold by Ultimate Bathroom Emporium.

FIGURE 17.11 Inventory card with a sales return using FIFO

| Inventor | ry item: Bath she | Valuation method: FIFO |      |       |        |          |            |         |          |            |
|----------|-------------------|------------------------|------|-------|--------|----------|------------|---------|----------|------------|
| Date     | Reference         | IN                     |      |       | OUT    |          |            | BALANCE |          |            |
|          |                   | Qty                    | Cost | Value | Qty    | Cost     | Value      | Qty     | Cost     | Value      |
| Aug 1    | Balance           |                        |      |       |        |          |            | 3<br>10 | 50<br>55 | 150<br>550 |
| Aug 3    | Invoice 989       |                        |      |       | 3<br>2 | 50<br>55 | 150<br>110 | 8       | 55       | 440        |
| Aug 5    | Cr note 666       | 1                      | 55   | 55    |        |          |            | 9       | 55       | 495        |

Five bath sheets were sold on credit on 3 August. Under FIFO it's assumed that three of them had a cost price of \$50, with the other two allocated a cost of \$55 each.

When one bath sheet was returned on 5 August, which was returned?

The rule is to *always* use the latest issued price in the 'Out' column. The last issued price was \$55, so it's assumed that the sales return had a cost price of \$55.

Always keep in mind that the owner doesn't really know which inventory was sold or returned, as FIFO is completely based on assumptions. Therefore, the sales return is actually *based* on the reverse of FIFO. The price to be used is the latest one issued, so to determine the cost price, we work backwards up through the 'Out' column.

#### 17.4 CHECK YOUR UNDERSTANDING



- 1 Explain the purpose of a credit note.
- 2 State two reasons why a supplier may issue a credit note.
- 3 When a sales return takes place, explain how the cost price is determined under:
  - a identified cost.
  - b FIFO.

# 17

# **CHAPTER REVIEW**

## KEY CONTENT

- Trading firms should conduct a stocktake at least once a year, physically counting all the inventory on hand on one particular date. The cost price of every product should also be recorded. This can be done using barcodes, but small businesses might also use techniques such as codes or fixed mark-ups.
- [17.2] A perpetual inventory system involves continuously recording inventory movements throughout a reporting period, and keeping track of those movements on inventory cards. The system could either identify the cost of every inventory item, or use the first-in-first-out (FIFO) assumption to assign costs. The choice of method will determine how inventory cards are updated.
- Regular stocktakes may reveal either inventory losses or gains disparities between the records on the inventory cards and the amount of inventory actually on hand. The inventory cards should be adjusted to reflect the disparity, and a memo written to document the change.
- A further complication is accounting for returns of inventory. A purchases return involves a business returning goods to its supplier, while a sales return involves customers returning inventory to the business. Both types of returns need to be recorded in inventory cards; for a purchases return, the supplier also issues a credit note.

#### **CHAPTER 17 EXERCISES**



#### 1 INVENTORY SHEETS



The manager of Greendale Trading completes a physical stocktake and finds the following inventory on hand.

| Item no. 16790 | 520 units with a cost price of \$24.00 each           |
|----------------|---|
| Item no. 16791 | 300 units @ \$19.50 each                              |
| Item no. A854  | 145 units @ \$10.00 each                              |
| Item no. CB76  | 580 units @ \$4.50 each                               |
| Item no. 60175 | 170 units @ \$32.00 each and 400 units @ \$34.00 each |

- **a** Prepare the inventory sheets for the physical stocktake, showing clearly the value of each inventory item.
- **b** Calculate the total cost of inventory on hand.

#### **2 COST PRICES FROM MARK-UPS**



As part of an annual stocktake, the following goods are identified as being part of inventory. The selling price (including GST) of each item is also listed.

| AFL footballs    | \$99 |
|------------------|------|
| NSL soccer balls | \$66 |
| NBL basketballs  | \$33 |



- a Calculate the GST included in each of the selling prices stated above, and determine the price the business charges for each item.
- **b** Calculate the cost price of each of the items if the firm was using a mark-up of:
  - i 100%. ii 80%.
  - iii 65%. iv 50%. v 20%.
- c Prove your answers to part b(iii) by working from the cost prices back to the selling prices.

#### **3 COST PRICES FROM CODES**





Castlemaine Home Appliance Centre supplies the following information from its physical stocktake.

| Item              | Units on hand | Selling price | Cost price |
|-------------------|---------------|---------------|------------|
| Electric toasters | 80            | \$39.90       | QI/RL      |
| Microwaves        | 30            | \$399.00      | UQR/LL     |
| Blu-ray players   | 15            | \$550.00      | AER/FR     |
| Televisions       | 20            | \$645.00      | DLO/ER     |

All price tags are encoded with cost prices before goods are put on sale, using the following system.

| Q | U | Α | D | R | Е | F | 0 | I | L |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

- a Convert the coded cost prices into dollars and cents.
- **b** Prepare inventory sheets to determine the value of inventory on hand.

#### **4 IDENTIFIED COST VERSUS FIFO**



Brunswick Trail Bikes purchases bicycle chains on several different occasions during 2023, as shown below.

| July 1      | Purchase lot #1 | 10 chains @ \$50 |
|-------------|-----------------|------------------|
| August 1    | Purchase lot #2 | 10 chains @ \$52 |
| September 1 | Purchase lot #3 | 20 chains @ \$54 |
| October 1   | Purchase lot #4 | 30 chains @ \$54 |
| November 1  | Purchase lot #5 | 30 chains @ \$55 |

On 30 November 2023, a physical stocktake shows that there were 30 bicycle chains in inventory. An examination of the price tags on these chains reveals the following cost prices.

- 5 had a cost price of \$50
- 5 had a cost price of \$52
- 15 had a cost price of \$54
- 5 had a cost price of \$55.
- **a** Using the identified cost method of inventory valuation, calculate the value of the cost of sales for bicycle chains for the year ended 30 November 2023.
- **b** What is the value of inventory on hand as at 30 November 2023 if identified cost was used by this business?
- **c** Using the FIFO assumption of inventory flows, calculate the value of the cost of sales for bike chains for the year ended 30 November 2023.
- d What is the value of inventory on hand as at 30 November 2023 under the FIFO method?
- **e** Which method, identified cost or FIFO, will determine the most accurate profit for this business? Explain your answer fully.



#### **5 COST PRICES FROM CODES**



Ron Wu owns Williamstown Gym Equipment. He uses a coding system to identify the cost price of all his inventory items, based on the following letters.

| R | 0 | N | Α | L | D | S | G | Υ | М |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

On 30 June 2023, Wu completes a stocktake and determines the following quantities on hand.

| Inventory item      | Quantity on hand | Price code | Quantity sold this period |  |  |
|---------------------|------------------|------------|---------------------------|--|--|
| Exercise bikes      | 24               | ONM/LM     | 80                        |  |  |
| Home gymnasiums     | 8                | ROMM/      | 22                        |  |  |
| Electric treadmills | 12               | DSM/YL     | 27                        |  |  |
| Sets of weights     | 20               | YG/AL      | 110                       |  |  |

- **a** Using the coding system provided, determine the cost of inventory on hand as at 30 June 2023.
- **b** If Wu applies a mark-up of 100% to all inventory sold, prepare an income statement to determine his gross profit for the year ended 30 June 2023.



#### **6 IDENTIFIED COST VERSUS FIFO**



The following transactions relate to the Big Kahuna Smoker, one of several models of barbecues bought and sold by Bellarine Barbecues. The owner of this business uses the identified cost method.

- Jul 1 Six Big Kahunas were in inventory, with each one costing the business \$200, plus GST of \$20
  - 2 Sold one Big Kahuna for \$390, plus \$39 GST (Rec. 283)
  - 3 Sold two Big Kahunas for \$780, plus \$78 GST (Rec. 284)
  - 4 Purchased 10 barbecues for \$220 each, plus \$22 GST (Inv. 3929)
  - 5 One of the barbecues purchased on 4 July was found to be damaged and was returned to the supplier. Credit note number 32 was issued by the supplier
  - 6 Sold two barbecues for \$390 each, plus \$39 GST (Rec. 285 and 286). One barbecue had a cost price of \$200; the other came from the \$220 inventory
  - 7 Sold two Big Kahunas for \$780, plus \$78 GST (Rec. 287); cost price of both \$200
  - 8 Sold one barbecue for \$400, plus \$40 GST (Rec. 288); cost price \$220
- a Prepare an inventory card for the Big Kahuna Smoker under the identified cost method.
- **b** The owner is interested in how the FIFO method works. Prepare the inventory card again, this time using the FIFO assumption of inventory flow. (Assume that the actual cost prices were not available to the owner.)
- **c** Comment on the differences between the two methods by determining cost of sales under each.
- **d** Which method do you believe should be used in this business? Explain fully.
- e How many smokers should be in inventory on 7 July?
- **f** Is it possible for a business selling barbecues to experience an inventory loss? Explain your answer fully.

#### 7 IDENTIFIED COST VERSUS FIFO





Hospitality Supplies is a small business specialising in furniture for the hospitality industry. One of its products is the Deluxe Bar Stool.

The following information relates to the purchases and sales of the Deluxe Bar Stool during July 2023. On 1 July, there were 10 bar stools on hand with a cost price of \$56 each.

|         | Pur   | chases                     |       | S                        | ales  |
|---------|-------|----------------------------|-------|--------------------------|---|
| Inv. 32 | Jul 2 | 50 units @ \$56.00<br>each | Jul 4 | 40 units @<br>\$112 each | Inv. 132<br>(cost price \$56)                   |
| Inv. 39 | 5     | 40 units @ \$60.00<br>each | 6     | 15 units @<br>\$120 each | Inv. 135<br>(cost price 5 @ \$56,<br>10 @ \$60) |
| Inv. 44 | 11    | 50 units @ \$60.00<br>each | 13    | 30 units @<br>\$120 each | Inv. 142<br>(cost price \$60)                   |
| Inv. 54 | 24    | 50 units @ \$64.00<br>each | 21    | 50 units @<br>\$128 each | Inv. 150<br>(cost price 5 @ \$56,<br>45 @ \$60) |
|         |       |                            | 27    | 20 units @<br>\$128 each | Inv. 164<br>(cost price 5 @ \$60,<br>15 @ \$64) |
|         |       |                            | 29    | 20 units @<br>\$128 each | Inv. 168<br>(cost price \$64)                   |

On 31 July, a physical stocktake reveals 15 units on hand (Memo 38). These units have a cost price of \$64.

- a Using identified cost, prepare an inventory card for the month of July for Deluxe Bar Stools.
- **b** Prepare a second inventory card, this time using the FIFO inventory assumption.
- **c** Explain to the owner the effect on profit for July if the FIFO method was used, rather than identified cost.

#### **8 SALES RETURNS – IDENTIFIED COST**





The following stock card extract has been prepared for a furniture store that sells student desks.

| Item: St | Item: Student desks |     |      | Valuation method: Identified cost |     |      |       |     |         |       |  |  |
|----------|---------------------|-----|------|-----------------------------------|-----|------|-------|-----|---------|-------|--|--|
|          |                     | IN  |      |                                   |     | OUT  |       |     | BALANCE |       |  |  |
| Date     | Reference           | Qty | Cost | Value                             | Qty | Cost | Value | Qty | Cost    | Value |  |  |
| Sep 1    | Balance             |     |      |                                   |     |      |       | 4   | 250     | 1 000 |  |  |
|          |                     |     |      |                                   |     |      |       | 10  | 260     | 2 600 |  |  |
| Sep 3    | Invoice 43          |     |      |                                   | 3   | 250  | 750   | 1   | 250     | 250   |  |  |
|          |                     |     |      |                                   | 2   | 260  | 520   | 8   | 260     | 2 080 |  |  |

Sep 4 One of the student desks sold on 3 September had a mark on it. The customer returned it and requested a full credit. This was granted and credit note 64 was issued. The returned desk came from the \$250 inventory and was sold for \$390.

Record the required entry for the sales return in the inventory card shown above.



#### 9 SALES RETURNS - FIFO



The inventory card in Question 8 has been reproduced below. If FIFO was being used, rather than identified cost, complete the entries for:

- a the sale on 3 September.
- b the sales return on 4 September.

| Item: 9 | Item: Student desks |     |      |    |     | Valuation method: FIFO |      |       |         |            |               |  |
|---------|---------------------|-----|------|----|-----|------------------------|------|-------|---------|------------|---------------|--|
|         |                     | IN  |      |    |     | OUT                    |      |       |         | BALANCE    |               |  |
| Date    | Reference           | Qty | Cost | Va | lue | Qty                    | Cost | Value | Qty     | Cost       | Value         |  |
| Sep 1   | Balance             |     |      |    |     |                        |      |       | 4<br>10 | 250<br>260 | 1 000<br>2 00 |  |
| Sep 3   | Invoice 43          |     |      |    |     |                        |      |       |         |            |               |  |

#### 10 INVENTORY LOSS OR GAIN



The following information is extracted from an inventory card prepared under the FIFO assumption.

|        |           | IN  |      |       | OUT |      |       | BALANCE |      |       |
|--------|-----------|-----|------|-------|-----|------|-------|---------|------|-------|
| Date   | Reference | Qty | Cost | Value | Qty | Cost | Value | Qty     | Cost | Value |
| Sep 28 | EFTPOS    |     |      |       | 2   | 100  | 200   | 9       | 100  |       |
|        |           |     |      |       |     |      |       | 20      | 105  | 3000  |
| 29     | EFTPOS    |     |      |       | 3   | 100  | 300   | 6       | 100  |       |
|        |           |     |      |       |     |      |       | 20      | 105  | 2700  |

- a How many units were on hand at the close of business on 27 September?
- **b** If a physical stocktake carried out on 30 September revealed that there were 23 units in inventory, what is the value of the inventory loss or gain experienced by this business?
- **c** Justify why an adjustment for inventory loss/gain should be made on 30 September, with reference to a qualitative characteristic of accounting.

#### SPREADSHEET

#### 11 INVENTORY LOSS OR GAIN



The owner of Seaford Skis provides the following extract from one of his inventory cards. It relates to Elite Skis, which sell for about \$170 per pair, plus GST.

|        |           | IN  |      |       | OUT |      |       | BALANCE |      |       |
|--------|-----------|-----|------|-------|-----|------|-------|---------|------|-------|
| Date   | Reference | Qty | Cost | Value | Qty | Cost | Value | Qty     | Cost | Value |
| Aug 28 | Inv. 3199 | 10  | 80   | 800   |     |      |       | 2       | 75   |       |
|        |           |     |      |       |     |      |       | 10      | 80   | 950   |
| 30     | Rec. 194  |     |      |       |     |      |       |         |      |       |

- a On 30 August the business sold three pairs of Elite skis for cash. At what value should these skis be recorded in the 'Out' column of the inventory card if the FIFO assumption was followed?
- **b** No other transactions occurred in relation to the Elite skis in August. A stocktake on 31 August revealed that there were 10 pairs of skis still on hand. What adjustment is necessary in the inventory card because of the information revealed by the stocktake (Memo 32)?
- **c** Copy out the above inventory card and make all entries required at the end of August 2023.
- d State two possible reasons why the quantity revealed by the stocktake on 31 August was different from that shown on the inventory card.

#### 12 INVENTORY LOSS OR GAIN



This extract of an inventory card was prepared by Brett Holzer, the manager of a retail business, who uses the perpetual inventory system.

|        |           | IN  |      |       | OUT |      |       | BALANCE        |                |                       |
|--------|-----------|-----|------|-------|-----|------|-------|----------------|----------------|-----------------------|
| Date   | Reference | Qty | Cost | Value | Qty | Cost | Value | Qty            | Cost           | Value                 |
| Jul 29 | Rec. 909  |     |      |       | 21  | 40   | 840   | 9<br>80        | 40<br>42       | 360<br>3 360          |
| 31     | Inv. 2916 | 100 | 44   | 4400  |     |      |       | 9<br>80<br>100 | 40<br>42<br>44 | 360<br>3 360<br>4 400 |

A physical stocktake conducted on 31 July reveals that 174 units were still on hand.

- **a** Using the FIFO assumption of inventory flows, determine the value of any inventory loss or gain revealed by the stocktake on 31 July. (Show all workings.)
- **b** State, and explain, three different causes of the inventory loss (or gain) you have identified in part **a**.
- **c** State the two-fold effect of the inventory loss (or gain) on the balance sheet of Holzer's business.

#### **CHAPTER CHECKLIST**

Now that you've finished Chapter 17, double-check your progress.

Are you ready for your Unit 2 assessment?

#### I have ...

- completed all 'Check Your Understanding' questions
- completed all exercises
- Manded in my workbook for marking.

#### I understand ...

- documents used by a business to record financial transactions
- of the purpose and use of inventory cards using the First-In, First-Out (FIFO) and Identified Cost methods for recording:
  - inventory sold
  - inventory purchased
  - inventory returned to suppliers
  - inventory returned by customers
  - inventory loss/gain.

#### I can ...

- use correct accounting terminology
- Manually record transactions in the special journals and inventory cards
- manually prepare accounting reports for a trading business.

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#### **PREPARE**

Read back over the chapter now, then complete the online revision activity



Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



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# 18

# MANAGING A TRADING BUSINESS

You've learnt about how small businesses account for their inventory, but keeping accurate records is only one part of running a trading business. Owners and managers use accounting information in order to make effective decisions about the control of inventory – when to buy it, what to charge for it, and how to maximise the profitability of their business.

In this chapter, you will learn about the decisions faced by owners and managers of trading businesses, and how accounting information informs those decisions. You'll also calculate some key financial indicators for a trading business, and consider how to actively manage inventory.

#### **LEARNING OBJECTIVES**

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

- record transactions for drawings of inventory and using inventory for advertising [18.1]
- prepare an income statement to determine a gross profit figure [18.2]
- outline the principles of efficient inventory management [18.3]
- describe various measures used to protect inventory [18.3]
- determine inventory turnover and evaluate turnover rates for a period [18.4].



### 181 MAKING USE OF INVENTORY

The primary purpose of inventory is to be sold, so that it generates revenue for a trading business.

That said, inventory is an asset, and the owners and managers of a trading business may find other uses for that asset. In this chapter we look at two common transactions involving inventory that managers may choose to make for other purposes.

#### DRAWINGS OF INVENTORY

It's common for a business owner to withdraw cash from their business, particularly when they make their living from the profits. Such transactions appear in the cash payments journal throughout this text, and cause the bank account of the business, as well as owner's equity, to decrease.

The owner of a trading business may also choose to withdraw inventory for personal use. They may have their own needs for items such as computers, hardware, clothing and so on, and choose to take those items from their own assets at any time. The effect on the balance sheet is a decrease in inventory, with a corresponding decrease in owner's equity.

If an owner withdraws inventory, it should be noted on an office memo, such as in Figure 18.1, with the details recorded on the relevant inventory card.

FIGURE 18.1 Office memo for the withdrawal of inventory

Barry John Menswear

Date: 2/8/23

Office memo: Withdrawal of one navy blue suit

Cost price: \$250

Memo No. 201 Signed: B John

This memo provides all the details required to update the inventory card. The date of the event, the item withdrawn and its cost price are all clearly stated.

The relevant inventory card would then be updated, as shown in Figure 18.2.

FIGURE 18.2 Inventory card updated for a withdrawal of inventory

| Inventory item: Navy blue suits |           |     |      | Valuation method: Identified cost |     |      |       |         |      |       |
|---------------------------------|-----------|-----|------|-----------------------------------|-----|------|-------|---------|------|-------|
|                                 |           | IN  |      |                                   | OUT |      |       | BALANCE |      |       |
| Date                            | Reference | Qty | Cost | Value                             | Qty | Cost | Value | Qty     | Cost | Value |
| Aug 1                           | Balance   |     |      |                                   |     |      |       | 4       | 250  | 1 000 |
| 2                               | Memo 201  |     |      |                                   | 1   | 250  | 250   | 3       | 250  | 750   |

Note that the identified cost method is used in this example. If the business used the FIFO method, the cost price would be sourced from the inventory card in the usual way. That is, it would be assumed that the suit withdrawn was from the oldest inventory in the balance of the inventory card at that time.

#### INVENTORY USED FOR ADVERTISING PURPOSES

A business may also use inventory to advertise its business. This could involve a business owner donating goods from the business to a local charity, school or fete. In return, the donation might be recognised with a certificate of thanks that can be displayed in the business's premises as a sign that the business supports the local community. Such donations advertise the business in a good light and hopefully result in locals supporting the business.

When inventory is used for advertising purposes, details of the inventory sacrificed should be noted in a memo and the inventory card updated to reflect the situation. Figure 18.3 shows an example for Strathmore Science Supplies.

FIGURE 18.3 Office memo for inventory used for advertising purposes

**Strathmore Science Supplies** 

Date: 2/9/23

Office memo: Donation of two microscopes

Cost price:  $$80 \times 2 = $160$ 

Memo No. 150 Signed: Kay Sheedy

| Inventory item: Microscopes |           |     |      | Valuation method: FIFO |     |      |       |         |          |            |  |
|-----------------------------|-----------|-----|------|------------------------|-----|------|-------|---------|----------|------------|--|
|                             |           | IN  |      |                        |     | OUT  |       |         | BALANCE  |            |  |
| Date                        | Reference | Qty | Cost | Value                  | Qty | Cost | Value | Qty     | Cost     | Value      |  |
| Sep 1                       | Balance   |     |      |                        |     |      |       | 5<br>10 | 80<br>85 | 400<br>850 |  |
| 2                           | Memo 150  |     |      |                        | 2   | 80   | 160   | 3<br>10 | 80<br>85 | 240<br>850 |  |

This business uses the FIFO system (as stated on the inventory card), so it's assumed that the donated microscopes came from the \$80 lot, rather than the \$85 inventory.

As you can see, memos are used for several different transactions. These include inventory losses, inventory gains, withdrawals of inventory and using inventory for advertising. It's important that business owners keep copies of all memos to confirm details of all transactions being recorded in inventory cards.

#### 18.1 CHECK YOUR UNDERSTANDING



- 1 A memo may be used to note the details of three different events in relation to inventory. Describe these three events.
- 2 Explain the two-fold effect on a balance sheet when an owner withdraws inventory.
- 3 When an owner donates inventory items, an office memo should be completed. Explain why, making reference to a qualitative characteristic of accounting.

## 18.2 DETERMINING GROSS PROFIT

As you know, a single entry accounting system consists of cash journals as a starting point. This cash-based system may be supplemented by inventory cards so that the owner can manage inventory efficiently. However, these two records need to come together at the end of the period so that management can see the overall performance of the business.

The cash journals are used to record, among other things:

- the cash paid for purchases of inventory
- the cash received from sales of inventory.

Inventory cards, on the other hand, record:

- the cost price of inventory when purchased
- the cost price of inventory when sold.

All these details must come together so that the owner of a trading business can determine if a profit or loss has been made on the inventory sold.

#### **CALCULATING PROFIT**

Inventory is always valued at cost price. When it's purchased, the cost paid is noted in the journals. When it's sold, the cost price is recorded in the 'Out' column of the appropriate inventory card.

The customer, of course, doesn't pay cost price (under normal circumstances). The selling price received is recorded in the cash journals as sales. The difference between the cost price of the inventory and the selling price represents the business's profit made on the sale.

To demonstrate this, the following accounting records have been provided for the business of Camilleri's Computers for the month of September. This retail outlet sells both the Megafast and the Economax tablet computer models.

FIGURE 18.4 Camilleri's Computers: cash receipts journal

| Date  | Details    | Receipt no. | Amount<br>banked<br>\$ | Sales<br>Megafast<br>\$ | Sales<br>Economax<br>\$ | Sundry<br>receipts<br>\$ | GST<br>received<br>\$ |
|-------|------------|-------------|------------------------|-------------------------|-------------------------|--------------------------|-----------------------|
| Sep 3 | Cash sales | 001         | 2 200                  |                         | 2 000                   |                          | 200                   |
| 6     | Cash sales | 002         | 5 500                  | 5 000                   |                         |                          | 500                   |
| 8     | Cash sales | 003         | 2 750                  | 2 500                   |                         |                          | 250                   |
| 11    | Cash sales | 004         | 3 850                  |                         | 3 500                   |                          | 350                   |
| 14    | Cash sales | 005         | 4 950                  | 4 500                   |                         |                          | 450                   |
| 15    | Capital    | EFT         | 5 000                  |                         |                         | 5 000                    |                       |
| 16    | Cash sales | 006         | 2 750                  | 2 500                   |                         |                          | 250                   |
| 19    | Cash sales | 007         | 5 720                  |                         | 5 200                   |                          | 520                   |
| 22    | Cash sales | 008         | 3 960                  |                         | 3 600                   |                          | 360                   |
| 24    | Cash sales | 009         | 7 700                  | 7 000                   |                         |                          | 700                   |
| 28    | Cash sales | 010         | 1 980                  |                         | 1 800                   |                          | 180                   |
| 29    | Loan-NAB   | EFT         | 4 000                  |                         |                         | 4 000                    |                       |
| 30    | Totals     |             | 50 360                 | 21 500                  | 16 100                  | 9 000                    | 3 760                 |

The total cash sales for September can be found by adding the two columns used for the sales of the two types of computers: \$21 500 + \$16 100 = \$37 600 total sales revenue.



Total cash sales can be calculated by adding up the two columns used for sales of the two types of tablet computers.

The capital contribution made on 15 September isn't included as revenue, because it represents owner's equity. The loan taken out on 29 September is also excluded from the definition of revenue, because it represents a liability of the business.

The inventory cards in Figures 18.5 and 18.6 show what happened to the firm's inventory in September.

FIGURE 18.5 Inventory card for Megafast tablet computer

| Inventory item: Megafast tablet<br>Min: 5 Max: 10<br>Location: South warehouse |           |     |       | Supplier: Advanced Computers Pty Ltd<br>Product code: PC186291<br>Valuation method: FIFO |        |                |              |        |                |       |
|--|-----------|-----|-------|--|--------|----------------|--------------|--------|----------------|-------|
|  |           |     | IN    |  |        | OUT            |              |        | BALAN          | CE    |
| Date   | Reference | Qty | Cost  | Value  | Qty    | Cost           | Value        | Qty    | Cost           | Value |
| Sep 1  | Balance   |     |       |  |        |                |              | 8      | 1 300          | 10400 |
| 6  | Rec. 002  |     |       |  | 2      | 1 300          | 2600         | 6      | 1 300          | 7 800 |
| 8  | Rec. 003  |     |       |  | 1      | 1 300          | 1 300        | 5      | 1 300          | 6500  |
| 12   | Inv. 3838 | 5   | 1 350 | 6750   |        |                |              | 5<br>5 | 1 300<br>1 350 | 13250 |
| 14   | Rec. 005  |     |       |  | 2      | 1 300          | 2600         | 3<br>5 | 1 300<br>1 350 | 10650 |
| 16   | Rec. 006  |     |       |  | 1      | 1 300          | 1 300        | 2<br>5 | 1 300<br>1 350 | 9350  |
| 24   | Rec. 009  |     |       |  | 2<br>1 | 1 300<br>1 350 | 2600<br>1350 | 4      | 1 350          | 5400  |
| 26   | Inv. 3894 | 6   | 1370  | 8220   |        |                |              | 4<br>6 | 1 350<br>1 370 | 13620 |

FIGURE 18.6 Inventory card for Economax tablet computer

| Inventory item: Economax tablet<br>Min: 5 Max: 10<br>Location: South warehouse |           |     |       |       | Supplier: Advanced Computers Pty Ltd<br>Product code: PC14321<br>Valuation method: FIFO |    |       |       |        |                |        |
|--|-----------|-----|-------|-------|---|----|-------|-------|--------|----------------|--------|
|  |           |     | IN    |       |   |    | OUT   |       |        | BALAN          | ICE    |
| Date   | Reference | Qty | Cost  | Value | Q.  | ty | Cost  | Value | Qty    | Cost           | Value  |
| Sep 1  | Balance   |     |       |       |   |    |       |       | 10     | 1 000          | 10 000 |
| 3  | Rec. 001  |     |       |       | 1   |    | 1 000 | 1000  | 9      | 1 000          | 9000   |
| 11   | Rec. 004  |     |       |       | 2   | 2  | 1 000 | 2000  | 7      | 1 000          | 7 000  |
| 19   | Rec. 007  |     |       |       | 3   | 3  | 1 000 | 3000  | 4      | 1 000          | 4000   |
| 21   | Inv. 3864 | 6   | 1 050 | 6300  |   |    |       |       | 4<br>6 | 1 000<br>1 050 | 10 300 |
| 22   | Rec. 008  |     |       |       | 2   | 2  | 1 000 | 2000  | 2<br>6 | 1 000<br>1 050 | 8 300  |
| 28   | Rec. 010  |     |       |       | 1   |    | 1 000 | 1 000 | 1<br>6 | 1 000<br>1 050 | 7 300  |
| 30   | Memo 205  |     |       |       | 1   |    | 1 000 | 1000  | 6      | 1050           | 6300   |

(*Note*: A stocktake completed on 30 September revealed that there were 10 Megafast and six Economax tablets in inventory. This means that the firm has suffered an inventory loss of one Economax model, so the required adjustment has been entered in the inventory card.)

#### **GROSS PROFIT**

In order to determine a **gross profit** for September, the inventory cards must be examined to calculate the total cost of sales for the month.

By looking at the 'Out' column of the inventory cards for the two lines, the cost of sales can be determined.

| N     | Megafast model       |  |  |  |  |  |
|-------|----------------------|--|--|--|--|--|
| Date  | Cost of sales*<br>\$ |  |  |  |  |  |
| Sep 6 | 2600                 |  |  |  |  |  |
| 8     | 1 300                |  |  |  |  |  |
| 14    | 2600                 |  |  |  |  |  |
| 16    | 1 300                |  |  |  |  |  |
| 24    | 2600                 |  |  |  |  |  |
| 24    | 1 350                |  |  |  |  |  |
| Total | 11750                |  |  |  |  |  |

| Ed    | Economax model       |  |  |  |  |  |
|-------|----------------------|--|--|--|--|--|
| Date  | Cost of sales*<br>\$ |  |  |  |  |  |
| Date  | Ð                    |  |  |  |  |  |
| Sep 3 | 1 000                |  |  |  |  |  |
| 11    | 2 000                |  |  |  |  |  |
| 19    | 3 000                |  |  |  |  |  |
| 22    | 2 000                |  |  |  |  |  |
| 28    | 1 000                |  |  |  |  |  |
| Total | 9 000                |  |  |  |  |  |

<sup>\*</sup> The cost of sales for the month doesn't include inventory losses or gains. Any inventory losses should be reported as a separate expense item in an income statement.

To determine the total cost of sales for the month for this business, the two inventory lines are added together.

Cost of sales = \$11750 + \$9000 = \$20750

Sales revenue for the month has already been noted as \$37 600 (from the cash receipts journal).

gross profit sales revenue for a

period less the cost

of sales over that same period

The following accounting report may now be prepared.

#### CAMILLERI'S COMPUTERS: INCOME STATEMENT FOR **MONTH ENDED 30 SEPTEMBER 2023**

|                     | \$     |
|---------------------|--------|
| Cash sales          | 37 600 |
| Less: Cost of sales | 20 750 |
| Gross profit        | 16 850 |

This report shows both the amount of revenue received by the business and the cost of inventory that was sacrificed to earn this revenue. The difference is the gross profit for the period.

The amount of gross profit earned by a trading business will depend on several factors, including:

- how many units are sold within the given period
- what mark-up percentage has been added to the cost price of the inventory to determine selling prices
- whether selling prices are rigid, or whether allowances are made for haggling with customers. Sometimes negotiations at the point of sale result in the selling price being reduced to clinch a sale.

#### **ACCOUNTING FOR LOSSES AND GAINS**

The management of a business may want to extend the income statement to account for inventory losses or gains. Our example included an inventory loss of one Economax tablet computer, at a cost of \$1000. This too can be incorporated into the report.

#### CAMILLERI'S COMPUTERS: INCOME STATEMENT FOR **MONTH ENDED 30 SEPTEMBER 2023**

|                       | \$     |
|-----------------------|--------|
| Cash sales            | 37 600 |
| Less: Cost of sales   | 20 750 |
| Gross profit          | 16 850 |
| Less: Inventory loss  | 1 000  |
| Adjusted gross profit | 15 850 |

(If a trading firm experiences an inventory gain in a period, this gain is simply added to gross profit.)

In this example, Camilleri's Computers reported an inventory gain of \$1350 at the end of October's trading period.

#### CAMILLERI'S COMPUTERS: INCOME STATEMENT FOR **MONTH ENDED 31 OCTOBER 2023**

|                       | \$     |
|-----------------------|--------|
| Cash sales            | 50 000 |
| Less: Cost of sales   | 25750  |
| Gross profit          | 24250  |
| Plus: Inventory gain  | 1 350  |
| Adjusted gross profit | 25600  |

#### adjusted gross profit

sales revenue minus cost of sales and any adjustment for inventory loss (or plus any adjustment for an inventory gain)

#### net profit

sales revenue less all expenses incurred by a business

#### BEST PRACTICE

Make sure you know the difference between gross profit and net profit. This **adjusted gross profit** figure should truly reflect the success (or otherwise) of a trading business. It reports on the firm's sales revenue, deducts the cost of these sales, and is then adjusted for any inventory losses or gains as revealed by a stocktake.

#### OTHER EXPENSES

The only thing not yet considered in the above report is the range of other expenses that a trading firm may experience, such as rent, wages and advertising. To prepare a full income statement, such expense items are simply deducted from the gross profit figure to reach a final **net profit** result.

For example, rent, wages and advertising would be shown in the report as follows.

# CAMILLERI'S COMPUTERS: INCOME STATEMENT FOR MONTH ENDED 31 OCTOBER 2023

|                       | \$    | \$     |
|-----------------------|-------|--------|
| Cash sales            |       | 50 000 |
| Less: Cost of sales   |       | 25750  |
| Gross profit          |       | 24 250 |
| Plus: Inventory gain  |       | 1 350  |
| Adjusted gross profit |       | 25 600 |
| Less: Other expenses  |       |        |
| Rent                  | 1 600 |        |
| Wages                 | 1 200 |        |
| Advertising           | 800   | 3600   |
| Net profit            |       | 22000  |

It's also important to recognise the link between inventory cards and the balance sheet. The value of the current asset Inventory comes directly from the totals of the individual inventory cards.

In the previous example, inventory on hand would be determined as follows.

| Inventory item:            | Value as at 30 September<br>(from final balance of inventory cards) |  |
|----------------------------|---|--|
| Megafast computers         | 13620   |  |
| Economax computers         | 6300  |  |
| Total of inventory on hand | 19920   |  |

This value is simply reported in the balance sheet, along with the firm's other current assets, as shown in the extract below.

| Current assets |       |         |
|----------------|-------|---------|
| Cash on hand   | 300   |         |
| Cash at bank   | 5400  |         |
| Inventory      | 19920 | \$25620 |

#### 18.2 CHECK YOUR UNDERSTANDING



- 1 Distinguish between the terms 'gross profit' and 'adjusted gross profit' as applied to an income statement.
- 2 In an income statement, the item 'cost of sales' appears. Where does the value for this item originate? Explain fully.
- 3 How is an inventory gain treated in an income statement?

# 18.3

## MANAGING INVENTORY

Inventory cards provide an owner with information about how well inventory has been selling during a period. These cards reflect the decisions of management and show the day-to-day movement of goods as they are bought and sold. Sound management of inventory can lead to an increase in sales, and therefore profit.

A number of principles should be followed for efficient inventory management, as shown in Figure 18.7.

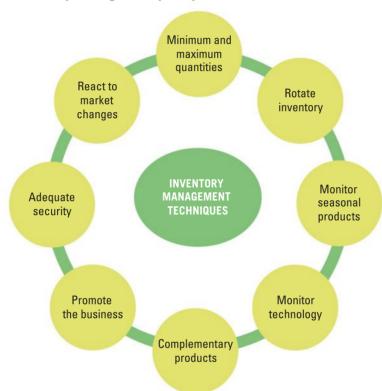


FIGURE 18.7 Inventory management principles

#### **DETERMINE MINIMUM AND MAXIMUM QUANTITIES**

For each particular line of inventory, management should determine a *maximum* quantity to keep in inventory. Once this amount is purchased, sales can be made until the *minimum* number is reached. At this stage, an order should be placed and the maximum number of units re-ordered.

In a perfect situation, the minimum quantity should be just enough to satisfy sales until the new delivery arrives. This is known as **just-in-time ordering**. However, this depends on the **lead time** of deliveries from the suppliers. Lead time is the number of days it takes from the moment an order is made until the actual delivery of goods. It's risky to carry too little inventory, as sales opportunities may be missed and customers may go elsewhere.

#### ROTATE ALL INVENTORY

When a new delivery of goods takes place, inventory items must be *rotated* so that the older units are on prominent display.

- If goods are stacked up (e.g. shirts), the older inventory should be on top with the new delivery at the bottom of the stack.
- If goods are on display shelves, the new inventory should be put at the back of the shelf.

#### just-in-time ordering

purchasing inventory so that it arrives just before the business runs out of inventory

#### lead time

the time from when an order is made until the goods are delivered Rotation is particularly important for perishable items (e.g. food), but also matters for other types of inventory with use-by dates, such as batteries and medicines.

Almost all types of inventory should be rotated, because all products have a risk of becoming shop-soiled, dusty, dirty or marked. The longer an item sits in a shop, the more likely it is to become damaged.

#### **MONITOR SEASONAL PRODUCTS**

Some businesses have inventory items that are prone to seasonal demand, such as woollen jumpers and heavy coats in winter, or bathers and swimming pool accessories in summer. Shops involved in sporting goods are particularly affected by seasonal factors; there's little value in having a large supply of football jumpers over summer.

Management must ensure that, towards the end of a season, this inventory is run down to a minimum, perhaps even to zero. Inventory that cannot be sold for another 8-10 months is called 'dead inventory'. Such items have been paid for but aren't generating sales, so they cost the business money to just sit there on display! The selling price of such items may have to be reduced to clear them as the season ends.

#### MONITOR TECHNOLOGICAL ADVANCES

Some industries are affected by rapid technological change. Computers, tablets and smartphones are good examples of products that should not be ordered in large quantities. The technology of these products is subject to rapid change, and consumers generally want the latest developments. To manage such inventory effectively, owners and managers must keep up to date in terms of technology and the impact it has on their inventory items.

#### CONSIDER COMPLEMENTARY PRODUCTS

A useful inventory management method is to offer a range of complementary products. This means that the business provides a variety of inventory items that complement one other.

For example, a menswear store will usually sell ties and belts, as well as shirts and trousers. A mobile phone shop will sell mobiles, chargers, cases, spare batteries and screen protectors. The sales of one particular item can then promote sales of other items.

#### PROMOTE THE BUSINESS AND ITS PRODUCTS

Many stores offer special prices on old or out-of-season items because they want to get rid of that inventory. However, business owners should also consider special promotions on current items. Doing something different keeps customers involved with the firm.

Managers should *always* be looking for new ways to promote their inventory. The lifeblood of a trading firm is the turnover of the actual goods in inventory, so it's vital to keep sales moving!

Special deals, discount prices, in-store celebrities, two-for-one offers, free movie passes, lucky draws ... management should consider all those methods and more as a way to keep the business in the public eye.

### **ENSURE ADEQUATE SECURITY**

Management must pay attention to the security of inventory. Inventory items are often the target of thieves, and may be taken by customers or by staff if adequate security is not in place.

Some devices and/or tactics that management may consider include:

- security guards
- undercover security personnel
- video surveillance
- security tags on all products
- two-way mirrors
- dve bombs
- electronic security gates at all exits
- random checks on staff.

Naturally, single-owner businesses cannot always afford, or may not need, some of these security measures. Management should consider what security is required for their particular store and respond on that basis.

### REACT TO CHANGES IN THE MARKET

Inventory management demands continuous attention. Many businesses slowly die out because owners think they can just sit back and things will take care of themselves.

Business owners must be willing to watch over inventory cards on a daily basis to detect slow-moving items, as these may have to be discontinued. Fast-moving lines must also be identified, as it is likely that they will sell out. All other inventory must be checked to ensure that items aren't damaged or dirty and that displays are as required.

If changes in the general market are detected, management must be ready and able to react. Prices and products are subject to change, and management must make decisions in reaction to such changes.

### 18.3 CHECK YOUR UNDERSTANDING



- 1 A business can have too much or too little inventory on hand. Outline the implications of each of these situations.
- 2 Some business owners try to practise just-in-time ordering of inventory. Explain what this practice means.
- 3 Explain why inventory rotation is important for all trading businesses.
- 4 Refer to a variety of media (television, newspapers, magazines etc.) and describe six different examples of special promotions used by trading firms to sell their inventory. Select the most effective promotion and the most ineffective one, and explain why you have made your choices.

inventory turnover

that shows how many

days it takes a business to turn its inventory

a financial indicator

into sales

## 18.4 INVENTORY TURNOVER

The success of a trading firm depends largely on management's ability to buy inventory and turn it into sales. A firm that purchases the wrong type of inventory, or too much inventory, will end up with money tied up in an investment that provides no return. There's no point in a business buying inventory if it just sits there and does nothing! Inventory is only effective as an investment if it can be turned into revenue.

A financial indicator that measures the performance of management in this area is inventory turnover. Inventory turnover is determined by dividing the average level of inventory for the period by the cost of goods sold for the period, and multiplying the result by the number of days in the reporting period. This shows how many days it takes management to turn its inventory into sales.

Inventory turnover = 
$$\frac{\text{Average inventory}}{\text{Cost of goods sold}} \times 365 \text{ days}$$

As the level of inventory changes over time, it's common practice to use an average value of inventory for the year. Inventory at the end of the year could be used, but if inventory levels have recently increased or decreased, this may provide misleading figures.

Inventory for the beginning and end of the period may be used to determine an average. Monthly inventory figures may also be used – just total up the 12 monthly values and divide by 12.

#### **EXAMPLE 18.1**

The owner of Starjammer Skateboards considers the business's inventory levels for the 2022-23 financial year.

| Inventory as at 1 July 2022                        | \$38 000  |
|--|-----------|
| Inventory as at 30 June 2023                       | \$42000   |
| Cost of goods sold for the year ended 30 June 2023 | \$160 000 |

Using this data, the calculation of inventory turnover would be:

Inventory turnover = 
$$\frac{\text{Average inventory}}{\text{Cost of goods sold}} \times 365$$

$$= \frac{\left(\frac{\$38\ 000 + \$42\ 000}{2}\right)}{\$160\ 000} \times 365$$

$$= \frac{\$40\ 000}{\$160\ 000} \times 365 = 91.25\ \text{days}$$

This shows that Starjammer Skateboards turned its inventory into sales every 91 days (on average) during the year.

### **EVALUATING INVENTORY TURNOVER**

It's important to be careful when interpreting the results of inventory turnover. There's no standard, desirable rate for all trading firms.

Remember that a key factor in turning over inventory is the type of product being sold. It's reasonable to expect a greengrocer to need a rapid inventory turnover;

perishable products must be turned over quickly, or they wind up being thrown out as rubbish. However, shops trading in furniture or electrical appliances don't have the same pressure to turn their inventory over quickly.

In order to evaluate inventory turnover, management should consider:

- the nature of the goods being sold
- industry averages (i.e. turnover rates for similar businesses)
- the trend in the ratio (what were the rates achieved in the last two or three periods?)
- the budgeted rate (what did management expect to achieve?).

A business may also experience fluctuations in turnover due to seasonal factors. For example, a business selling wood heaters would experience a much faster turnover rate in the colder months and a slower turnover during summer. The inventory turnover rate will reflect the average turnover for the period. If inventory values at the beginning and end of a year are used in the calculation, the final result will show an average of the ups and downs a business may experience in a typical year.

### 18.4 CHECK YOUR UNDERSTANDING



- 1 'All firms should strive to achieve an inventory turnover of 30 days or less.' Do you agree? Explain your answer fully, using appropriate examples.
- 2 A business owner tells you: 'I'm not worried about inventory turnover. I like to have the biggest range of inventory possible. That way, I won't miss out on sales.' Do you agree with this owner? Discuss.
- 3 Inventory turnover has a direct impact on the cash flows of a business. Explain fully how inventory turnover connects to cash flows.

## 18 CHAPTER REVIEW

### **KEY CONTENT**

- The owners and managers of trading businesses may choose to use their inventory, rather than just selling it. If inventory is withdrawn for personal use, or given away for advertising purposes, the effect on the balance sheet is a decrease in both inventory and owner's equity. The transactions should be noted on an office memo, and the details recorded on the inventory card.
- The information in cash journals and inventory cards is part of the process used to determine if a profit or loss has been made. The difference between the amount of revenue received by the business and the cost of inventory sacrificed to earn this revenue is the gross profit for the period. This may be adjusted to account for inventory loss or gain. The final net profit is found by subtracting all other business expenses for the period.
- [18.3] It's vital for businesses owners to manage their inventory, as effective inventory management can lead to an increase in sales and therefore profit. A number of principles should be followed for efficient inventory management, such as setting minimum and maximum quantities, rotating inventory, promoting products using sales and ensuring adequate security.
- Inventory is only effective as an investment if it can be turned into revenue. The inventory turnover rate measures how fast inventory is converted to revenue; it's determined by dividing the average level of inventory for the period by the cost of goods sold for the period. While most businesses will want to turn over inventory quickly, there's no standard, desirable rate for all firms.

### **CHAPTER 18 EXERCISES**



### 1 DRAWINGS OF INVENTORY



The following information is found in an inventory card at the start of October 2023. The card has been prepared under the identified cost method.

|       |           | IN  |      | IN OUT |     |      | BALANCE |     |      |       |
|-------|-----------|-----|------|--------|-----|------|---------|-----|------|-------|
| Date  | Reference | Qty | Cost | Value  | Qty | Cost | Value   | Qty | Cost | Value |
| Oct 1 | Balance   |     |      |        |     |      |         | 5   | 24   | 120   |
|       |           |     |      |        |     |      |         | 25  | 26   | 650   |

On 2 October the owner decides to withdraw two units of inventory for a birthday present for his daughter. The two units each had a price tag on them of \$52. The owner applies a mark-up of 100% on all inventory held by the business. He writes out Memo 54 and notes the details of his withdrawal.

- a Copy out the details in the above inventory card and record the withdrawal of inventory by the owner using identified cost.
- **b** Would the amount you recorded for drawings of inventory on 2 October be the same if this business used the FIFO method? Explain your answer fully.
- c Describe the two-fold effect of Memo 54 on the balance sheet of this business.

### 2 INVENTORY USED FOR ADVERTISING PURPOSES





Bea Queen, a pharmacy owner, donates three expensive bottles of perfume to the neighbourhood school for its upcoming fete. The principal of the school gives the pharmacy a half-page advertisement in the school's newsletter as a sign of gratitude.

Queen's business uses the FIFO method of inventory valuation; the inventory card for the perfume is shown below. Memo 85 was completed for this transaction on 30 August.

|        |           | IN  |      | OUT   |     |      | BALANCE |         |          |       |
|--------|-----------|-----|------|-------|-----|------|---------|---------|----------|-------|
| Date   | Reference | Qty | Cost | Value | Qty | Cost | Value   | Qty     | Cost     | Value |
| Aug 30 | Inv. 415  | 20  | 90   | 1 800 |     |      |         | 2<br>20 | 75<br>90 | 1 950 |

- a Complete the entry in the inventory card on 30 August for the inventory used for advertising.
- **b** Queen believes this entry should be recognised as 'drawings', as she took the inventory from the business. Do you agree? Explain fully.
- **c** Does Memo 85 create an expense item for this business? Explain fully, with reference to the definition of an expense.

### **3 INVENTORY CARDS TO INCOME STATEMENT**





Isabella Carlini is the proprietor of Bella's Outdoor Furniture. This small business sells two types of outdoor folding chairs. The Standard model retails for \$30, plus \$3 GST; the Deluxe model, which features a drink holder and footrest, usually sells for \$40, plus \$4 GST. Carlini primarily sells to individual consumers, but also sells chairs to sporting clubs and businesses. In recording inventory movements, Carlini follows the FIFO assumption.

The following events occur during August 2023.



- 3 Cash sale of six Standard chairs for \$30 each, plus GST of \$3 (Rec. 939)
- 5 Sold three Deluxe chairs for \$110 cash, plus \$11 GST (EFT)
- 7 Cash sale of five Deluxe chairs for \$190, plus \$19 GST (Rec. 940)
- 9 Purchased 25 more Deluxe model chairs at a cost of \$20 each, plus \$2 GST (Inv. 3820)
- 11 Sold six Standard chairs for \$170 cash, plus \$17 GST (Rec. 941)
- Made a sale to the local football club at a special price: 10 Standard chairs for \$250 (plus \$25 GST) and five Deluxe chairs for \$180 (plus \$18 GST) for a total cash sale of \$430 + \$43 GST = \$473 (Rec. 942)
- 17 Purchased 30 Standard chairs for \$15 each (Inv. 3727: \$450 + \$45 GST = \$495)
- 18 Carlini withdrew one Standard chair for personal use (Memo 34)
- 20 Sold three Standard chairs for \$120, plus \$12 GST (Rec. EFT)
- 23 Cash sale of six Deluxe chairs for \$220, plus \$22 GST (Rec. 943)
- 25 Sold one Standard and one Deluxe chair for a total of \$70, plus GST of \$7 (EFT)
- 28 Sold three Deluxe chairs for \$110, plus \$11 GST (Rec. 944)
- A physical stocktake revealed the following quantities on hand at the end of the month: Standard model 31 chairs, Deluxe model 20 chairs (Memo 102)
- a Prepare an inventory card for each of the two types of chairs sold by Bella's Outdoor Furniture.
- **b** Check your inventory cards against the details of the physical stocktake and make any necessary adjustments on 31 August.

- c Calculate the total value of cash sales for August for each model of chair sold.
- **d** Using your inventory cards, calculate the cost of sales for August for each model of chair sold.
- **e** Using your calculations from parts **c** and **d**, prepare an income statement to determine the firm's gross profit for the month. (Include any adjustments for inventory losses or gains, as appropriate.)

### SPREADSHEET

### **4 INVENTORY CARDS TO INCOME STATEMENT**



Hill's Hockey Hideout is a small business owned by Michael Hill. He sells a range of hockey memorabilia, including signed hockey sticks that come in two sizes: junior and senior.

On 1 September 2023, the business has the following inventory of signed hockey sticks: junior – 22 sticks and senior – 19 sticks. The inventory cards for these two items have the following balances as at 31 August.

| Junior sticks | 5 @ \$15  | \$75  | Senior sticks | 9 @ \$24  | \$216 |
|---------------|-----------|-------|---------------|-----------|-------|
|               | 17 @ \$16 | \$272 |               | 10 @ \$23 | \$230 |
|               | 22        | \$347 |               | 19        | \$446 |

The following transactions occur during September 2023.



- 3 Purchased on credit 20 junior sticks at a cost of \$17 each, plus GST of \$1.70 (Inv. 943)
- 4 Sold for cash four senior sticks for a total of \$180, plus \$18 GST (Rec. 294)
- 5 Cash sale of two senior sticks for \$45 each, plus \$4.50 GST (EFT)
- 7 Sold four junior sticks for \$118, plus \$11.80 GST (Rec. 295)
- 9 Issued receipt no. 296 for a cash sale of two senior sticks for \$90, plus \$9 GST
- 11 Cash sale: three junior sticks for \$85, plus \$8.50 GST (EFT)
- 14 Purchased on credit 15 senior sticks at \$25 each, plus \$2.50 GST (Inv. 933)
- Sold for cash two senior (\$40 each) and two junior sticks (\$30 each) for \$140, plus \$14 GST (Rec. 297)
- 18 Sold four junior sticks for \$122, plus \$12.20 GST (Rec. 298)
- 20 Cash sale: two senior sticks for \$90, plus \$9 GST (Rec. EFT)
- 22 The owner donated one junior hockey stick and one senior stick to the Doxa Youth Club (Memo 21)
- 23 Issued Receipt no. 299 for \$105 (plus \$18 GST) for a cash sale of three junior (2 at \$30) and two senior sticks (1 at \$45)
- 25 Sold for cash one junior stick \$32, plus \$3.20 GST (Rec. 300)
- 28 Cash sale of three senior sticks for \$130, plus \$13 GST (Rec. 301)
- 30 Physical stocktake completed. Quantities on hand: junior sticks 17; senior sticks 15 (Memo 007)
- a Prepare an inventory card for September for each of the two types of hockey sticks sold by Hill.
- **b** Verify your inventory card balances with the details of the physical stocktake and make any necessary adjustments on 30 September.
- c Calculate the total value of cash sales for September for each type of hockey stick sold.
- **d** Using your inventory cards, calculate the cost of sales for September for each type of hockey stick.
- **e** Using your calculations from parts **c** and **d**, prepare an income statement to determine the firm's gross profit for the month. (Include any adjustments for inventory losses or gains, as appropriate.)

- **f** Given the results of the physical stocktake completed on 30 September, comment on Hill's level of control over his inventory.
- **g** Suggest two possible strategies that Hill could adopt in this business to improve control over inventory.

### **5 INVENTORY TURNOVER**



A business had inventory of \$28 000 at the beginning of the year and \$33 000 at the end of the year. Cost of sales during the year amounted to \$152 500.

- a Calculate the inventory turnover in days.
- **b** Comment on the adequacy of the inventory turnover determined in part **a**.

### **6 INVENTORY TURNOVER**



A fashion boutique recorded sales of \$180 000 for the year ended 30 June 2023. The business applies a mark-up of 100% to all of its inventory. Inventory at the beginning of the year was \$22 000, and at the end of the period it was \$27 000.

The owner believes that inventory turnover should be around 90 days, as she likes to move inventory in line with the four seasons. However, she's keen to have any new items and fashions in the shop, and is usually tempted to purchase a few units of everything available.

- a Calculate the inventory turnover in days for the year ended 30 June 2023.
- **b** Has the owner reached her objective in terms of turnover? Explain your answer fully.
- **c** Comment on the owner's approach to buying inventory, taking into account the inventory turnover calculated in part **a**.

### 7 COMPARISONS OF INVENTORY TURNOVER



Consider the following financial information relating to two local businesses.

|                         | SAM'S SPORTS | CAROL'S CHOCOLATES |
|-------------------------|--------------|--------------------|
| Inventory turnover 2022 | 32 days      | 30 days            |
| 2023                    | 30 days      | 37 days            |

- **a** Which business has managed its investment in inventory more efficiently in 2023? Explain fully.
- **b** Should Carol be concerned about her management of her inventory? Justify your answer.
- c 'All businesses should use the FIFO method, as it ensures that the oldest goods are sold first.' Do you agree? Explain your answer fully.
- d Describe two benefits of having a faster inventory turnover.

### CASE STUDY



Random Access Robotics sells a range of robots, drones and components, and maintains inventory cards under the FIFO method for each item. The Skyranger drone has always been popular, but recently the owner has noticed increasing sales of both the Comet and Black Phantasm models.

The owner also maintains multi-column cash journals to account for all cash flows. No credit facility is offered, so all sales are made through EFTPOS or on a cash basis. The following information has been made available.

### **RANDOM ACCESS ROBOTICS: CASH RECEIPTS JOURNAL**

| Date  | Details    | Rec. | Amount<br>banked<br>\$ | Sales<br>Skyranger<br>drones<br>\$ | Sales<br>Comet<br>drones<br>\$ | Sales<br>Black<br>Phantasm<br>drones<br>\$ | Sundry<br>receipts<br>\$ | GST<br>received<br>\$ |
|-------|------------|------|------------------------|------------------------------------|--------------------------------|--|--------------------------|-----------------------|
| Oct 1 | Cash sales | 645  | 440                    |                                    | 400                            |  |                          | 40                    |
| 2     | Cash sales | 646  | 220                    | 200                                |                                |  |                          | 20                    |
| 3     | Cash sales | 647  | 660                    |                                    |                                | 600  |                          | 60                    |
| 4     | Cash sales | EFT  | 880                    |                                    | 800                            |  |                          | 80                    |
| 5     | Cash sales | 648  | 660                    |                                    |                                | 600  |                          | 60                    |
| 8     | Cash sales | EFT  | 440                    |                                    | 400                            |  |                          | 40                    |
| 9     | Cash sales | 649  | 440                    | 400                                |                                |  |                          | 40                    |
| 11    | Cash sales | 650  | 880                    |                                    | 800                            |  |                          | 80                    |
| 12    | Cash sales | 651  | 1 320                  |                                    |                                | 1 200                                      |                          | 120                   |
| 15    | Cash sales | EFT  | 880                    |                                    | 800                            |  |                          | 80                    |
| 16    | Cash sales | 652  | 440                    | 400                                |                                |  |                          | 40                    |
| 18    | Cash sales | 653  | 1 320                  |                                    |                                | 1 200                                      |                          | 120                   |
| 19    | Cash sales | 654  | 440                    | 400                                |                                |  |                          | 40                    |
| 23    | Cash sales | 655  | 660                    | 200                                | 400                            |  |                          | 60                    |
| 24    | Cash sales | EFT  | 880                    |                                    | 800                            |  |                          | 80                    |
| 25    | Cash sales | 656  | 1100                   | 400                                |                                | 600  |                          | 100                   |
| 29    | Cash sales | 657  | 880                    |                                    | 800                            |  |                          | 80                    |
| 30    | Cash sales | EFT  | 1320                   |                                    |                                | 1 200                                      |                          | 120                   |
| 31    | Cash sales | 659  | 880                    | 400                                | 400                            |  |                          | 80                    |
| 31    | Totals     |      | 14740                  | 2400                               | 5 600                          | 5 400                                      |                          | 1 340                 |

RANDOM ACCESS ROBOTICS: CASH PAYMENTS JOURNAL

|       |             |        | Total |           | Adver- |       |          |        | Sundry   |          |
|-------|-------------|--------|-------|-----------|--------|-------|----------|--------|----------|----------|
|       |             | Cheque | paid  | Inventory | tising | Wages | Drawings | Assets | payments | GST paid |
| Date  | Details     | no.    | \$    | \$        | \$     | \$    | \$       | \$     | \$       | \$       |
| Oct 1 | Advertising | 301    | 165   |           | 150    |       |          |        |          | 15       |
| 5     | Wages       | EFT    | 420   |           |        | 420   |          |        |          |          |
| 10    | Drawings    | EFT    | 600   |           |        |       | 600      |        |          |          |
| 12    | Wages       | EFT    | 430   |           |        | 430   |          |        |          |          |
| 15    | Advertising | 302    | 165   |           | 150    |       |          |        |          | 15       |
| 17    | Cleaning    | 303    | 132   |           |        |       |          |        | 120      | 12       |
| 18    | Computer    | 304    | 4433  |           |        |       |          | 4030   |          | 403      |
| 19    | Wages       | EFT    | 400   |           |        | 400   |          |        |          |          |
| 22    | Inventory   | 305    | 2420  | 2 200     |        |       |          |        |          | 220      |
| 25    | Drawings    | EFT    | 600   |           |        |       | 600      |        |          |          |
| 26    | Wages       | EFT    | 400   |           |        | 400   |          |        |          |          |
| 31    | Loan R/P    | EFT    | 3000  |           |        |       |          |        | 3000     |          |
| 31    | Electricity | 306    | 110   |           |        |       |          |        | 100      | 10       |
| 31    | Totals      |        | 13275 | 2200      | 300    | 1650  | 1 200    | 4030   | 3220     | 675      |

Note: the business had a cash balance of \$4300 in the bank on 1 October 2023.



### **Additional information:**

- The cash purchase of inventory on 22 October was for 20 Skyranger drones. Purchases of both the Comet and Black Phantasm drones are usually made on credit from the suppliers.
- On 25 October, 20 Comet drones were purchased on credit at a cost of \$205 each, plus GST of \$20.50 per drone.
- On the following day, 12 Black Phantasms were purchased on credit for \$310 each, plus GST of \$31.
- On 31 October, at about 10 pm, the owner was called to the business by the police - someone had driven a heavy vehicle through the shop's front window! The owner conducted a stocktake immediately and found 16 Skyrangers, 21 Comets and 14 Black Phantasms on hand. No adjustments have been made to the inventory cards in response to these events.

### Inventory cards

| Inventory item:<br>Skyranger Drone |           |     | Supplie<br>Deckard | r:<br>ds Drone | es     | Valuation method:<br>FIFO |            |         |            |       |  |
|------------------------------------|-----------|-----|--------------------|----------------|--------|---------------------------|------------|---------|------------|-------|--|
|                                    |           |     | IN                 |                |        | OUT                       |            | В       | BALANCE    |       |  |
| Date                               | Reference | Qty | Cost               | Value          | Qty    | Cost                      | Value      | Qty     | Cost       | Value |  |
| Oct 1                              | Balance   |     |                    |                |        |                           |            | 9       | 100        | 900   |  |
| 2                                  | Rec. 646  |     |                    |                | 1      | 100                       | 100        | 8       | 100        | 800   |  |
| 9                                  | Rec. 649  |     |                    |                | 2      | 100                       | 200        | 6       | 100        | 600   |  |
| 16                                 | Rec. 652  |     |                    |                | 2      | 100                       | 200        | 4       | 100        | 400   |  |
| 19                                 | Rec. 654  |     |                    |                | 2      | 100                       | 200        | 2       | 100        | 200   |  |
| 22                                 | Chq. 305  | 20  | 110                | 2200           |        |                           |            | 2<br>20 | 100<br>110 | 2400  |  |
| 23                                 | Rec. 655  |     |                    |                | 1      | 100                       | 100        | 1<br>20 | 100<br>110 | 2300  |  |
| 25                                 | Rec. 656  |     |                    |                | 1<br>1 | 100<br>110                | 100<br>110 | 19      | 110        | 2090  |  |
| 31                                 | Rec. 659  |     |                    |                | 2      | 110                       | 220        | 17      | 110        | 1870  |  |

|       | Inventory item:<br>Comet drone |     |      | Supplier:<br>Tek Supplies Pty Ltd |        |            |            | Valuation method:<br>FIFO |            |       |  |
|-------|--------------------------------|-----|------|-----------------------------------|--------|------------|------------|---------------------------|------------|-------|--|
|       |                                |     | IN   |                                   |        | OUT        | BALANCE    |                           |            |       |  |
| Date  | Reference                      | Qty | Cost | Value                             | Qty    | Cost       | Value      | Qty                       | Cost       | Value |  |
| Oct 1 | Balance                        |     |      |                                   |        |            |            | 5<br>10                   | 190<br>200 | 2950  |  |
| 1     | Rec. 645                       |     |      |                                   | 1      | 190        | 190        | 4<br>10                   | 190<br>200 | 2760  |  |
| 4     | EFT                            |     |      |                                   | 2      | 190        | 380        | 2<br>10                   | 190<br>200 | 2380  |  |
| 8     | EFT                            |     |      |                                   | 1      | 190        | 190        | 1<br>10                   | 190<br>200 | 2190  |  |
| 11    | Rec. 650                       |     |      |                                   | 1<br>1 | 190<br>200 | 190<br>200 | 9                         | 200        | 1800  |  |
| 15    | EFT                            |     |      |                                   | 2      | 200        | 400        | 7                         | 200        | 1 400 |  |
| 23    | Rec. 655                       |     |      |                                   | 1      | 200        | 200        | 6                         | 200        | 1 200 |  |
| 24    | Rec. EFT                       |     |      |                                   | 2      | 200        | 400        | 4                         | 200        | 800   |  |
| 25    | Inv. 939                       | 20  | 205  | 4100                              |        |            |            | 4<br>20                   | 200<br>205 | 4900  |  |
| 29    | Rec. 657                       |     |      |                                   | 2      | 200        | 400        | 2<br>20                   | 200<br>205 | 4 500 |  |
| 31    | Rec. 659                       |     |      |                                   | 1      | 200        | 200        | 1<br>20                   | 200<br>205 | 4300  |  |

|       | ory item:<br>Phantasm dr |     |      | Supplier:<br>Vanguard One |     |      | Valuation method:<br>FIFO |         |            |       |  |
|-------|--------------------------|-----|------|---------------------------|-----|------|---------------------------|---------|------------|-------|--|
|       |                          |     | IN   |                           |     | OUT  |                           | В       | ALANC      | ANCE  |  |
| Date  | Reference                | Qty | Cost | Value                     | Qty | Cost | Value                     | Qty     | Cost       | Value |  |
| Oct 1 | Balance                  |     |      |                           |     |      |                           | 12      | 300        | 3600  |  |
| 3     | Rec. 647                 |     |      |                           | 1   | 300  | 300                       | 11      | 300        | 3 300 |  |
| 5     | Rec. 648                 |     |      |                           | 1   | 300  | 300                       | 10      | 300        | 3000  |  |
| 12    | Rec. 651                 |     |      |                           | 2   | 300  | 600                       | 8       | 300        | 2400  |  |
| 18    | Rec. 653                 |     |      |                           | 2   | 300  | 600                       | 6       | 300        | 1800  |  |
| 25    | Rec. 656                 |     |      |                           | 1   | 300  | 300                       | 5       | 300        | 1 500 |  |
| 26    | Inv. 48311               | 12  | 310  | 3720                      |     |      |                           | 5<br>12 | 300<br>310 | 5220  |  |
| 30    | EFT                      |     |      |                           | 2   | 300  | 600                       | 3<br>12 | 300<br>310 | 4620  |  |

- **a** Calculate the value of the inventory loss experienced on 31 October 2023. (Show all workings.)
- **b** Determine the value of inventory on hand as at 31 October 2023. (Show all workings.)
- **c** Using the relevant information from the above sources, prepare a statement of receipts and payments for the month ended 31 October 2023.
- **d** Extract all relevant information from the above sources and prepare an income statement for the month ended 31 October 2023.
- e How much is the owner selling each type of drone for at the moment?
- **f** The owner hasn't altered his selling prices for quite a while. Comment on his price-setting strategy in light of the purchases made on 22, 25 and 26 October.
- g State one benefit for this business of buying some of its inventory on credit.
- **h** Do you think this business should offer credit facilities to its customers? Explain your answer fully.
- i The owner admits to only checking the inventory cards occasionally. Could this create a problem in this business? Refer to one or more of the inventory cards in your explanation.

### **CHAPTER CHECKLIST**

Now that you've finished Chapter 18, double-check your progress.

Are you ready for your Unit 2 assessment?

### I have ...

- completed all 'Check Your Understanding' questions
- completed all exercises
- ompleted the end-of-chapter activities
- Manded in my workbook for marking.

### I understand ...

- indicators to measure business performance in relation to inventory
- of the purpose and use of inventory cards using the First-In, First-Out (FIFO) and Identified Cost methods for recording:
  - drawings of inventory by the owner
  - inventory used for advertising
  - inventory loss/gain
- strategies for effective inventory management such as physical count, inventory rotation, expected inventory levels, range of complementary goods, delivery and handling procedures and internal controls to prevent theft and fraud
- 🧭 the potential impact of alternative inventory management strategies on business performance
- dethical considerations when undertaking decision-making related to inventory.

### I can ...

- wse correct accounting terminology
- manually record transactions in the special journals and inventory cards
- discuss the ethical considerations faced by business owners related to inventory
- discuss the effect of alternative inventory management strategies on the performance of the business.

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Make sure you skim this chapter one more time when preparing for the exam.



### PREPARE

Read back over the chapter now, then complete the online revision activity



Watch the Mr Box on Demand video, then ask your teacher if you need additional help.







# CREDIT TRANSACTIONS FOR A TRADING BUSINESS

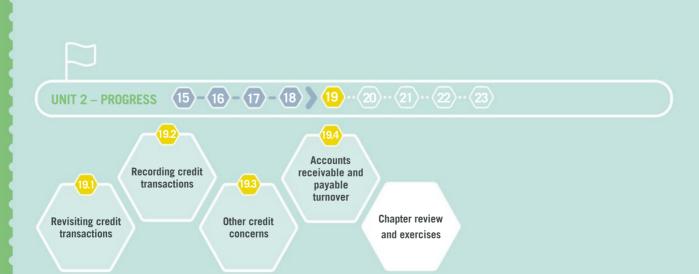
In Unit 1, you learnt about credit transactions for service businesses. The same transactions largely apply to trading businesses, but several additional situations need to be considered when extending credit to customers.

In this chapter, you'll learn how trading businesses handle credit transactions, along with new concepts such as discounts, bad debts and turnover rates for both accounts receivable and accounts payable.

### **LEARNING OBJECTIVES**

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

- identify the documents used to evidence credit transactions [19,1]
- define the terms 'accounts receivable' and 'accounts payable' [19.1]
- maintain a subsidiary record for both accounts receivable and accounts payable [19.2]
- record sales returns and purchases returns [19.3]
- prepare an accounts receivable or accounts payable schedule at the end of a period [19.3]
- determine GST liability, taking credit transactions into account [19.3]
- determine and evaluate turnover rates for accounts receivable and accounts payable [19.4]
- record bad debts in individual records for accounts receivable [19.4].



### 191 REVISITING CREDIT TRANSACTIONS

Chapter 9 presented the concept of credit transactions. Let's start this chapter by revisiting those transactions, but for trading businesses. You may want to return to Chapter 9 to revise any unclear concepts.

### **CREDIT SALES AND PURCHASES**

A credit transaction is one where goods are supplied immediately, but payment is made at a later date.

Since the introduction of EFTPOS, few retail traders still provide credit facilities for customers. However, they may extend credit to corporate customers placing large orders - and most trading firms purchase their inventory on credit, because this allows them time to sell their goods before payment is due.

Typical credit terms for trading businesses are 30 days, with some suppliers granting 60 days. The suppliers of such terms are often wholesale businesses providing inventory to retail outlets.

### **DISCOUNTS FOR PAYMENT**

With basically all of their sales done on credit, wholesalers often offer discounts as an incentive for prompt payment. These are referred to as settlement discounts, as they encourage customers to settle (or pay off) their accounts guickly.

The period of time offered to credit customers, and the discounts available to them, make up the terms of a credit agreement. Typical credit terms would be notations such as:

- 5/7, meaning '5% discount if paid within 7 days'
- 2/30, meaning '2% discount if paid within 30 days'
- n/60, meaning 'the net amount payable due within 60 days' (i.e. no discount).

The credit terms are usually stated on the invoice given to the customer.

### **INVOICES**

All credit transactions must be verified by source documents. An **invoice** is the document used to inform a customer of the cost of a credit transaction. The original invoice is given to the customer, and the supplier keeps a copy.

TAX INVOICE No. 1888

Date: 22/10/23

Figure 19.1 demonstrates a sales invoice issued by Leeroy Jumpsuits to Walton's Workwear.

### invoice

a business document used to provide evidence of a credit transaction

credit transaction

a transaction in which

goods or services are provided now, but

payment follows later

### FIGURE 19.1 Sales invoice

Supplied to:

**Leeroy Jumpsuits** 32 Thomas Street Ascot Vale VIC 3032

Walton's Workwear 452 Chapel Street - Prahran VIC 3181

CREDIT TERMS: 5/7; n/30

Quantity Description Cost per unit Total 100 Hi-vis vests \$30 \$3000 300 GST (10%) TOTAL AMOUNT OWING \$3300

This document represents a purchase invoice to Walton's Workwear, as they're buying inventory from Leeroy Jumpsuits.

Note the credit terms on the invoice. If Walton's pays the invoice within the seven-day discount period, it would receive a discount of 5%. While this helps Walton's, which then pays out less cash, it also benefits the supplier of the goods, as slow-paying accounts receivable can prove very costly to businesses.

### **ACCOUNTS RECEIVABLE AND ACCOUNTS PAYABLE**

If you were accounting for Leeroy Jumpsuits, you would classify Walton's Workwear under the heading of **accounts receivable**. Accounts receivable are usually classified as current assets in a balance sheet, as they are expected to pay their debts within the next 12 months (hopefully, within one or two months).

**Accounts payable** include the businesses that supply goods or services to a business on credit. If you were accounting for Walton's Workwear, accounts payable would include the business trading as Leeroy Jumpsuits. The classification of accounts payable would include other businesses that supply items to Walton's Workwear, such as shirts, overalls, boots, safety helmets and so on.

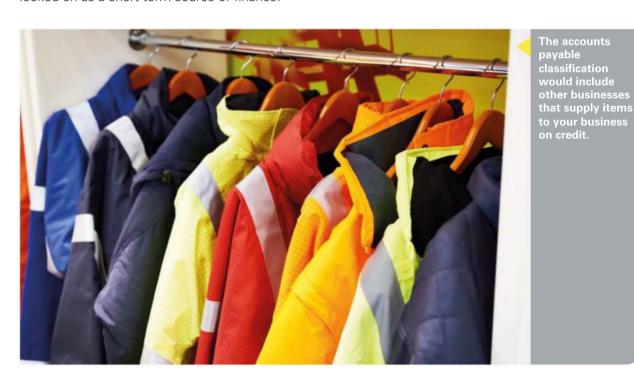
Accounts payable are usually classified as current liabilities because they are looked on as a short-term source of finance.

### accounts receivable

customers that owe a business money because they obtained goods or services on credit

### accounts payable

suppliers that a business owes money to after obtaining goods or services on credit



### 19.1 CHECK YOUR UNDERSTANDING



- 1 Explain what is involved in a credit transaction.
- 2 What is a settlement discount? Why are such discounts offered?
- 3 Identify what each of the following notations mean when they are included on an invoice.
  - a 5/10
  - **b** 1/30
  - c n/60

### 19.2 RECORDING CREDIT TRANSACTIONS

subsidiary records additional accounting records used to keep track of accounts receivable or accounts payable

Most single entry accounting systems rely on cash journals as the main accounting record. As you saw in Chapter 9, subsidiary records need to be created if credit transactions are expected to occur frequently. Subsidiary records for a trading business are similar to those of a service firm, but with a few important differences.

### CREDIT PURCHASES JOURNAL

The first step in organising credit transactions is to create a credit purchases journal. Figure 19.2 shows a record for a small business, Waterworld Aquariums.

### FIGURE 19.2 Purchases journal

### WATERWORLD AQUARIUMS: PURCHASES JOURNAL

| Date  | Accounts payable           | Invoice<br>no. | Inventory<br>\$ | GST<br>\$ | Accounts payable<br>\$ |
|-------|----------------------------|----------------|-----------------|-----------|------------------------|
| Aug 1 | Northern Aquarium Supplies | 1011           | 2 400           | 240       | 2 640                  |
| 5     | Sandringham Sand & Glass   | 727            | 1 900           | 190       | 2 090                  |
| 8     | Port Fairy Fish Food P/L   | 9399           | 2 640           | 264       | 2 904                  |
| 14    | Northern Aquarium Supplies | 1019           | 1 300           | 130       | 1 430                  |
| 19    | Northern Aquarium Supplies | 1023           | 1 600           | 160       | 1 760                  |
| 22    | Port Fairy Fish Food P/L   | 9413           | 800             | 80        | 880                    |
| 28    | Northern Aquarium Supplies | 1033           | 600             | 60        | 660                    |
| 31    | Totals for month           |                | 11 240          | 1 124     | 12 364                 |

The purchases journal keeps all credit purchases together in one record and can be referred to if there are any queries. Note that each invoice's key details are recorded: the date, supplier's name, invoice number, transaction value, GST charged and each invoice's total.

### **INDIVIDUAL RECORDS**

Although this record shows all purchases on credit for a particular period, it doesn't show the amount owing to each individual supplier. A firm that deals on credit may also require individual records for each of its suppliers providing goods on credit.

Figure 19.3 shows individual records for Waterworld Aquariums' accounts payable.

### FIGURE 19.3 Individual records for accounts payable

### **ACCOUNTS PAYABLE RECORD: NORTHERN AQUARIUM SUPPLIES**

| Date  | Details       | Document no. | Amount<br>\$ | Balance<br>\$ |
|-------|---------------|--------------|--------------|---------------|
| Aug 1 | Inventory/GST | Inv. 1011    | 2 640        | 2 640         |
| 14    | Inventory/GST | Inv. 1019    | 1 430        | 4 070         |
| 19    | Inventory/GST | Inv. 1023    | 1 760        | 5 830         |
| 28    | Inventory/GST | Inv. 1033    | 660          | 6 490         |

### **ACCOUNTS PAYABLE RECORD: SANDRINGHAM SAND & GLASS**

| Date  | Details       | Document no. | Amount<br>\$ | Balance<br>\$ |
|-------|---------------|--------------|--------------|---------------|
| Aug 5 | Inventory/GST | Inv. 727     | 2 090        | 2 090         |

### ACCOUNTS PAYABLE RECORD: PORT FAIRY FISH FOOD P/L

| Date  | Details       | Document no. | Amount<br>\$ | Balance<br>\$ |
|-------|---------------|--------------|--------------|---------------|
| Aug 8 | Inventory/GST | Inv. 9399    | 2 904        | 2 904         |
| 22    | Inventory/GST | Inv. 9413    | 880          | 3 784         |

In these records, one entry has been made in each instance of a credit purchase. Each entry includes the GST charged as part of the total transaction.

An alternative approach is to break each entry down into two separate entries –one for the cost price of the inventory being purchased, and one for the GST being charged. Figure 19.4 shows how to do this for the Port Fairy Fish Food account.

FIGURE 19.4 Individual records for accounts payable: alternative approach

ACCOUNTS PAYABLE RECORD: PORT FAIRY FISH FOOD P/L

| Date  | Details     | Document no. | Amount<br>\$ | Balance<br>\$ |
|-------|-------------|--------------|--------------|---------------|
| Aug 8 | Inventory   | Inv. 9399    | 2 640        | 2 640         |
|       | GST charged |              | 264          | 2 904         |
| 22    | Inventory   | Inv. 9413    | 800          | 3 704         |
|       | GST charged |              | 80           | 3 784         |

Both approaches satisfy *verifiability*. The document numbers for the transactions are clearly stated, so the invoices can be traced at a later date to answer any queries.

These records simply break down all the credit purchases individually. The information is transferred – or *posted* – from the purchases journal to the individual records. A major benefit of maintaining individual records is that the current amount owing to each one is updated in the right-hand column each time a new transaction takes place.

### **INCLUDING CASH TRANSACTIONS**

These records only show part of the overall picture that exists for a typical business. Once credit purchases are recorded, a cash payment is expected at some time in the future.

Referring to the Waterworld Aquariums cash journals, two cash payments were located.

Aug 4 Paid Northern Aquarium Supplies \$2600 and received a discount of \$40

31 Paid Northern Aquarium Supplies \$1430

If these cash payments were included in the individual accounts payable's record for Northern Aquarium Supplies, the record would be as shown in Figure 19.5.

FIGURE 19.5 Accounts payable record with cash payment included

### ACCOUNTS PAYABLE RECORD: NORTHERN AQUARIUM SUPPLIES

|       | A CONTROL PARTICIPATION AND AND AND AND AND AND AND AND AND AN |              |              |               |  |  |  |  |  |
|-------|--|--------------|--------------|---------------|--|--|--|--|--|
| Date  | Details  | Document no. | Amount<br>\$ | Balance<br>\$ |  |  |  |  |  |
| Aug 1 | Inventory/GST  | Inv. 1011    | 2 640        | 2 640         |  |  |  |  |  |
| 4     | Cash payment   | Chq. 822     | 2 600        | 40            |  |  |  |  |  |
|       | Discount revenue   |              | 40           | Nil           |  |  |  |  |  |
| 14    | Inventory/GST  | Inv. 1019    | 1 430        | 1 430         |  |  |  |  |  |
| 19    | Inventory/GST  | Inv. 1023    | 1 760        | 3 190         |  |  |  |  |  |
| 28    | Inventory/GST  | Inv. 1033    | 660          | 3 850         |  |  |  |  |  |
| 31    | Cash payment   | Chq. 827     | 1 430        | 2 420         |  |  |  |  |  |

As with inventory purchases and the GST, a cash payment to an accounts payable may be linked to a discount. These two items may also be combined into one entry.

In this record, the 4 August payment was \$2600. The supplier discounted \$40 for prompt payment. As this \$40 causes a decrease in the amount owing to the liability, it represents a revenue item and has been noted as *discount revenue*. If management prefers to join these two entries together, it can be recorded as 'Cash Payment' Discount Revenue \$2640'.

The record shown in Figure 19.5 is an ideal way to provide vital information about a firm's accounts payable. Because a running balance is recorded after every transaction, the amount owing to individual accounts payable is available at a glance. All document numbers are recorded for future reference, providing a history of the transactions with a particular accounts payable in one compact record.

### **CREDIT SALES JOURNAL**

The credit sales journal records the details of all invoices issued to customers for goods provided on credit. In this case, the original invoice is issued to the customer and a copy is used to record the details in the journal.

Figure 19.6 shows a typical design for a credit sales journal, again for Waterworld Aquariums.

FIGURE 19.6 Credit sales journal

### WATERWORLD AQUARIUMS: SALES JOURNAL

| Date  | Accounts receivable   | Invoice no. | Credit sale<br>\$ | GST<br>\$ | Accounts receivable |
|-------|-----------------------|-------------|-------------------|-----------|---------------------|
| Sep 1 | Portland Marina       | 2011        | 4 200             | 420       | 4 620               |
| 3     | Sea Shanty Restaurant | 2012        | 1 000             | 100       | 1 100               |
| 9     | A. Curry              | 2013        | 900               | 90        | 990                 |
| 11    | Portland Marina       | 2014        | 1 200             | 120       | 1 320               |
| 14    | B. Manta              | 2015        | 160               | 16        | 176                 |
| 21    | Sea Shanty Restaurant | 2016        | 500               | 50        | 550                 |
| 26    | Portland Marina       | 2017        | 400               | 40        | 440                 |
| 30    | Totals                |             | 8 360             | 836       | 9 196               |

The details in the sales journal include the date, customer's name, invoice number, selling price, GST charged and the transaction's total value. Invoice numbers should always run in sequence, because the document numbers used are created by the business selling the goods.

### INDIVIDUAL RECORDS

As with accounts payable, businesses can create individual records for accounts receivable.

Let's assume Waterworld Aquariums receives the following cash receipts.

- Sep 6 Received from Sea Shanty Restaurant \$1080, discount expense \$20 (Rec. no. 101)
  - 16 Received from Portland Marina \$4620 (Rec. no. 102)
  - 20 Received from Portland Marina \$1290, discount allowed \$30 (Rec. no. 103)
  - 24 Received from A. Curry \$990 (Rec. no. 104)



Figure 19.7 shows the individual accounts receivable records for Waterworld Aquariums, which include both the transactions in the credit sales journal and these cash receipts.

FIGURE 19.7 Individual records for accounts receivable

### ACCOUNTS RECEIVABLE RECORD: PORTLAND MARINA

| Date  | Details                        | Document no. | Amount<br>\$ | Balance<br>\$ |
|-------|--------------------------------|--------------|--------------|---------------|
| Sep 1 | Credit sale/GST                | Inv. 2011    | 4 620        | 4 620         |
| 11    | Credit sale/GST                | Inv. 2014    | 1 320        | 5 940         |
| 16    | Cash received                  | Rec. 102     | 4 620        | 1 320         |
| 20    | Cash received/Discount expense | Rec. 103     | 1 320        | Nil           |
| 26    | Credit sale/GST                | Inv. 2017    | 440          | 440           |

### ACCOUNTS RECEIVABLE RECORD: SEA SHANTY RESTAURANT

| Date  | Details                        | Document no. | Amount<br>\$ | Balance<br>\$ |
|-------|--------------------------------|--------------|--------------|---------------|
| Sep 3 | Credit sale/GST                | Inv. 2012    | 1 100        | 1 100         |
| 6     | Cash received/Discount expense | Rec. 101     | 1 100        | Nil           |
| 21    | Credit sale/GST                | Inv. 2016    | 550          | 550           |

### ACCOUNTS RECEIVABLE RECORD: A. CURRY

| Date  | Details         | Document no. | Amount<br>\$ | Balance<br>\$ |
|-------|-----------------|--------------|--------------|---------------|
| Sep 9 | Credit sale/GST | Inv. 2013    | 990          | 990           |
| 24    | Cash received   | Rec. 104     | 990          | Nil           |

### **ACCOUNTS RECEIVABLE RECORD: B. MANTA**

| Date   | Details         | Document no. | Amount<br>\$ | Balance<br>\$ |
|--------|-----------------|--------------|--------------|---------------|
| Sep 14 | Credit sale/GST | Inv. 2015    | 176          | 176           |

### MANAGING ACCOUNTS RECEIVABLE

These records provide a clear summary of transactions relating to each individual credit customer. This makes it easy to see which customers haven't made a payment in the last month, or which ones have fully paid their accounts.

If an accounts receivable hasn't made a recent payment or has exceeded the credit terms noted on the invoice, they must be queried and followed up. An owner or manager should never assume that accounts receivable will pay on time, no matter who they are.

### 19.2 CHECK YOUR UNDERSTANDING



- 1 Distinguish between accounts receivable and accounts payable.
- 2 Describe the function of a credit purchases journal.
- 3 Why should a firm that sells on credit maintain individual records for its accounts receivable?

## 19.3 OTHER CREDIT CONCERNS

As well as the accounts payable and receivable records, a trading business that uses or offers credit must maintain several other reports and records.

### MODIFYING CASH JOURNALS FOR DISCOUNTS

If a business receives a discount from a supplier (discount revenue) or allows a discount to its accounts receivable (discount expense), these items must be recorded when the transaction takes place.

- Discount revenue occurs when a prompt payment is made to a supplier.
- Discount expense occurs when a credit customer pays within the discount period.

As both items occur when a cash transaction takes place, it makes sense to note them in the cash journals. The two cash journals can be modified slightly to take into account discount revenue and discount expense.

To demonstrate this, consider two transactions you saw earlier in the chapter. Waterworld Aquariums received a discount for one of its credit payments.

Aug 4 Paid Northern Aquarium Supplies \$2600 and received a discount of \$40

This can be noted by adding a column to the cash payments journal.

## WATERWORLD AQUARIUMS: CASH PAYMENTS JOURNAL (WITH COLUMN FOR DISCOUNT REVENUE)

| Date  | Details                          | Cheque no. | Total<br>paid<br>\$ | Discount<br>revenue<br>\$ | Accounts<br>payable<br>\$ | Inventory<br>\$ | Sundry<br>payment<br>\$ | GST<br>paid<br>\$ |
|-------|----------------------------------|------------|---------------------|---------------------------|---------------------------|-----------------|-------------------------|-------------------|
| Aug 4 | Northern<br>Aquarium<br>Supplies |            | 2 600               | 40                        | 2 640                     |                 |                         |                   |



Note that the actual amount of cash paid must be recorded in the 'Total paid' column. If a discount was granted, this should be shown under 'Discount revenue'. The total effect on the supplier's account is then listed in the 'Accounts payable' column.

Waterworld Aquariums also provided a discount to one of its credit customers.

Sep 6 Received from Sea Shanty Restaurant \$1080, discount expense \$20



Again, this can be noted by adding a column to the cash receipts journal.

## WATERWORLD AQUARIUMS: CASH RECEIPTS JOURNAL (WITH COLUMN FOR DISCOUNT EXPENSE)

| Date  | Details                     | Receipt<br>no. |       |    | Accounts receivable |  | GST<br>received<br>\$ |
|-------|-----------------------------|----------------|-------|----|---------------------|--|-----------------------|
| Sep 6 | Sea<br>Shanty<br>Restaurant |                | 1 080 | 20 | 1 100               |  |                       |

The actual amount of cash that has changed hands is shown in the 'Amount banked' column. If a discount has been granted to an accounts receivable, it should be shown under 'Discount expense', as the business has made an economic sacrifice and doesn't collect this amount in cash. The total effect on the customer's account should then be recorded in the 'Accounts receivable' column.

### **PURCHASES RETURNS AND SALES RETURNS**

Chapter 17 introduced the concepts of sales returns and purchases returns in relation to inventory cards. Transactions involving returns also affect the individual records for accounts receivable and accounts payable.

In the case of purchases returns, the amount owing to suppliers will be decreased, once a credit note has been issued. Consider the following example for Ironclad Locks & Security.

- Jul 1 Bought inventory from Wholesale Locks on credit. Invoice 312 for \$500, plus GST.
  - 2 One of the locks purchased on 1 July was found to be faulty and was returned for credit. The lock cost \$50, plus GST. Credit note 68 was received from Wholesale Locks.
  - 31 Paid Wholesale Locks the balance of their account via EFT.

The individual record for Wholesale Locks would appear as follows.

### **ACCOUNTS PAYABLE RECORD: WHOLESALE LOCKS**

| Date  | Details              | Document no.   | Amount<br>\$ | Balance<br>\$ |
|-------|----------------------|----------------|--------------|---------------|
| Jul 1 | Credit purchase/GST  | Inv. 312       | 550          | 550           |
| 2     | Purchases return/GST | Credit note 68 | 55           | 495           |
| 31    | Cash payment         | EFT            | 495          | Nil           |

Credit notes may also be issued to accounts receivable if they return unsatisfactory goods. In this case, the entry becomes a sales return and the effect of the transaction is to decrease the individual accounts receivable.

Again, consider this example for Ironclad Locks & Security.



- Aug 1 Sold 5 Mighty Tuff locks to Yarraville High School for a total of \$600, plus GST (Invoice 87).
  - 2 One lock was returned by Yarraville High School, as it was faulty. The business decided to issue a credit note for \$120, plus GST, as no more Mighty Tuff locks were in inventory at the time (Credit note 52).
  - 31 Yarraville High School paid the amount owing via EFT.

The individual record for the relevant accounts receivable would look like the following.

### ACCOUNTS RECEIVABLE RECORD: YARRAVILLE HIGH SCHOOL

| Date  | Details          | Document no.   | Amount<br>\$ | Balance<br>\$ |
|-------|------------------|----------------|--------------|---------------|
| Aug 1 | Credit sale/GST  | Inv. 87        | 660          | 660           |
| 2     | Sales return/GST | Credit note 52 | 132          | 528           |
| 31    | Cash receipt     | EFT            | 528          | Nil           |

When recording both purchases returns and sales returns, always remember to record the GST as well as the invoice price. When an invoice is issued, it must include the GST on the sale. Similarly, when a return occurs, it must also include the invoice price and the GST. Both items should always be included in the individual record for accounts receivable and accounts payable.

### **ACCOUNT SCHEDULES**

When a balance sheet is being prepared, the total amount owing to the business by accounts receivable must be listed under 'Current assets'. Similarly, the total amount the firm owes to accounts payable must be listed under 'Current liabilities'. If a business is using a system of individual records for its accounts receivable or accounts payable, a summary of these records is required.

An **accounts receivable schedule** is a listing of all accounts receivable, with their amounts owing at a particular date. An accounts receivable schedule for Waterworld Aguariums would be prepared as follows.

### **ACCOUNTS RECEIVABLE SCHEDULE AS AT 30 SEPTEMBER 2023**

| Portland Marina       | \$440   |
|-----------------------|---------|
| Sea Shanty Restaurant | 550     |
| B. Manta              | 176     |
| Total amount owing    | \$1 166 |

Therefore, in the balance sheet of Waterworld Aquarium, 'Accounts Receivable' of \$1166 would be shown as a current asset as at 30 September 2023.

An **accounts payable schedule** can be prepared in a similar way from the accounts payable records to show a listing of all accounts payable, with the amounts owing to them at a particular date.

### accounts receivable schedule

a listing of accounts receivable and the amount owing from each

### accounts payable schedule

a listing of accounts payable and the amount owing to each

### ACCOUNTS RECEIVABLE, ACCOUNTS PAYABLE AND THE GST

As with a service business, there are four types of transactions that may impact on the GST debt of a business. These are:

- GST collected by a business on its cash sales
- GST paid by a business on its cash payments
- GST charged to accounts receivable when credit sales are made
- GST charged by suppliers when credit purchases are made.

When a business owner completes their business activity statement (BAS), they must determine their overall GST situation. Consider the following example.

| GST collected on cash sales (from cash receipts journal)                       | \$1 400 |
|--|---------|
| GST charged to accounts receivable on credit sales (from credit sales journal) | 800     |
| Total charged to customers   | 2 200   |
| GST paid on cash payments (from cash payments journal)                         | 600     |
| GST charged by accounts payable (from credit purchases journal)                | 400     |
| GST charged by all suppliers   | \$1 000 |

The GST paid to and charged by suppliers is deducted from the GST collected from and charged to customers to determine the overall GST debt the business owes to the government.

The net result from the above would be:

| GST charged to customers              | \$2 200 |
|---------------------------------------|---------|
| Less: GST charged by suppliers        | 1 000   |
| GST debt owing to the Taxation Office | \$1 200 |

If the GST paid to suppliers exceeds the GST charged to customers, the business would be entitled to a GST refund. Both situations are allowed for in the preparation of the BAS.

### 19.3 CHECK YOUR UNDERSTANDING



- 1 What is an accounts receivable schedule? When is such a schedule prepared?
- 2 An accounts receivable owes a trading business a total of \$300. It pays \$290 and is granted a discount of \$10. State the amounts that should be recorded in a receipts journal under each of the following columns: Amount banked, Discount expense, Accounts receivable.
- **3** GST charged by accounts payable during a given month was \$700. GST charged to accounts receivable during the same time was \$500. Does this business have a GST debt, or is it due a refund? Explain your answer fully.

## ACCOUNTS RECEIVABLE AND PAYABLE TURNOVER

Managing and controlling inventory, accounts receivable and accounts payable are the most crucial tasks faced by anybody managing a small trading business. It is highly likely that any business that doesn't give these areas sufficient attention will fail. A business's ability to buy and sell inventory at a fast enough rate, and to manage the balancing act between collecting cash from accounts receivable and paying it to accounts payable, will determine its success.

### **ACCOUNTS RECEIVABLE TURNOVER**

Once inventory has turned into sales, a question that arises is how long it takes to actually collect the cash from accounts receivable.

A business's ability to collect debts from credit customers is an important factor in determining its success. If goods are sold for cash, the collection of the sales revenue happens immediately. However, when goods are sold on credit, the customer is typically given 30 or 60 days in which to settle their account.

**Accounts receivable turnover** is a measure of management's effectiveness in collecting the credit sales of the business. Similar to inventory turnover (p. 312), it's how long it takes to actually collect the cash from accounts receivable. Note that this indicator only considers sales made on credit, as cash sales don't affect accounts receivable.

The accounts receivable turnover rate is calculated by dividing the average amount owing by accounts receivable by the credit sales for the period (including GST), and multiplying the result by the number of days in the reporting period.

### **EXAMPLE 19.1**

Tempest Tech provides the following data for its accounts receivable in the 2022–23 reporting period.

| Total accounts receivable as at 1 July 2022  | \$14 000  |
|--|-----------|
| Total accounts receivable as at 30 June 2023 | \$16 000  |
| Credit sales for the year ended 30 June 2023 | \$150 000 |
| GST charged on credit sales                  | \$15 000  |

Accounts receivable turnover = 
$$\frac{\text{Average accounts receivable}}{\text{Net credit sales} + \text{GST}} \times 365$$

$$= \frac{\left(\frac{\$14\ 000 + \$16\ 000}{2}\right)}{\$150\ 000 + \$15\ 000} \times 365$$

$$= \frac{\$15\ 000}{\$165\ 000} \times 365 = 33.18 \text{ or } 33 \text{ days}$$

This financial indicator shows that Tempest Tech took an average of 33 days to collect its debts from accounts receivable.

Note that this indicator is based on an average. This means that some customers would have taken less than 33 days to pay their accounts, while others may have taken much longer.

### accounts receivable turnover

a financial indicator that shows the average time taken by accounts receivable to settle their accounts

### **EVALUATING ACCOUNTS RECEIVABLE TURNOVER**

In order to evaluate a business's accounts receivable turnover, the following factors need to be considered.

- The credit terms the business extends to its customers
- The trend in the ratio over the last few periods
- The budgeted, or desired, rate as set by management

There's little point in comparing an accounts receivable turnover to any industry benchmark. As the credit terms are stipulated by management, the control of accounts receivable and their payments is also up to management.

If a business owner grants credit terms of 30 days to credit customers, they may be satisfied with an average collection period of 30–35 days. Another business owner may be satisfied with a range of 30–40 days. However, most managers wouldn't be pleased with an average collection period of 60 days if the credit terms issued were only 30 days! Such a result is a warning that management has poor control over accounts receivable and isn't following up on overdue accounts.

The trend in this ratio is important. If the average collection period is always increasing, the firm needs to review its credit control procedures. Steps that a firm can take to reduce its average collection period include:

- offering discounts for accounts settled early
- giving reminders to overdue customers by phone or email
- sending copies of invoices to slow payers as a reminder
- issuing monthly statements with stickers indicating 'payment now due'
- making threats of legal action in the case of very late accounts
- employing a debt collecting agency
- threatening not to provide credit in the future.

### **ACCOUNTING FOR BAD DEBTS**

Accounts receivable turnover can be used to measure management's effectiveness in collecting debts from credit customers. However, some debts can remain unpaid for a long period of time, or may never be collected.

Some accounts receivable may just disappear and never respond to follow-up procedures. People who find themselves in financial trouble may move interstate or even overseas to avoid paying their debts. Others may be declared bankrupt through the court system, and their debts written off as irrecoverable – that is, the business owner is never going to receive the money the customer owes, and suffers a loss as a result.

Keep in mind that accounts receivable are classified as assets, as they are expected to have future economic benefits for the business. If these benefits aren't going to be received and the account is written off, the business now has an expense instead of having an asset. When this happens, the customers being written off are known as **bad debts**.

BEST PRACTICE
Make sure you know

Make sure you know the theory behind managing accounts receivable – don't just practise keeping records.

bad debt

an accounts receivable that is written off as an uncollectible debt, possibly due to bankruptcy

### **EXAMPLE 19.2**

C. Chance, a customer of Tempest Tech, hasn't made a payment for more than 12 months. Emails and letters have gone unanswered, so the owner of Tempest Tech has finally written off the account as a bad debt.

### ACCOUNTS RECEIVABLE RECORD: C. CHANCE

| Date        | Details         | Document no. | Amount<br>\$ | Balance<br>\$ |
|-------------|-----------------|--------------|--------------|---------------|
| Jul 1 2022  | Credit sale/GST | Inv. 184     | 3 300        | 3 300         |
| Sep 1 2022  | Cash received   | Rec. 345     | 300          | 3 000         |
| Dec 31 2023 | Bad debts       | Memo 25      | 3 000        | Nil           |

A bad debt should be noted on an office memo (Memo 25, in this case). Once the bad debt entry is made in the record of the accounts receivable, a zero balance is shown. The business should then report the value of the bad debt (\$3000, in the above record) in its income statement as an expense. This entry reduces the profit reported for the period.

### PARTIAL REPAYMENT OF BAD DEBTS

If a credit customer disappears without trace, the entire amount owing is written off as a bad debt. However, when a person is declared bankrupt, the courts may decide that they do have some assets and these assets should be sold off. The funds generated are then divided among all the debts the person owes. The result is expressed as something like: *All debts will be paid at the rate of 10 cents in the dollar*. That is, individuals and businesses owed money will receive 10% of the amount owing, with the other 90% being written off as a bad debt.

### **EXAMPLE 19.3**

If C. Chance paid 10 cents in the dollar, this should be recorded first, followed by the bad debts entry. As \$3000 remains unpaid, 10% of \$3000 would be received in cash – that is, \$300. This means that \$2700 is still unpaid and this amount would then be written off as a bad debt.

The record would then be prepared as follows.

### ACCOUNTS RECEIVABLE RECORD: C. CHANCE

| Date        | Details         | Document no. | Amount<br>\$ | Balance<br>\$ |
|-------------|-----------------|--------------|--------------|---------------|
| Jul 1 2022  | Credit sale/GST | Inv. 184     | 3 300        | 3 300         |
| Sep 1 2022  | Cash received   | Rec. 345     | 300          | 3 000         |
| Dec 31 2023 | Cash received   | Rec. 422     | 300          | 2 700         |
| Dec 31 2023 | Bad debts       | Memo 25      | 2 700        | Nil           |

### **ACCOUNTS PAYABLE TURNOVER**

**Accounts payable turnover** may be calculated in a similar way to accounts receivable turnover. This financial indicator evaluates how well accounts payable are managed, and calculates the average time (in days) taken to settle accounts with suppliers. Instead of credit sales, credit *purchases* for the period are used, and this figure is compared to the average amount owed to the firm's accounts payable.

Note that this financial indicator only considers those purchases made on credit, as cash purchases don't affect accounts payable.

## accounts payable turnover

a financial indicator that shows the average time a business takes to settle its accounts with suppliers



### **EXAMPLE 19.4**

Tempest Tech provides the following data for its accounts payable in the 2022–23 reporting period.

|                         | 2022  | 2023   |
|-------------------------|-------|--------|
|                         | \$    | \$     |
| Credit purchases        |       | 50 000 |
| GST on credit purchases |       | 5 000  |
| Total accounts payable  | 6 000 | 5 000  |

Accounts payable turnover = 
$$\frac{\text{Average accounts payable}}{\text{Net credit purchases} + \text{GST}} \times 365$$

$$= \frac{\left(\frac{\$6\ 000 + \$5\ 000}{2}\right)}{\$50\ 000 + \$5\ 000} \times 365$$

$$= \frac{\$5\ 500}{\$55\ 000} \times 365 = 36.5 \text{ or } 36 \text{ days}$$

Accounts payable turnover may be compared to the accounts receivable turnover. Balancing the time taken to complete the collection of cash with the time taken to settle with accounts payable is important in managing cash within a small business. At times, management may have to extend the accounts payable turnover simply because it is unable to collect cash on time from accounts receivable.

Things to consider when interpreting results of the accounts payable turnover include:

- credit terms offered by suppliers
- previous periods' results (i.e. the trend)
- management's expectations or budget objectives.

A business owner should take great care when dealing with accounts payable. Some suppliers may tolerate an occasional late payment, but generally they won't be happy if their credit terms are continually abused. If this happens, the supplier may decide not to provide a credit facility to a business in the future, or even refuse to sell to it at all. This may be very damaging to a business, particularly if the supplier's products are a fast-moving inventory item.

### 19.4 CHECK YOUR UNDERSTANDING



- 1 The accounts receivable turnover in your business has changed from 32 days in 2022 to 47 days in 2023. Would you be concerned about this change in this financial indicator? Explain your answer.
- 2 A business owner was told that trade credit is free and therefore it should always be used. The accounts payable turnover for her business has increased from 25 days to 40 days over the past two years. State two possible responses from the suppliers of inventory to this business if this trend continues.
- 3 Discuss the following statement: 'If you are going to sell on credit, bad debts will always happen, so be ready for them.'

## (19) CHAPTER REVIEW

### **KEY CONTENT**

- [19.1] A credit transaction is one where goods are supplied immediately, but payment follows at a later date. An invoice is the source document used to inform a customer of the cost of a credit transaction. Accounts receivable are the credit customers who owe a business money; accounts payable are suppliers that the business owes money to for their goods or services.
- In single entry accounting, subsidiary records are used to keep track of credit accounts. The purchases journal is used to keep all of a business's credit purchases together in one record. The sales journal is used to keep all of a business's credit customers together in one record.
- If a business receives a discount from a supplier (discount revenue) or allows a discount to its accounts receivable (discount expense), these items must be recorded when the transaction takes place. The two cash journals can be modified with an additional column to record discount revenue and discount expense.
- Transactions involving returns affect the individual records for accounts receivable and accounts payable. In the case of purchases returns, the amount owing to suppliers will decrease; for sales returns, the individual accounts receivable decreases. Schedules of accounts receivable and accounts payable summarise all account balances for entering into the balance sheet.
- [19.4] Accounts receivable turnover is a measure of how long it takes to actually collect cash from accounts receivable. Some accounts receivable may vanish or go bankrupt, and these are usually written off as bad debts, which are an expense. Accounts payable turnover is the average time (in days) taken to settle accounts with suppliers.

### **CHAPTER 19 EXERCISES**

### 1 CALCULATING DISCOUNTS



For each of the following situations, state the amount of cash paid to the accounts payable and the discounts received.

- a A \$100 purchase on 4 June 2023 on credit terms of 5/7, n/30. Payment was made on 7 June 2023.
- **b** Invoice for \$160 dated 14 July 2023, with credit terms of 2/30, n/60. Payment occurred on 1 August 2023.
- c On 8 August 2023, goods were purchased for \$350 on terms of 5/14, n/30. The invoice was paid on 25 August 2023.
- d On 11 September 2023, an invoice was received for materials purchased. The total cost was \$180 and the terms were 2/30, n/60. The account was settled on 8 October 2023.

### **2 ACCOUNTS PAYABLE**





The following credit purchases were made by Gifts Galore during September 2023.

- Sep 2 Bought inventory on credit from Rosa's Rings. Invoice no. 401: \$600, plus \$60 GST
  - 5 Credit purchase from Kitchens Plus \$250, plus \$25 GST: Invoice no. 8234
  - 9 Received Invoice no. 924 from Galaxy Games for goods purchased, a total of \$440, including GST of \$40
  - 13 Bought goods on credit from Rosa's Rings for \$210, plus \$21 GST: Invoice no. 445
  - 19 Received Invoice no. 945 for \$230 worth of goods, plus \$23 GST, purchased from Galaxy Games
  - 22 Some of the goods received on 19 September were damaged. These goods were returned to Galaxy Games and credit note no. 11 was received for \$30, plus \$3 GST
  - 24 Rosa's Rings supplied inventory. Invoice no. 476 received for a total of \$220, plus GST of \$22)
- a Enter the above transactions in a credit purchases journal.
- **b** Transfer the information into individual records for accounts payable.
- c Prepare an accounts payable schedule as at 30 September 2023.

### **3 ACCOUNTS PAYABLE**





The owner of Balwyn Bats & Balls supplies the following information in relation to the firm's accounts payable.

| Credit p | GST  |      |
|----------|--|------|
| Nov 1    | Invoice no. 124 received from Ace Tennis Supplies for \$350  | \$35 |
| 5        | Doncaster Sports provided Invoice no. A834 for \$340         | 34   |
| 10       | Ace Tennis Supplies, \$420 (Inv. no. 138)                    | 42   |
| 13       | Invoice no. 152, from Ace Tennis Supplies, for \$430         | 43   |
| 17       | \$980 from Kooka Sports: Invoice no. 3912                    | 98   |
| 25       | Doncaster Sports, Invoice no. A867, for \$780                | 78   |
| Paymen   | ts to accounts payable:                                      |      |
| Nov 11   | Paid Ace Tennis Supplies Co. via EFT \$385                   |      |
| 16       | EFT payment approved for Doncaster Sports \$374              |      |
| 23       | Paid Kooka Sports \$500 via EFT                              |      |
| 31       | Bank transfer completed for EFT to Ace Tennis Supplies \$442 |      |

- a Prepare a credit purchases journal for November 2023.
- **b** Record both the credit purchases and cash payments in the individual records for accounts payable. (All entries must be in chronological sequence.)
- c Prepare an accounts payable schedule as at 30 November 2023.



### **4 ACCOUNTS RECEIVABLE**



Lilydale Laptops provides its goods to regular customers on credit.

The following credit transactions occurred during August 2023.



- 4 \$1500 for a credit sale, plus \$150 GST. Invoice no. 207 issued to L Hanna CPA
- 8 Emailed Invoice no. 208 to L Simpson for credit sale of \$2300, plus \$230 GST
- 11 Craigieburn College charged \$3300, including GST (Inv. no. 209)
- 18 L Hanna CPA billed for \$1500 plus \$150 GST, Invoice no. 210
- 22 Charged Cragieburn College \$2950, plus \$295 GST, by issuing Invoice no. 211
- 29 Invoice no. 212 was sent to Kew College for a total of \$4730, including GST
- 31 Kew College sent one laptop back to Lilydale Laptops and a credit note was issued for \$1200, plus \$120 GST (Credit note 142)
- **a** Enter the relevant transactions from above into a credit sales journal for Lilydale Laptops.
- b Post the information to individual records for accounts receivable.
- c Prepare an accounts receivable schedule as at 31 August 2023.

### SPREADSHEET

### **5 ACCOUNTS RECEIVABLE**



Five-Star Comics & Graphic Novels supplies the following information regarding transactions with accounts receivable in September 2023.

| Credit s | ales charged to accounts receivable:               | GST  |
|----------|--|------|
| Oct 1    | Invoice no. 539 to Spotswood TAFE, for \$580       | \$58 |
| 3        | To Coburg Library, Invoice no. 540 for \$490       | 49   |
| 7        | Invoice no. 541 to K Norton for \$150              | 15   |
| 12       | Spotswood TAFE, Invoice no. 542, for \$1400        | 140  |
| 17       | Spotswood TAFE, Invoice no. 543, for \$1800        | 180  |
| 21       | Coburg Library, Invoice no. 544, for \$290         | 29   |
| 24       | Invoice no. 545, to J Wade, for \$160              | 16   |
| 28       | Spotswood TAFE, Invoice no. 546, for \$680         | 68   |
| 31       | Invoice no. 547, to Coburg Library, for \$270      | 27   |
| Cash re  | ceipts from accounts receivable:                   |      |
| Oct 10   | Received from Coburg Library \$539 via EFT         |      |
| 13       | Spotswood TAFE paid \$638 (Rec. 901)               |      |
| 16       | Received from K Norton \$150 by EFT                |      |
| 21       | Receipt no. 902 issued to Spotswood TAFE for \$700 |      |

- a Record the credit sales for October in a suitably designed credit sales journal.
- **b** Enter both the credit sales charged to accounts receivable and the cash received from accounts receivable in individual records for accounts receivable. (All entries must be in sequence.)
- c Prepare an accounts receivable schedule as at 31 October 2023.
- d Explain why the document numbers in the sales journal run in sequence.

### 6 ACCOUNTS PAYABLE AND ACCOUNTS RECEIVABLE





The following transactions relate to a small business trading as Kitchen & Cellar Catering Supplies.

- Nov 1 Invoice no. 234 issued to Berwick Hotel for \$560, plus \$56 GST
  - 4 Received Invoice no. 101 from Olinda Knife Co. \$1940, plus GST of \$194
  - 6 Invoiced Berwick Hotel \$275 (including \$25 GST): Invoice no. 235
  - 9 Charged Ferntree Motel \$380, plus \$38 GST: Invoice no. 236
  - 11 Received Invoice no. 313 from Wholesale Glassware for \$550, including \$50 GST
  - 12 Received \$616 from Berwick Hotel via EFT
  - 16 Invoiced Olinda Pasta Bar \$380, plus \$38 GST: Invoice no. 237
  - 18 Made an EFT to Olinda Knife Co. for \$1000
  - 21 Charged Ferntree Motel \$270, plus \$27 GST: Invoice no. 238
  - 23 Purchased inventory on credit from Olinda Knife Co.: Invoice no. 129 \$960, plus \$96 GST
  - 25 Received \$275 through EFT from Berwick Hotel
  - 26 Paid Wholesale Glassware \$550 by EFT
  - 28 Invoice no. 239 to Olinda Pasta Bar, \$240, plus \$24 GST
  - 29 Received \$418 from Ferntree Motel via EFT
  - 30 Received Invoice no. 172 from Olinda Knife Co. \$310, plus \$31 GST Charged Berwick Hotel \$290 plus GST of \$29: Invoice no. 240
- **a** Using the information provided above, enter the relevant transactions in a credit sales journal and a credit purchases journal.
- **b** Prepare individual records for both the accounts receivable and accounts payable of Kitchen & Cellar Catering Supplies.
- Draw up an accounts receivable schedule and an accounts payable schedule as at 30 November 2023.

### 7 ACCOUNTS PAYABLE





The following information is a summary of the business transactions with Wholesale Toys Pty Ltd in the month of June 2023. At the start of June, this supplier was already owed \$1400.

| Credit | purchases:        |                     |
|--------|-------------------|---------------------|
| Jun 3  | Invoice 216       | \$440 plus \$44 GST |
| 8      | Invoice 223       | \$360 plus \$36 GST |
| 12     | Invoice 254       | \$270 plus \$27 GST |
| 21     | Invoice 276       | \$450 plus \$45 GST |
| 30     | Invoice 301       | \$380 plus \$38 GST |
| Purcha | ses returns:      |                     |
| Jun 9  | Credit note 12    | \$40 plus \$4 GST   |
| 22     | Credit note 15    | \$20 plus \$2 GST   |
| Cash p | ayments:          |                     |
| Jun 4  | Cheque 3827       | \$1400              |
| 14     | Cheque 3844       | \$340               |
|        | Discount received | \$12                |
| 29     | Cheque 3877       | \$484               |
| 30     | Cheque 3901       | \$270               |

- **a** Prepare the individual record for Wholesale Toys Pty Ltd, showing all transactions during the month of June 2023.
- **b** Explain how *verifiability* has been satisfied in your record for this accounts payable.
- **c** State one benefit of taking advantage of discounts for prompt payment (refer to 14 June above).
- d State one disadvantage of making a prompt payment in order to get a discount.

### **8 GST: REFUND OR DEBT?**



Gail Turner has the following events take place in her business during July 2023.

| GST collected on cash transactions           | \$2 900 |
|--|---------|
| GST paid on cash payments                    | \$1 450 |
| GST charged by suppliers on credit purchases | \$1 150 |

Considering the above information, does Gail owe the taxation office in relation to the GST or is she owed a tax refund? Explain fully.

### 9 GST: REFUND OR DEBT?



On 1 October 2023, Laz Vassiliadis owed the taxation office \$290 as a result of GST transactions in his business. During October, Laz experienced the following events in his business.

| GST charged by suppliers on credit purchases       | \$950   |
|--|---------|
| GST charged to accounts receivable on credit sales | \$880   |
| GST paid on cash payments                          | \$850   |
| Cash payments not attracting GST                   | \$6 200 |
| GST received on cash sales of inventory            | \$580   |
| Cash receipts not attracting GST                   | \$9 000 |

- a Calculate the GST debt or GST refund due as at 31 October 2023.
- **b** How would you classify your answer to part **a** in the balance sheet of Laz's business? Explain your answer fully.

### SPREADSHEET

### 10 ACCOUNTS RECEIVABLE AND ACCOUNTS PAYABLE



Designer Jeans is a retail store that buys inventory on credit and allows credit to trusted customers. Discounts are granted to customers who settle their accounts guickly.

On 1 November 2023, the following amounts were already owed by accounts receivable: D Jones \$200, J Douglas \$90 and B Trouble \$450. The following events take place during November 2023.

- Nov 2 Invoice no. 184 issued to K Stackpole for \$120, plus \$12 GST
  - 3 Purchased inventory from Jeans Plus at a cost of \$3400, plus \$340 GST. Invoice no. 285 was received
  - 8 D Jones paid \$194 by EFT and was granted a discount of \$6
  - 12 Issued Invoice no. 185 to J Scholes for \$180, plus \$18 GST
  - 13 K Stackpole paid \$127 via EFT and was allowed \$5 discount
  - 14 Bought goods from Denim Imports for \$1400, plus \$140 GST, Invoice no. 261
  - 16 Issued Invoice no. 186 to J Douglas for \$160, plus \$16 GST
  - 17 J Douglas returned faulty goods and was issued credit note 21 for \$30, plus \$3 GST







- 19 EFT to Jeans Plus \$3700 and received a discount of \$40
- 20 J Scholes paid \$150, Receipt no. 26
- 23 Charged C Kinnear \$290, plus \$29 GST, for a credit sale. Invoice no. 187
- 28 Paid Denim Imports by EFT \$740 and received \$10 discount
- 30 Purchased \$1600 of goods from Jeans Plus and received Invoice no. 299 (GST charged \$160)
  - Invoiced D Jones \$160 plus \$16 GST, Invoice no. 188
  - B Trouble has not made a payment on his account since December 2022. Advice has now been received that he has disappeared overseas and the owner has decided that the account should be written off as a bad debt (Memo 28).
- a Enter the relevant transactions from the list above into a credit purchases journal.
- **b** Prepare an extract from the cash payments journal to show how the payments on 19 November and 28 November would be recorded.
- **c** Prepare individual records for the accounts payable, showing all entries in correct sequence.
- **d** Select the appropriate transactions from the list above and prepare a credit sales journal.
- **e** Prepare an extract from the cash receipts journal to show how cash received during the month would be recorded.
- f Prepare individual records for the accounts receivable, with all relevant entries.
- g Prepare accounts receivable and accounts payable schedules as at 30 November 2023.
- **h** Using your credit journals, determine the GST situation of this business at the end of November 2023. Explain your answer fully.

### 11 ACCOUNTS RECEIVABLE AND ACCOUNTS PAYABLE





Healesville Furniture is a small business that buys and sells inventory on credit. Accounts receivable are encouraged to settle their accounts quickly by the discounts offered by the proprietor.

On 1 July 2023, the following accounts receivable were already in existence: G Smyth \$1450, R Larkin \$600, IB Gone \$900 and D Berry & Co. \$2200.

Balances owing to accounts payable at that date were: Classic Importers \$5100 and Classic Furniture \$3200.

- Aug 1 Paid Classic Importers \$3100 by EFT
  - 2 Invoice no. 919 issued to R Larkin for \$380, plus \$38 GST
  - 3 Purchased goods from Classic Furniture for \$5800, plus \$580 GST. Invoice no. 217
  - 6 Sold goods to G Smyth for \$550, including \$50 GST. Invoice no. 920 D Berry & Co. paid \$1850 and was granted a discount of \$30 (Rec. 332)
  - 9 Issued Invoice no. 921 to R Larkin for \$540, plus \$54 GST
  - 11 G Smyth paid \$1430 and was allowed \$20 discount (Rec. 333)
  - 12 Issued Invoice no. 922 to St Andrew's Secondary College for \$3800, plus \$380 GST
  - 15 Bought goods from Classic Importers for \$4200 (Inv. no. 6545): GST charged \$420
  - 18 Sold goods on credit to I Wrigglesworth for \$1800, plus \$180 GST (Inv. 923)
  - 21 Paid Classic Furniture \$3160 and received a discount of \$40 (Chq. no. 98343)
  - 22 Issued Invoice no. 924 to St Andrew's Secondary College for \$1520, plus \$152 GST



- 23 R Larkin completed an EFT for \$600 for overdue payment
- 24 Sold goods on credit to G Smyth \$540, plus \$54 GST (Inv. 925)
- 26 Purchased inventory on credit from Oz Furniture for \$3900, plus \$390 GST (Inv. A654)
- 28 I Wrigglesworth paid \$855 on account and was allowed a discount of \$25 (Rec. 335)
- 29 Invoiced D Berry & Co. for credit sale of \$4800, plus GST of \$480 (Inv. 926)
- Purchases from Classic Furniture for \$5400, plus GST of \$540 (Inv. 927)
   D Berry returned goods sold for \$55, including GST. The goods supplied were the wrong colour and a full credit was granted
- 31 Sold goods on credit to G Cusack for \$3360 (Inv. 928): GST charged \$336

  The owner of Healesville Furniture has been informed that one of the firm's customers, IB Gone, has been declared bankrupt and is paying all debts at the rate of 20 cents in the dollar. An EFT transfer was made on 31 August for the appropriate amount. The remainder of the account is to be written off as a bad debt.
- a Prepare the following journals for the month of August 2023, with all relevant transactions:
  - credit sales journal
- credit purchases journal
- cash receipts journal
- cash payments journal.
- **b** Prepare individual records for accounts receivable with all relevant entries in correct sequence.
- c Prepare individual records for accounts payable showing all entries for August.
- **d** Prepare accounts receivable and accounts payable schedules as at 31 August 2023
- e Determine whether this business has a GST debt or is owed a GST refund at the end of August 2023 (show workings).
- f Explain the effect a bad debt has on the:
  - a income statement.
  - **b** balance sheet.

### 12 ACCOUNTS RECEIVABLE TURNOVER



The total value of accounts receivable on 1 January 2023 was \$15 000, while on 31 December the total value was only \$12 000. Credit sales for the year were \$74 250, plus GST. The business offers credit customers 30 days to settle their accounts.

- a Calculate the accounts receivable turnover for 2023.
- **b** Comment on the performance of the firm in controlling its accounts receivable.
- **c** Make a list of what the business could do to improve the present situation.

### 13 ACCOUNTS RECEIVABLE TURNOVER



The following information relates to Commercial Computer Systems.

|   | 1/1/23   | 31/12/23  |
|---|----------|-----------|
| Accounts receivable balance                   | \$12 000 | \$16 000  |
| Credit sales for the year – excluding GST     |          | \$168 000 |
| Cash sales for the year                       |          | \$152 000 |
| Cost of sales for the year                    |          | \$174 000 |
| Standard credit terms for accounts receivable |          | 30 days   |



- a Calculate accounts receivable turnover in days.
- **b** Comment on the success of the firm in meeting its objectives with regard to the turnover of accounts receivable.

### 14 ACCOUNTS PAYABLE TURNOVER



The total value of accounts payable on 1 January 2023 was \$25 000, while on 31 December the total value was \$32 000. Credit purchases for the year were \$162 000, plus GST. The business has been provided with 30 days' credit

- a Calculate the accounts receivable turnover for 2023.
- **b** Comment on the performance of the firm in relation to meeting its debts on time.
- **c** Taking into account the results of the accounts payable turnover, what would be a possible response from the suppliers to this business? Explain fully.

### 15 ACCOUNTS PAYABLE TURNOVER



The following information relates to Supersonic Cleaning Products.

|   | 1/1/23   | 31/12/23  |
|---|----------|-----------|
| Accounts payable balance                      | \$15 000 | \$10 000  |
| Credit purchases for the year – excluding GST |          | \$202 000 |
| Cash purchases for the year                   |          | \$112 000 |
| Standard credit terms from accounts payable   |          | 30 days   |

- a Calculate accounts payable turnover.
- **b** Comment on the success of the firm in meeting its obligations to its accounts payable.
- **c** Do you think it is important to always meet the credit terms offered by suppliers? Discuss.

### **ETHICAL CONSIDERATIONS**



The owner of Waterworld Aquariums, Mera Jackson, sells a range of aquarium products and supplies to individual and corporate customers. Over the past three years, she has bought inventory from 10 different suppliers who operate out of Melbourne and the surrounding area.

Lately, Jackson has become increasingly concerned about price increases introduced by her accounts payable. After extensive research, she has discovered that she can save between 10% and 20% on the cost prices if she buys overseas, rather than using the Melbourne suppliers. She has asked for your advice as to what she should do.

- **a** Should Jackson be concerned about buying from overseas? Describe any disadvantages of the proposed idea.
- **b** Some business owners suggest that you should always support local industries. Do you agree? Discuss.
- **c** What would you do if you were in Jackson's situation? Are there any concerns that you have about buying inventory from other countries? Discuss fully.

### **CHAPTER CHECKLIST**

Now that you've finished Chapter 19, double-check your progress.

Are you ready for your Unit 2 assessment?

### I have ...

- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- ompleted the end-of-chapter activities
- Manded in my workbook for marking.

### I understand ...

- documents used by a business to record financial transactions
- indicators to measure business performance in relation to accounts receivable and accounts payable
- the purpose and use of special journals:
  - Sales Journal
  - Purchases Journal
  - Cash Receipts Journal
  - Cash Payments Journal
- fransactions involving accounts receivable and accounts payable records:
  - sales
  - purchases
  - returns, both sales and purchases
  - bad debts
  - cash and settlement discounts (GST to be excluded)
- strategies for effective management of accounts payable and accounts receivable
- the use of both manual methods and ICT to model and analyse the potential financial outcomes of decisions relating to accounts receivable and accounts payable
- ethical considerations when dealing with accounts receivable and accounts payable.

### I can ...

- use correct accounting terminology
- manually prepare accounting reports for a trading business
- use ICT, including spreadsheets, to model and analyse potential financial outcomes in relation to accounts receivable and accounts payable
- discuss the ethical considerations of financial decisions in relation to accounts receivable and accounts payable.

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### PREPARE

Read back over the chapter now, then complete the online revision activity.



### VA/ATCL

Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



mea.digital/vceacc12\_19





# INCOME STATEMENTS FOR TRADING BUSINESSES

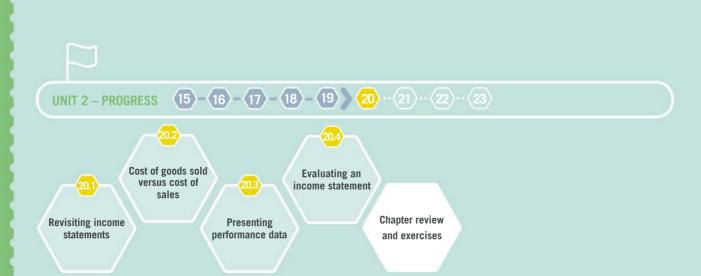
In Chapter 8, you learnt about the use of income statements for service businesses. This key report is used to compare revenue and expenses for a reporting period. Trading businesses also make use of income statements, but, as you've come to expect, there are a few important differences.

In this chapter, you'll revisit the income statement, then learn how to design and prepare one for a trading business. You'll also explore ways of presenting the information from such statements in different formats, in particular graphs and charts.

#### **LEARNING OBJECTIVES**

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

- prepare an income statement for a trading business[20.1]
- distinguish between gross profit and net profit [20.1]
- distinguish between cost of goods sold and cost of sales [20.2]
- use various means of presentation, including graphs, in relation to performance data [20.3]
- evaluate the results reported by an income statement[20.4]
- calculate and interpret financial indicators such as return on owner's investment [20.4].



# 20.1 REVISITING INCOME STATEMENTS

Most small businesses can rely on the two cash journals as their main tool for recording transactions. They can then extract information from these cash records in summarised form to prepare an income statement at the end of the period. This is essentially the basic structure of a single entry accounting system.



#### **INCOME STATEMENT FOR A SERVICE FIRM**

Figure 20.1 shows an income statement for a service firm to refresh your memory before you examine income statements for a trading business.

FIGURE 20.1 Income statement for a service business

#### CHARLIE'S CLEANING ANGELS: INCOME STATEMENT FOR YEAR ENDED 30 JUNE 2023

| Revenue          | \$     | \$     |
|------------------|--------|--------|
| Cleaning fees    |        | 90 000 |
| Less: Expenses   |        |        |
| Wages            | 30 000 |        |
| Office expenses  | 4 000  |        |
| Insurance        | 2 000  |        |
| Advertising      | 1 000  |        |
| Vehicle expenses | 3 000  | 40 000 |
| Net profit       |        | 50 000 |

This report has basically two parts. The revenue items are listed at the top of the report, followed by the firm's expenses items. The end result, which is the profit or loss for the period, is stated at the bottom of the report.

#### INCOME STATEMENT FOR A TRADING FIRM

The main change required when reporting for a trading business is that both gross profit and net profit should be stated in the income statement.

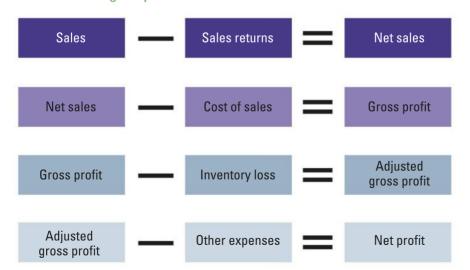
As a trading business has the basic function of buying and selling goods to earn its revenue, the income statement should report on these activities. The mark-up added to cost prices in order to determine selling prices will have a significant impact on the profit results of a trading firm.

Let's revisit some key terms in relation to trading businesses. You've seen these terms in previous chapters, but it's useful to have them all listed here again, because the income statement needs to address each of them in turn.

- Sales: The main source of revenue for a trading business. These may be both cash and credit sales. The value of cash sales can be extracted straight from the cash journals, whereas credit sales for a period will be shown as the total of the credit sales journal.
- Sales returns: If a business experiences returns of some of its sales, this should also be reported in the income statement. Sales returns should be viewed as a negative revenue item, as they are deducted from the total sales made during the accounting period.
- Net sales: The total sales for the period, less any sales returns recorded during the same period of time.
- Cost of sales: The cost price of all inventory sold during the reporting period. The total cost of sales can be determined by adding up the entries for the sales made in the 'Out' column of the firm's inventory cards (excluding inventory losses, inventory withdrawn by the owner and inventory used for advertising purposes).
- Gross profit: A gross profit figure is determined by deducting the cost of sales
  from the sales revenue earned for the reporting period. That is, gross profit is the
  difference between the selling prices and the cost prices of the inventory sold
  during the period.
- Adjusted gross profit: The gross profit is then adjusted for any inventory losses or inventory gains to provide an adjusted gross profit figure.
- Net profit: The net profit figure is the final performance result for the period. Under the accrual accounting assumption, profit is the revenues earned for a period less all expenses for the same period. This provides management with a net profit result based on all the relevant transactions for the period. Thus, it satisfies the qualitative characteristic of relevance.

In terms of the income statement, net profit can be calculated by following the process shown in Figure 20.2.

FIGURE 20.2 Calculating net profit



net sales total sales for a period less sales returns The layout of an income statement for a trading business follows this outline. In fact, as you can see in Figure 20.3, the headings used within the report come from this outline.

FIGURE 20.3 Income statement for a trading business

# CARMELINA'S GIFT SHOP: INCOME STATEMENT FOR YEAR ENDED 30 JUNE 2023

| Revenue               | \$      | \$       |
|-----------------------|---------|----------|
| Cash sales            | 172 000 |          |
| Credit sales          | 33 000  |          |
|                       | 205 000 |          |
| Less: Sales returns   | 5 000   | 200 000  |
| Cost of sales         |         | 90 000   |
| Gross profit          |         | 110 000  |
| Less: Inventory loss  |         | 5 000    |
| Adjusted gross profit |         | 105 000  |
| Less: Other expenses  |         |          |
| Wages                 | 50 000  |          |
| Office expense        | 8 000   |          |
| Insurance             | 12 000  | 70 000   |
| Net profit            |         | \$35 000 |

This income statement reports on the key areas in which management would have an interest. The net sales earned by the business (\$200 000) and the gross profit made on the sales (\$110 000) are clearly stated, and the overall profit result for the year has been determined (\$35 000). These are all important factors for an owner or manager to consider at the end of a reporting period.



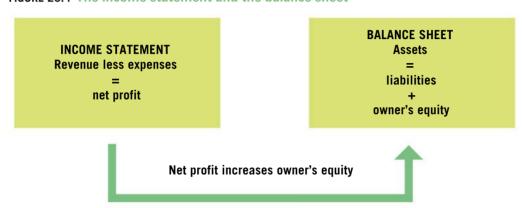
#### NET PROFIT AND THE BALANCE SHEET

The net profit figure, which is determined by preparing the income statement, is the result of deducting expenses from revenues, with a profit leading to an increase in owner's equity. The profit figure is therefore also reported as part of the balance sheet.

If a net profit is determined, it is added to owner's equity. If there is a net loss, the final result is deducted from owner's equity.

Figure 20.4 shows this link between the two financial statements.

FIGURE 20.4 The income statement and the balance sheet



The relationship in this diagram is further evidence of the two-fold effect of all transactions on the balance sheet.

- As revenues represent an inflow of resources, revenues will increase assets, usually through Accounts receivable or Cash at bank.
- Expenses, on the other hand, represent sacrifices of economic resources and will therefore result in decreases in assets.

Therefore, the net result of all revenue and expense transactions will have an impact on two elements in the balance sheet: assets and owner's equity.

Rather than adjusting the value of owner's equity after every single transaction, the income statement acts as a summary of all revenue and expense transactions for the entire period.

#### 20.1 CHECK YOUR UNDERSTANDING



- 1 Describe the basic difference between an income statement prepared for a service firm and one prepared for a trading business.
- 2 List three items that may appear in an income statement for a trading business that wouldn't appear in a report for a service firm.
- 3 Explain the link between the income statement and the balance sheet.

# 20.2 COST OF GOODS SOLD VERSUS COST OF SALES

cost of goods sold

all expenses incurred in getting goods into the business ready for sale

#### cost of sales

the cost price of inventory sold by a trading firm

#### cartage

the cost of transporting inventory to or from a business

Cost of sales is a vitally important item in the income statement. The cost price of the goods that a firm sells is deducted from its revenue in order to determine gross profit.

However, sometimes a trading firm incurs other costs in getting its inventory ready to sell. An additional heading may be used in the income statement to bring all such expenses together. The heading 'Cost of goods sold' includes all expenses incurred in acquiring inventory and preparing it for sale.

Cost of goods sold may include such items as cost of sales, cartage inwards (delivery costs into the business), packaging costs, buying expenses and customs duty (if goods are imported from overseas). All of these expenses are incurred in order to get inventory into the business ready to sell.

Cost of goods sold may include cartage inwards, packaging costs, buying expenses as well as customs duty.



In the income statement, these items are listed together before the firm's gross profit is determined. Figure 20.5 shows an example of this layout.

FIGURE 20.5 Income statement with 'Cost of goods sold' subheading

#### TOORAK TRADING STORE: INCOME STATEMENT FOR **MONTH ENDED 30 JUNE 2023**

| Revenue                  | \$    | \$      |
|--------------------------|-------|---------|
| Cash sales               | 8 000 |         |
| Credit sales             | 2 000 | 10 000  |
| Less: Cost of goods sold |       |         |
| Cost of sales            | 4 000 |         |
| Cartage inwards          | 500   |         |
| Buying expenses          | 500   | 5 000   |
| Gross profit             |       | 5 000   |
| Less: Other expenses     |       |         |
| Cartage outwards         | 200   |         |
| Wages – sales staff      | 2 400 | 2 600   |
| Net profit               |       | \$2 400 |



Note that in this report, the item 'Cost of goods sold' includes the actual cost of sales for the period. All other expenses are then listed in the bottom half of the report.

Note also the two cartage items in the income statement.

- Cartage inwards is a delivery fee created when inventory is coming into the business
- Cartage outwards is an expense incurred when inventory leaves the business and is being delivered to customers.

As cartage outwards isn't created when inventory is being prepared for sale, it wouldn't be considered to be part of cost of goods sold. Instead, it's listed under the 'Other expenses' heading.

Wages is also an expense created in helping to move the inventory out of the business. Sales staff are paid to move inventory out of the business as quickly as possible. Therefore, wages of the sales team would be listed under the 'Other expenses' heading, along with any other general expenses.



Helping to move inventory out of a business is also an expense created, in terms of wages.

#### 20.2 CHECK YOUR UNDERSTANDING



- 1 Distinguish between the terms 'cost of sales' and 'cost of goods sold'.
- 2 List two expense items that may come under the heading 'Cost of goods sold' in an income statement.
- 3 List two expense items that wouldn't be listed under 'Cost of goods sold' (i.e. items that would appear after the gross profit has been determined).

# 20.3

# PRESENTING PERFORMANCE DATA

One of the important qualitative characteristics of accounting reports is *understandability*. Accounting information should be presented in such a way that users of the report can easily understand it.

Income statements such as those in Figures 20.2 and 20.5 can be prepared in an easy-to-read fashion, set out with headings, sub-totals and all key figures suitably labelled. However, some users of financial reports find a page of numbers daunting, and struggle to understand exactly what is being presented.

Because of this, accountants sometimes present financial information in alternative ways in an attempt to improve users' understanding of the statements. Alternative forms of presentation include graphs and charts, since graphs may have an impact that a page of numbers can't achieve. Pie charts, line graphs and bar graphs can all be used to convey information in a clear, understandable fashion.

#### **PIE CHARTS**

Consider the information presented in Figure 20.2, presented again here in an abbreviated form.

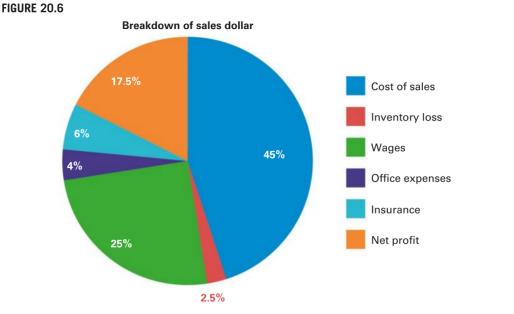
In addition to the dollar values for each item, percentages have also been included, with all the expenses being expressed as a percentage of the total sales revenue. When the dollar values are converted to percentages, it is much easier to present this data as a pie chart.

|                       | \$      | %     |
|-----------------------|---------|-------|
| Net sales             | 200 000 | 100.0 |
| Less: Cost of sales   | 90 000  | 45.0  |
| Gross profit          | 110 000 | 55.0  |
| Less: Inventory loss  | 5 000   | 2.5   |
| Adjusted gross profit | 105 000 | 52.5  |
| Less: Wages           | 50 000  | 25.0  |
| Office expenses       | 8 000   | 4.0   |
| Insurance             | 12 000  | 6.0   |
| Total expenses        | 70 000  | 35.0  |
| Net profit            | 35 000  | 17.5  |

These percentages represent what happened to the average sales dollar earned by the business during the period. For example, 45% of the sales dollar was consumed by the cost price of the inventory. Another significant item was wages, which absorbed 25% of the sales revenue earned by the firm. After taking into account all expense items, this business still had 17.5% of each sales dollar remaining as net profit.

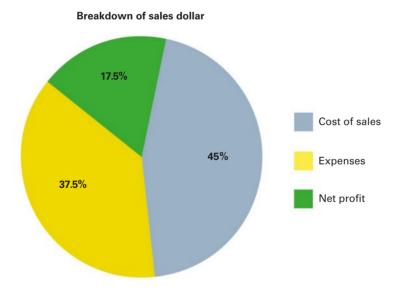
This information can be presented in a pie chart, as shown in Figure 20.6.





Rather than showing details of every individual expense item, a simplified pie chart can be used that shows only summaries. For example, cost of sales and total expenses for the period are crucial figures in determining a trading business's success. To highlight these two figures, as well as the profit for the period, an alternative pie chart can be prepared as shown in Figure 20.7.

FIGURE 20.7 Pie chart showing breakdown of the sales dollar



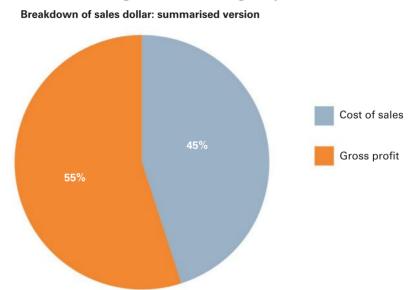
As with all graphs, a pie chart should be designed to report on the key areas of the business. There are no set rules for graphs or charts in accounting. However, if they are going to be used in an attempt to help satisfy *understandability*, they should be used to reveal all key information.

Figure 20.7 clearly shows that 45% of sales was consumed by cost of sales. However, because all expenses have been added together to make up a total of 37.5% of sales, the chart doesn't identify the importance of wages. As the amount for wages was significant (\$50 000), it probably deserves its own segment in the pie chart.

#### **COMPARING CONSECUTIVE PERIODS**

An excellent use of pie charts is to present a series of charts over consecutive reporting periods. As the charts can be used to show the breakdown of the sales dollar, changes in the firm's operations can be identified easily.

FIGURE 20.8 Pie chart showing cost of sales and gross profit

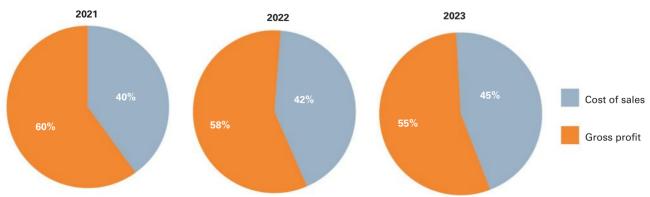


The pie chart in Figure 20.8 shows the breakdown of the sales dollar into two segments: cost of sales and gross profit. It has been based on the following data.

|                 | 2021    |       | 2022    |       | 2023    |       |
|-----------------|---------|-------|---------|-------|---------|-------|
|                 | \$      | %     | \$      | %     | \$      | %     |
| Sales           | 180 000 | 100.0 | 190 000 | 100.0 | 200 000 | 100.0 |
| – Cost of sales | 72 000  | 40.0  | 79 800  | 42.0  | 90 000  | 45.0  |
| Gross profit    | 108 000 | 60.0  | 110 200 | 58.0  | 110 000 | 55.0  |

The three-year comparison in Figure 20.9 in dollar terms may not show exactly what has happened in this business. However, by presenting the data graphically in percentage terms, we do get a clearer picture.

FIGURE 20.9 Comparative pie charts over consecutive reporting periods



These graphs show that the percentage of sales that remains as gross profit has been shrinking over the three years.

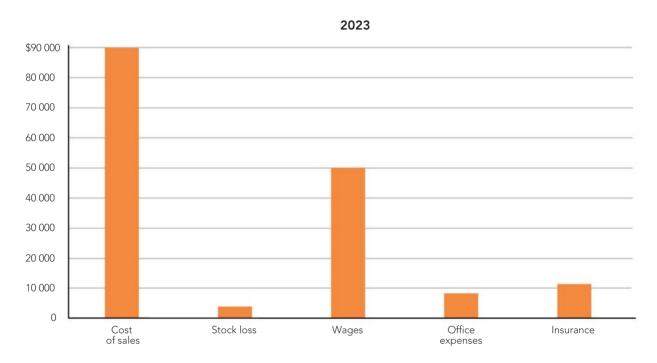
A very useful aspect of graphs in accounting is that changes can be identified easily, particularly if graphs have a consistent design and colour or shading is used to good effect. Most people can identify such changes when information is presented graphically, even if they don't fully understand accounting reports. This clearly helps satisfy the requirement for *understandability*, as the graphs help get the message across to the users of the report, which is the basic task of those who prepare reports.

#### **OTHER GRAPHS**

Other graphs and charts may also be used to convey accounting information. Bar graphs, for example, allow for easy comparison of the various expense items incurred by a business.

Using the data previously provided for Carmelina's Gift Shop (see Figure 20.3), the expenses of this business could be presented as shown in Figure 20.10.

FIGURE 20.10 Bar graph showing comparative spending on expense items



A variation of a bar graph is a stacked graph. This type of graph easily compares the revenue and expenses of a business. One part of the graph shows the firm's revenue, which can be broken down into credit and cash sales. The other half can be divided into segments representing all the expense items, plus one section showing net profit.



FIGURE 20.11 Stacked graph of revenues and expenses

Always remember that one function of accounting is to convey information to the users of financial reports. If charts or graphs can show information more clearly than a page full of numbers, their use should be encouraged. Therefore, accountants should view graphs and charts as an additional tool that can help them get their message across to the users of their financial statements.

## 20.3 CHECK YOUR UNDERSTANDING



- 1 Explain why some accountants present financial information using graphs.
- 2 Do you think a pie chart showing gross profit as a percentage of sales is valuable? Explain your answer fully.
- 3 Explain why net profit percentage decreases over time; that is, net profit as a percentage of sales.

## 2014 EVALUATING AN INCOME STATEMENT

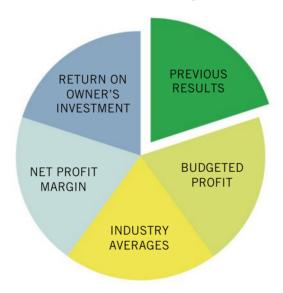
Chapter 13 examined the evaluation of income statements for service businesses, and how to determine a final profit result. Managers of trading businesses can use their income statements in similar ways, but potentially draw additional information from them.

As with a service business, the first point to keep in mind is the length of the accounting period, which is stated in the heading of the report. Profit results need to be evaluated in the context of that period.

#### PERFORMANCE BENCHMARKS

In addition to the period covered, there are several financial benchmarks that management can use to evaluate performance.

FIGURE 20.12 Performance benchmarks for a trading business



#### **COMPARING PROFIT TO PREVIOUS RESULTS**

This type of comparison provides management with a trend in the profit results over time. The trend may indicate an improved performance, or perhaps a declining profit. The results from several consecutive periods may provide the owner with a better idea of performance than simply one period's results.

Consider the profit results of the two firms shown below.

| Net profit results: | 2019<br>\$ | 2020<br>\$ | 2021<br>\$ | 2022<br>\$ | 2023<br>\$ |
|---------------------|------------|------------|------------|------------|------------|
| Business A          | 2 000      | 8 000      | 16 000     | 28 000     | 48 000     |
| Business B          | 90 000     | 78 000     | 65 000     | 56 000     | 48 000     |

If the year 2023 is examined in isolation, the simple conclusion is that the two businesses earned the same net profit. However, when the trend is taken into account, a different picture emerges. Business A has been improving its profit every year, while Business B's profit has been steadily declining.

### **BUDGETED (OR EXPECTED) PROFIT**

The past trend in a firm's profit results may be used to evaluate performance. However, even if profit has improved compared to previous results, it may still be unacceptable if it didn't meet management's expectations.

Referring to Business A in the example above, the budgeted profit for 2023 might have been \$52 000. Even though the business increased its profit to \$48 000 from the previous year, if the target for the period was \$52 000, management may be disappointed.

#### **INDUSTRY AVERAGES**

An accountant may be able to advise a business owner as to how their business's financial performance compares to that of other similar businesses.

If industry statistics are available, an owner can evaluate their business against the industry average. Is the business performance better than most? Has the business been falling behind in the last few years?

#### **NET PROFIT MARGIN**

The **net profit margin** (also known as the return on sales ratio) is a financial indicator that compares the net profit for a period to the amount of sales revenue generated. It determines the percentage of the sales dollar that remains after all expenses have been taken into account.

Net profit margin = 
$$\frac{\text{Net profit}}{\text{Net sales}}$$

For example, if a business has total sales of \$50 000 and net profit was \$5000, the net profit margin would be:

$$\frac{\text{Net profit}}{\text{Net sales}} = \frac{\$5\ 000}{\$50\ 000} = 10\%$$

This shows that 10% of the sales dollar was ultimately earned as net profit. Another way of interpreting this result is that out of every sales dollar earned, a profit of 10 cents was earned.

If expenses increase and selling prices remain the same, the net profit margin will decrease. This will happen because expenses are eating away more of the sales dollar. The reverse of this is also possible: if selling prices increase and expenses remain constant, the net profit margin will increase.

#### RETURN ON OWNER'S INVESTMENT

The **return on owner's investment** (often referred to as ROI) compares the profit earned by the business to the funds (capital) contributed by its owner. It is calculated as follows.

net profit margin

the percentage of sales revenue left as profit after all expenses have been taken into account

return on owner's investment (ROI) the return earned on the funds invested by a business owner Most small business owners invest their capital in order to maximise their return. They could put their money into term deposits in a bank and have a secure, low-interest return. When they go into business the risks are greater, but so too are the potential rewards. A proprietor can use the return on owner's investment to evaluate whether it is still worthwhile to continue with their business investment.

Consider the following example for Bay & Creek Fishing Store.

| Capital as at 1 January 2023   | \$70 000 |
|--------------------------------|----------|
| Capital as at 31 December 2023 | 90 000   |
| Net profit for 2023            | 20 000   |

Return on owner's investment = 
$$\frac{\text{Net profit}}{\text{Average capital}}$$

$$= \frac{\$20\ 000}{\left(\frac{\$70\ 000 + \$90\ 000}{2}\right)}$$

$$= \frac{\$20\ 000}{\$80\ 000} = 0.25:1 \text{ or } 25\%$$

This shows that for every dollar the owner invested, they earned a return of 25 cents. In order to compare the return with other possible investments, it may be simply stated that the owner has earned a return of 25% per annum.

Note that, in the above calculation, an average was determined for the owner's capital. An owner may contribute additional funds during an accounting period, or may withdraw assets. Rather than using owner's capital at the start or at the end of the period, an average figure is usually used. This provides a more accurate assessment of the owner's return when their contribution has changed during a period.

When evaluating an owner's return on investment, the percentage return should not be the only thing taken into account. Another thing to keep in mind is that many owners of small businesses work very long hours. While it is difficult to put a value on the risk taken and the hours worked, the return on an owner's investment should be substantially more than that available in the financial markets.

### 20.4 CHECK YOUR UNDERSTANDING



- 1 Explain why it is advisable to consider a trend in profit results, rather than the results of a single accounting period.
- 2 How may a budget be used to assess business performance?
- 3 What is the net profit margin? How is it determined?
- 4 Describe what is revealed by the financial indicator known as the return on owner's investment. Explain the purpose of calculating this percentage return.

# 20

# **CHAPTER REVIEW**

### **KEY CONTENT**

- An income statement is an accounting report that compares revenues and expenses for one reporting period, allowing the user to determine the net profit or loss for the business in that period. Once a net figure is calculated, the amount is transferred to the owner's equity section of the balance sheet.
- 'Cost of sales' is the cost price of the goods that a firm sells; this figure is deducted from its revenue in order to determine gross profit. If a trading business incurs other costs in getting its inventory ready to sell, such as transport or wages, the additional heading 'Cost of goods sold' may be used in the income statement to bring all such expenses together.
- The data in an income statement can be presented using graphs, which may be easier for some business owners to analyse. Pie charts are useful for immediate comparison of information, while bar graphs and stacked graphs provide more detailed breakdowns of data.
- Trading businesses may be evaluated against several performance benchmarks, such as an analysis of profit trends, budgeted revenues or industry averages. Key mathematical indicators can also be calculated, such as the net profit margin and the return on owner's investment.

#### **CHAPTER 20 EXERCISES**

### SPREADSHEET

#### 1 INCOME STATEMENT



Nakia Lyonga owns South Yarra Books and provides the following details of her trading results for the year ended 31 March 2023.

| Cash sales       | \$85 000 | Credit sales            | \$18 000 |
|------------------|----------|-------------------------|----------|
| Cost of sales    | 45 000   | Wages – sales assistant | 25 000   |
| Advertising      | 2 000    | Interest expense        | 1 200    |
| Postage expenses | 800      | Inventory loss          | 1 300    |
| Sales returns    | 2 000    | Insurance               | 1 000    |

- a Prepare an income statement for the year ended 31 March 2023.
- **b** State two items in your statement that would appear in a report for a service business.

#### **SPREADSHEET**

#### 2 INCOME STATEMENT FROM JOURNAL DATA



David Foss is the owner of Essendon Sports Store, a trading business that sells a range of sporting equipment and apparel. He provides the following details from his records for the year ended 31 August 2023.

| From the cash journals: |          | From the sales journal: |          |
|-------------------------|----------|-------------------------|----------|
| Cash receipts:          |          | Credit sales            | \$34 000 |
| Cash sales              | \$95 400 |                         |          |







| Capital           | 20 000 | From the inventory cards:        |        |
|-------------------|--------|----------------------------------|--------|
| Loan              | 10 000 | Cost of sales                    | 58 600 |
| GST collected     | 9 540  |                                  |        |
| Cash payments:    |        | From the stocktake of 31 August: |        |
| Casual wages      | 18 800 | Inventory loss                   | 2 400  |
| Interest on loans | 1 200  |                                  |        |
| Laptop computer   | 2 600  | From the credit notes issued:    |        |
| Office expenses   | 3 400  | Sales returns                    | 1 400  |
| Drawings          | 2 000  |                                  |        |
| Rent              | 35 000 |                                  |        |
| GST paid          | 4 100  |                                  |        |

- a There are several items listed above that are not relevant to an income statement. Make a list of these items and write a brief note explaining why they are irrelevant to this report.
- **b** Using the relevant information from that provided, prepare an income statement for the year ended 31 August 2023.
- **c** Make a brief comment on the profit performance of this business.

#### **3 INCOME STATEMENT AND BALANCE SHEET EXTRACT**





Barda Kirby is the owner of Big Barda's Boutique. She summarises her transactions for the three-month period ended 30 September 2023 and makes the following information available.

| Advertising         | \$1 320 | Cartage inwards      | \$640  |
|---------------------|---------|----------------------|--------|
| Cartage outwards    | 340     | Cash at bank balance | 3 200  |
| Cash sales          | 24 000  | Cost of sales        | 17 200 |
| Council rates       | 580     | Credit sales         | 12 100 |
| Drawings            | 4 300   | Electricity expenses | 340    |
| Bad debts           | 430     | Loan repayments      | 4 300  |
| Stationery expenses | 860     | Vehicle expenses     | 540    |

#### **Additional information:**

On 30 September 2023, Kirby totalled all of her inventory cards and found that inventory on hand should be \$27 100. However, a physical stocktake carried out on this date revealed inventory on hand of \$27 800.

- a Prepare an income statement for the three months ended 30 September 2023. (Use the heading 'Cost of goods sold' in your report.)
- **b** State two ways in which the discrepancy revealed by the stocktake could have been created.
- c If the owner's capital was \$34 000 on 1 July 2023, prepare an extract from the firm's balance sheet to show the owner's equity section of the report as at 30 September 2023.



#### **4 INCOME STATEMENT AND BALANCE SHEET EXTRACT**



Ross K Everett is the manager of Laser FX Lighting Store. He has supplied the information below, which relates to the period ended 30 June 2023.

| Sales                            | \$112 000 | Cartage in        | \$1 250 | Insurance         | \$570 |
|----------------------------------|-----------|-------------------|---------|-------------------|-------|
| Rent                             | 20 000    | Capital (1/7/22)  | 32 000  | Carry bags        | 680   |
| Cleaning                         | 940       | Postage           | 450     | Sales returns     | 1 400 |
| Wages                            | 17 000    | Accounting costs  | 540     | Telephone expense | 620   |
| Rates                            | 1 230     | Interest on loans | 980     | Drawings          | 4 300 |
| Inventory as per inventory cards | 34 200    | Cost of sales     | 47 600  |                   |       |
| Inventory as per stocktake       | 32 400    |                   |         |                   |       |

- **a** Prepare an income statement for the year ended 30 June 2023, showing clearly the gross and net profits for the period.
- **b** Prepare an extract from the firm's balance sheet to show the owner's equity section of the report.
- **c** Everett admits to a regular working week of 60–80 hours. Comment on the performance of his business, taking into account this information and the amount of capital invested.

#### **5 NET PROFIT MARGIN**



The following information relates to Warrnambool Trading Store.

| Net sales       | \$125 000 |
|-----------------|-----------|
| Cost of sales   | 56 250    |
| Wages           | 31 250    |
| Office expenses | 10 000    |

- a Determine the net profit earned by this business.
- **b** Calculate the net profit margin.
- **c** Comment on the results of your calculation in part **b**, explaining clearly what this indicator shows.
- **d** Prepare a pie chart, showing the breakdown of the sales dollar into the various expense items and the net profit that remains. (*Hint*: use the chart wizard in Microsoft Excel to prepare your pie chart.)
- e Prepare a bar graph for all expense items so that the owner can compare the spending in the various areas.

#### **6 NET PROFIT MARGIN**



Jordan Vu is the owner of JV's Gaming Rigs. He asks for your assistance in analysing the performance results of his business over the last three years. Vu provides the following details.

|                   | 2021      | 2022      | 2023      |
|-------------------|-----------|-----------|-----------|
| Cash sales        | \$120 000 | \$132 000 | \$138 000 |
| Credit sales      | 40 000    | 48 000    | 62 000    |
| Cost of sales     | 80 000    | 93 600    | 111 000   |
| Sales staff wages | 18 000    | 23 760    | 26 600    |
| Bad debts         | 1 000     | 1 500     | 3 000     |
| Advertising       | 5 000     | 9 060     | 12 800    |

- a Calculate the net profit for each of the three yearly periods.
- **b** Determine the net profit margin for each of the three years.
- **c** Comment on the trend in the net profit margin over the three-year period.
- **d** Prepare pie charts for each of the three years, showing clearly the breakdown of total sales revenue. (*Hint*: use the chart wizard in Excel.)
- e Prepare a stacked graph for each of the three years. Present cash and credit sales in one part of the graph, with all expense items and net profit in the other section.

#### 7 RETURN ON OWNER'S INVESTMENT



The following information relates to two similar businesses.

|                   | Dandenong Furniture | Cranbourne Furniture |
|-------------------|---------------------|----------------------|
| Net profit        | \$55 200            | \$56 000             |
| Capital (1/7/22)  | 220 000             | 210 000              |
| Capital (30/6/23) | 240 000             | 190 000              |

- a Calculate the return on owner's investment for the two business owners.
- **b** Comment on the results from part **a**, indicating clearly which owner has the better return.
- **c** State three benchmarks that may be used to evaluate the return on the owner's investment.

# 8 NET PROFIT MARGIN AND RETURN ON OWNER'S INVESTMENT



Daniel Lee is the proprietor of Lee's East Street Pharmacy. He provides the following details from his most recent reporting periods.

|                           | 2021     | 2022      | 2023      |
|---------------------------|----------|-----------|-----------|
| Sales revenue             | \$180 00 | \$160 000 | \$200 000 |
| Net profit                | 27 000   | 28 800    | 30 000    |
| Capital (start of period) | 96 000   | 100 000   | 110 000   |
| Capital (end of period)   | 100 000  | 110 000   | 120 000   |

- a Calculate the net profit margin for each of the three periods and comment on the trend in this financial indicator.
- **b** Calculate the return on owner's investment for each of the periods and comment on your results.



# 9 INCOME STATEMENT AND RETURN ON OWNER'S INVESTMENT



Evan Gelion is the owner of Pascoe Vale Collectables. At the end of the current reporting period, he has prepared the following summary of events for the year ended 30 September 2023.

| Cash sales       | \$65 000 | Credit sales    | \$32 900 | Sales returns    | 1 400 |
|------------------|----------|-----------------|----------|------------------|-------|
| GST received     | 6 500    | Advertising     | 1 230    | Inventory loss   | 2 140 |
| Customs duty     | 1 280    | Interest paid   | 2 190    | Drawings         | 9 830 |
| Office equipment | 5 650    | Cost of sales   | 43 260   | Cartage outwards | 1 210 |
| Shop rent        | 22 000   | GST paid        | 2 663    | Part-time wages  | 8 250 |
| Bad debts        | 1 270    | Cartage inwards | 910      | Security costs   | 3 760 |

- a Prepare an income statement for the year ended 30 September 2023. Your report should show both gross and net profit results.
- **b** Gelion's capital was \$43 000 as at 30 September 2022. Prepare an extract from his balance sheet to show how owner's equity would be reported as at 30 September 2023.
- **c** Calculate the return on the owner's investment for the year and comment on the rate that Gelion is earning.

#### SPREADSHEET

#### 10 INCOME STATEMENT AND FINANCIAL INDICATORS



The following details relate to the business of Altona Auto Parts for the period ended 31 March 2023.

| Wages – shop assistant      | \$24 300 | Cash sales          | \$89 100 |
|-----------------------------|----------|---------------------|----------|
| Credit sales                | 68 600   | Sales returns       | 2 400    |
| Interest on loan            | 2 300    | Postage & telephone | 1 240    |
| Promotional expenses        | 3 200    | Cartage inwards     | 2 100    |
| Cost of sales               | 63 400   | Shop maintenance    | 5 400    |
| Delivery costs to customers | 2 400    | Heating & lighting  | 1 320    |
| Salary – receptionist       | 27 000   | Buying expenses     | 1 200    |

#### Additional information:

- Owner's capital as at 1 April 2022: \$54 300.
- Total of inventory on hand according to inventory cards: \$32 400.
- Inventory on hand according to stocktake: \$31 600.
- **a** Prepare an income statement for the year ended 31 March 2023, showing clearly both gross profit and net profit.
- **b** Calculate the net profit margin and explain the significance of this financial indicator.
- c Calculate the return on owner's investment, given that the owner's capital as at 31 March 2023 was \$45 700.
- **d** The return on owner's investment should be approximately the same as that available on term deposits. Do you agree? Explain fully.

## **CASE STUDY**





#### From journals to evaluation of reports

Fashion Forward is a retail outlet that sells the latest women's street fashions. It has been established for a number of years. The owner of the business, Bree Semini, keeps cash journals and a credit sales journal. She supplements these records with individual inventory cards and individual records for her accounts receivable.

At the end of the previous accounting period, the balance sheet for the business reported the following.

| Assets              | \$      | Liabilities             | \$      | \$      | \$      |
|---------------------|---------|-------------------------|---------|---------|---------|
| Cash at bank        | 3 210   | GST debt                |         | 2 000   |         |
| Accounts receivable | 4 320   | Mortgage loan           |         | 173 000 | 175 000 |
| Inventory           | 45 300  | Owner's equity          |         |         |         |
| Shop fittings       | 12 000  | Capital                 | 415 430 |         |         |
| Office equipment    | 8 600   | <i>Plus:</i> Net profit | 28 000  | 443 430 |         |
| Premises            | 520 000 | Less: Drawings          |         | 25 000  | 418 430 |
|                     | 593 430 |                         |         |         | 593 430 |

Semini has prepared the following summary of events at the end of the current period.

| From her cash journals:           |          | From her credit sales journal:     |          |
|-----------------------------------|----------|------------------------------------|----------|
| Cash sales                        | \$86 400 | Credit sales                       | \$23 200 |
| Receipts from accounts receivable | 12 340   | GST charged to accounts receivable | 2 320    |
| Capital                           | 10 000   |                                    |          |
| Loan from NAB                     | 12 000   | From her inventory cards:          |          |
| GST received                      | 8 640    | Cost of sales                      | 51 200   |
| Cartage inwards                   | 1 210    | Inventory losses                   | 2 300    |
| Cash purchases of inventory       | 45 000   |                                    |          |
| Wages                             | 22 400   | From the physical stocktake:       |          |
| Advertising                       | 1 470    | Inventory on hand as at 30/9/23    | 36 800   |
| Loan repayments                   | 10 400   |                                    |          |
| Buying expenses                   | 1 420    | From the credit notes issued:      |          |
| Electricity                       | 1620     | Sales returns                      | 1 800    |
| Drawings                          | 37 000   |                                    |          |
| Office expenses                   | 2 180    |                                    |          |
| Interest on loans                 | 9 800    |                                    |          |
| Purchase of shop fittings         | 4 300    |                                    |          |
| GST paid                          | 5 720    |                                    |          |

#### **Additional information:**

- The mortgage loan is repayable at the rate of \$200 per week.
- The loan from NAB is an interest-only loan. The total amount borrowed is due for repayment on 30 June 2025.
- The firm's bankers have approved an overdraft facility to cover short-term shortages of cash.

- a Prepare a statement of receipts and payments for the year ended 30 September 2023.
- **b** Using the results from your statement in part **a**, comment on the firm's cash position at the end of the period.
- c Prepare an income statement for the year ended 30 September 2023.
- **d** Using a spreadsheet, prepare a pie chart to show the breakdown of the sales dollar. Divide the chart into three sections: cost of goods sold, expenses and net profit.
- **e** Using your statement in part **c**, plus your chart in part **d**, comment on the profit performance of the business.
- **f** Prepare a classified balance sheet as at 30 September 2023. (*Hint*: you will need to determine how much is owed by accounts receivable as at 30 September 2023 and the GST liability of the business.)
- **g** In a spreadsheet, prepare a stacked graph of the firm's balance sheet. On one side of the graph, show the breakdown of the assets. On the other side of the graph, show the liabilities and owner's equity of the business.
- **h** Using the data from the previous period's balance sheet, calculate the owner's return on investment.
- i Using the balance sheet prepared as at 30 September 2023, calculate the owner's return on investment.
- **j** Write a brief comment on the trend in the owner's return on investment over the two years.
- k Semini is worried about the level of inventory losses that the business is suffering.
  - i State two possible causes of the inventory loss.
  - ii State two security measures that may be appropriate for the business.
- I Semini is confused. She's certain that her business made a profit again this year but is worried about the shortage of cash her firm is experiencing. Explain to her why she has run out of cash but has been able to report a profit again in the current period. Your explanation should state the items that affect cash on hand but don't affect profit.

### **ETHICAL CONSIDERATIONS**



Ethan Paul has owned the local supermarket for a number of years. He values being a respected member of his local community and always tries to employ young people from the local schools. He currently has 10 students employed on a part-time basis, mainly working after school and on weekends. When they move on to university studies, some of them continue to work for Paul in the supermarket.

This year, Paul has become concerned about the downward trend in his profit results. He's analysed his income statements and noticed the significant increase in his wages cost since many of his employees turned 18 and are now on adult wages.

Paul has decided that he can't continue to employ the older students and will advertise in the local area for some new workers.

- a Identify and discuss the potential benefits of Paul's decision.
- **b** Are there any potential negatives of his decision? Explain fully.
- c Do you believe that Paul's decision is acceptable on ethical grounds? Discuss fully.



Students gain valuable experience by working while studying, but risk being replaced by younger workers when they turn 18.

#### **CHAPTER CHECKLIST**

Now that you've finished Chapter 20, double-check your progress.

Are you ready for your Unit 2 assessment?

#### I have ...

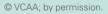
- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- ompleted the end-of-chapter activities
- Manded in my workbook for marking.

#### I understand ...

- ocuments used by a business to record financial transactions
- of accounting assumptions and qualitative characteristics as applicable
- Mistorical and budgeted classified accounting reports for a trading business:
  - Income Statement
  - Balance Sheet
- 🍼 reporting of inventory and the impact it has on the Income Statement and Balance Sheet.

#### I can ...

- use correct accounting terminology
- will use ICT, including spreadsheets, to record transactions and construct appropriate graphical representations
- prepare historical and budgeted accounting reports for a trading business using manual methods and ICT
- apply theoretical knowledge to simulated situations.





#### READ

Make sure you skim this chapter one more time when preparing for the exam.



#### PREPARE

Read back over the chapter now, then complete the online revision activity.



#### WATCH

Watch the Mr Box on Demand video, then ask your teacher if you need additional help.



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# CASH FLOW STATEMENTS FOR A TRADING BUSINESS

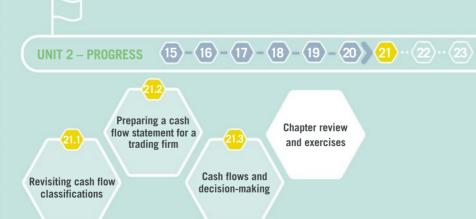
In Chapter 11, you examined cash flow statements for a service business. As with the other key reports, the balance sheet and income statement, it's now time to consider how this statement is used in a trading business. You may want to go back to Unit 1 when revising to make sure you fully understand these three reports.

In this chapter, you'll prepare cash flow statements for trading businesses, and consider how they differ from those for service businesses. You'll also analyse those statements and explain how they inform owners and managers.

#### **LEARNING OBJECTIVES**

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

- classify cash flows under the headings of operating, investing and financing activities [21.1]
- prepare a cash flow statement for a trading business[21.2]
- prepare a cash flow statement from cash journals[21.2]
- analyse the results revealed by a cash flow statement[21.3]
- explain the link between a cash flow statement and management decision-making [21.3].



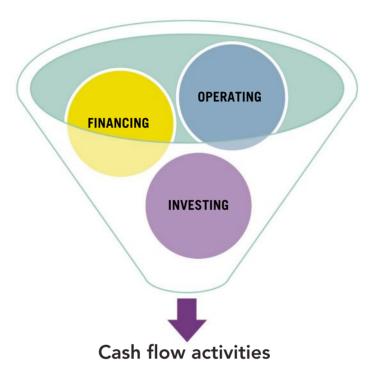
# 21.1 REVISITING CASH FLOW CLASSIFICATIONS

#### cash flow statement

an accounting report that states all cash inflows and outflows over a period

The cash flow statement is divided into three main areas, with classifications for operating activities, investing activities and financing activities. These three areas provide the basic format of the cash flow statement.

FIGURE 21.1 The three classifications of cash flows



These three headings – operating activities, investing activities and financing activities - provide the basic format of the cash flow statement. All cash inflows and outflows are classified according to these three groups, with a net figure being produced under each heading. It's common practice to label this net figure as either **net cash provided** or **net cash used** by each particular activity.

#### **OPERATING ACTIVITIES**

Operating activities are the cash inflows and outflows that occur as part of the day-to-day operations of a business. Cash sales and collections from accounts receivable are two of the most important operating cash flows, as they usually make up the majority of cash inflows.

Credit sales don't involve a movement of cash at the time of sale, so they are not included in the statement of cash flows. However, a cash flow will occur in the future when an accounts receivable settles its debt.

The cash outflows under operating activities include payments such as cash purchases of inventory, wages, office expenses, cartage inwards and outwards, insurance and payments to accounts payable.

#### **INVESTING ACTIVITIES**

Investing activities are cash flows from the buying and selling of *non-current* assets, rather than current assets such as inventory.

#### net cash provided a net cash inflow reported for one of the

areas of operating, investing or financing activities

#### net cash used

a net cash outflow reported for one of the areas of operating, investing or financing activities

When a business purchases non-current assets, it's making an investment for the long term, because non-current assets are expected to be controlled for longer than 12 months. Because assets have future economic benefits for a business, they are viewed as investments made so that the business can generate revenue.

Investing activities thus include investing cash in the non-current assets of a business, as well as receiving cash at their time of disposal or sale. The cash flow statement reports both the cash outflows when these assets are purchased and the cash inflows from selling used or unwanted non-current assets.

#### FINANCING ACTIVITIES

The last classification in a cash flow statement is that of financing activities. This category refers to cash flows that have occurred due to changes in the financial structure of a business.

Small businesses are often funded by contributions from the owner, which are known as internal funds. However, there may also be funds borrowed from external sources, which means that liabilities have been created. Financing activities therefore include the owner's capital contributions (cash only) and cash withdrawals, as well as the taking out of loans and repayments of loans.

How a business is financed is an important consideration when looking at its long-term future. The cash flows required to repay debts and support an owner's drawings are an important feature of the cash flow statement. Such information would also be of interest to potential lenders and prospective owners.

#### LINKS BETWEEN THE FINANCIAL REPORTS

The links between the cash flow statement and the other two main financial reports become clearer when the three classifications are considered.

- Operating activities examines the cash flows relating to revenues and expenses, which are brought together in the income statement.
- Investing activities looks at part of the balance sheet, as it examines cash flows from non-current assets.
- Financing activities also focuses on part of the balance sheet, as it looks at changes in long-term liabilities and owner's equity.

The three sections of the cash flow statement therefore look at three different aspects of the business.



The revenues and expenses captured in an income statement can relate to a surprisingly broad range of operating activities.

Table 21.1 provides some examples of the different nature of these cash flows.

**TABLE 21.1 Examples of cash flows by classification** 

| Operating activities   | Investing activities                   | Financing activities  |
|--|--|---|
|  | Cash inflows from:                     |   |
| <ul> <li>Selling goods for cash</li> <li>Providing services for cash</li> <li>Collecting cash from accounts receivable</li> <li>Commission received</li> <li>Interest received</li> <li>GST received</li> <li>GST refunds</li> </ul> | Selling non-current assets<br>for cash | <ul> <li>Capital injections by the owner</li> <li>Borrowing cash via loans</li> </ul> |
|  | Cash outflows from:                    |   |
| <ul> <li>Purchasing inventory for cash</li> <li>Paying cash to accounts payable</li> <li>Paying cash for services</li> <li>Paying cash for expenses</li> <li>GST paid</li> <li>GST settlements</li> </ul>                            | Buying non-current assets<br>for cash  | <ul><li>Cash drawings</li><li>Loan repayments</li></ul>                               |

### 21.1 CHECK YOUR UNDERSTANDING



- 1 Explain why an owner of a business would prepare a cash flow statement in addition to an income statement.
- 2 'Operating activities should include both cash and credit sales if they aim to measure business performance.' Do you agree? Explain your answer fully.
- 3 Are all GST transactions reported in a cash flow statement? Explain fully.

# PREPARING A CASH FLOW STATEMENT FOR A TRADING FIRM

The format of a cash flow statement is based on the three classifications described previously. The information reported in a cash flow statement will usually come from the two cash journals of the business, or from a summary of the cash receipts and payments for a period.

Figure 21.2 shows a cash flow statement for Mount Hotham Ski Essentials.

#### FIGURE 21.2 Cash flow statement

#### MOUNT HOTHAM SKI ESSENTIALS: CASH FLOW STATEMENT FOR YEAR ENDED 30 JUNE 2023

| Cash flows from operating activities      | \$       | \$       |
|---|----------|----------|
| Cash sales                                | 80 000   |          |
| Collections from accounts receivable      | 40 000   |          |
| GST receipts                              | 8 000    |          |
| Cash purchases of inventory               | (20 000) |          |
| Payments to accounts payable              | (40 000) |          |
| Advertising                               | (6 000)  |          |
| Wages                                     | (30 900) |          |
| Office expenses                           | (3 000)  |          |
| GST payments                              | (5 800)  |          |
| Net cash provided by operating activities |          | 22 300   |
| Cash flows from investing activities      |          |          |
| Purchase of vehicle                       | (25 000) |          |
| Purchase of computer                      | (4 000)  |          |
| Net cash used in investing activities     |          | (29 000) |
| Cash flows from financing activities      |          |          |
| Capital contribution                      | 50 000   |          |
| Loan from bank                            | 25 000   |          |
| Owner's drawings                          | (35 000) |          |
| Loan repayments                           | (3 000)  |          |
| Net cash used in financing activities     |          | 37 000   |
| Net increase (decrease) in cash held      |          | 30 300   |
| Cash held at the beginning of the year    |          | (7 000)  |
| Cash held at the end of the year          |          | 23 300   |

Note how each of the three classifications is clearly labelled, and how a sub-total is provided for each category. This helps to achieve the qualitative characteristic of understandability. The sub-totals can then be used to highlight the net cash inflow or outflow for each classification.

#### READING THE CASH FLOW STATEMENT

Business owners usually expect that their operating activities would generate cash. If the cash from operating activities was a *negative* result, this would be a bad sign that all wasn't well within the business!

There are no set expectations for the rest of the report. The areas of investing and financing may have a net cash inflow or outflow.

If a business is expanding, there may be a significant use of cash for investing. In other periods, a business may not buy any new assets; if it disposes of old assets for cash, the investing area may reveal a 'net cash provided' figure.

Similarly, financing activities may result in net cash provided or net cash used. In some periods, cash may be raised from either the owner or liabilities, and resulting in a net cash inflow. On the other hand, an established business may simply have cash outflows in this area. Loan repayments and the proprietor's drawings may result in a 'net cash used' final result.

Some cash flow statements have sub-headings for cash inflows and cash outflows, and this is an acceptable way of presenting the information. As with all accounting reports, the most important thing is that the information should be presented in a clear and concise manner, to meet the demands of *understandability*.

#### 21.2 CHECK YOUR UNDERSTANDING



- 1 A business owner states: 'Cash flows from operating activities are all I worry about! They have to have a positive result!' Do you agree? Explain fully.
- 2 A cash flow statement reported net operating activities of \$60 000, but overall the business's bank account decreased by \$10 000. Outline how this result is possible.
- **3** Financing activities in a cash flow statement showed a net result for the year as negative \$30 000. However, the business owner is unconcerned. Explain why this may be the case.

Financing activities, which include taking out loans, focus partly on the balance sheet, because it examines changes in long-term liabilities and owner's equity.



# 21.3 CASH FLOWS AND DECISION-MAKING

As with all reports, there's not much point preparing a cash flow statement if management doesn't analyse the results and use it to make decisions to correct problems or improve the business.

A good starting point is to compare the results of the current period with those of the previous period. This allows management to identify changes in the three areas reported in the cash flow statement. For example, if the net cash provided by operating activities is decreasing over consecutive periods, it should set off alarm bells with management.

Consider the comparative reports in Figure 21.3, which again relate to Mount Hotham Ski Essentials.

FIGURE 21.3 Comparative cash flow statements

#### MOUNT HOTHAM SKI ESSENTIALS: CASH FLOW STATEMENT FOR YEARS ENDED 30 JUNE 2022 AND 30 JUNE 2023

|   | 202      | 2        | 202      | 3        |
|---|----------|----------|----------|----------|
| Cash flows from operating activities      | \$       | \$       | \$       | \$       |
| Cash sales                                | 70 000   |          | 80 000   |          |
| Collections from accounts receivable      | 27 000   |          | 40 000   |          |
| GST receipts                              | 7 000    |          | 8 000    |          |
| Cash purchases of inventory               | (18 000) |          | (20 000) |          |
| Payments to accounts payable              | (45 000) |          | (40 000) |          |
| Advertising                               | (4 000)  |          | (6 000)  |          |
| Wages                                     | (25 700) |          | (30 900) |          |
| Office expenses                           | (2 000)  |          | (3 000)  |          |
| GST payments                              | (3 300)  |          | (5 800)  |          |
| Net cash provided by operating activities |          | 6 000    |          | 22 300   |
| Cash flows from investing activities      |          |          |          |          |
| Purchase of shop fittings                 | (9 000)  |          | 0        |          |
| Purchase of vehicle                       | 0        |          | (25 000) |          |
| Purchase of computer                      | 0        |          | (4 000)  |          |
| Net cash used in investing activities     |          | (9 000)  |          | (29 000) |
| Cash flows from financing activities      |          |          |          |          |
| Capital contribution                      | 0        |          | 50 000   |          |
| Loan from bank                            | 0        |          | 25 000   |          |
| Owner's drawings                          | (10 000) |          | (35 000) |          |
| Loan repayments                           | 0        |          | (3 000)  |          |
| Net cash used in financing activities     |          | (10 000) |          | 37 000   |
| Net increase (decrease) in cash held      |          | (13 000) |          | 30 300   |
| Cash held at beginning of the year        |          | 6 000    |          | (7 000)  |
| Cash held at the end of the year          |          | (7 000)  |          | 23 300   |

A comparison of cash flows may reveal a lot about a business.

For Mount Hotham Ski Essentials, there's good news in relation to operating activities. There has been an increase in the net cash provided by operating activities, with the net result in 2023 being \$16 300 above the figure achieved in 2022.

The investing activities reflect a considerable investment in assets over the past two years. In 2022, \$9000 was invested in shop fittings, followed by the purchase of a vehicle and a computer in 2023. These items required significant finance, and it is apparent that at the end of 2022 the business didn't have sufficient cash to fund these purchases.

However, in 2023 the owner made a cash contribution of \$50 000 and then borrowed an additional \$25 000. This assisted the business to make the purchases of the new non-current assets, without using up all its cash. At the end of 2023 the overall cash position is in a sound state, having recovered from an overdraft of \$7000 in 2022 to a cash balance of \$23 300.



#### 21.3 CHECK YOUR UNDERSTANDING



- 1 In relation to a trading business, state one revenue item that should be reported in a cash flow statement and another revenue item that should not be reported in this statement.
- 2 For a trading business, state two expense items that should be reported in a cash flow statement and two expense items that should not be reported in this statement.
- 3 Explain the advantage of preparing comparative cash flow statements for two consecutive reporting periods.

# CHAPTER REVIEW

### **KEY CONTENT**

**[21.1]** 

Cash flows can be classified into three main areas. Operating activities are cash flows relating to the day-to-day actions of the business. Investing activities are cash flows that result from the purchase of assets or the sale of non-current assets for cash. Financing activities are cash flows that relate to changes in the financial structure of a business.

[21.2]

A cash flow statement for a trading business presents information under the headings of 'Cash flows from operating activities', 'Cash flows from investing activities' and 'Cash flows from financing activities'. Sub-totals should be provided for each category. Some cash flow statements also have sub-headings for cash inflows and cash outflows.

**[21.3]** 

The cash flow items describe what has happened in a business over a period, allowing changes and problems to be identified, and decisions to be evaluated. The complete package of an income statement, balance sheet and cash flow statement provides management with a solid range of financial information.

#### **CHAPTER 21 EXERCISES**

#### 1 CLASSIFICATION OF CASH FLOWS



Classify the following items under the three classifications used in a cash flow statement. If you don't think an item should be reported in a cash flow statement, state 'non-cash item' for the irrelevant items.

- a Cash purchases of inventory
- **b** Credit purchases of inventory
- c Cartage inwards paid
- d Repayment of a loan
- e GST collected on cash sales
- f Withdrawal of inventory by the owner
- g Cash sale of inventory

- h Cash purchase of office furniture
- i Capital contribution by owner
- j Credit sale of inventory
- k Withdrawal of cash by the owner
- I GST paid on cash purchases
- m Inventory loss
- n Discount expense

#### **2 OPERATING ACTIVITIES**



The proprietor of Montuoro's Shoe Emporium has provided the following information about his business.

| Receipts                          | \$     | Payments                    | \$     |
|-----------------------------------|--------|-----------------------------|--------|
| Cash sales                        | 50 000 | Cash purchases of inventory | 35 000 |
| Collections – accounts receivable | 10 000 | Part-time wages             | 19 000 |
| Interest received                 | 1 000  | Interest paid               | 500    |
| GST receipts                      | 5 000  | Office expenses             | 3 000  |
| Capital contribution              | 10 000 | Loan repayments             | 8 000  |
|                                   |        | GST payments                | 3 800  |

- **a** Using relevant information from that provided, calculate the net cash provided by operating activities for the year ended 31 July 2023.
- **b** Did you omit any items in your calculation in part **a**? If so, explain why.

#### **3 OPERATING ACTIVITIES**



Christine Shannon owns Shannon's Jeans. She has extracted the following information from the financial records of the shop.

| Cash sales                           | \$112 000 |
|--------------------------------------|-----------|
| Credit sales                         | 33 000    |
| Collections from accounts receivable | 15 000    |
| GST receipts                         | 11 200    |
| Cost of sales                        | 55 000    |
| Cash purchases of inventory          | 23 000    |
| Sales returns by accounts receivable | 1 200     |
| Payments to accounts payable         | 32 000    |
| Wages                                | 34 600    |
| Cartage inwards                      | 1 200     |
| GST payments                         | 2 420     |

- a Select the relevant items from the above list and calculate the net cash provided (or used) by operating activities.
- **b** Explain your treatment of the items 'credit sales' and 'sales returns'.
- **c** Would you expect net cash flows from operating activities to be a positive or a negative figure? Explain your answer fully.

#### **4 INVESTING ACTIVITIES**



The owner of Unlimited Nuts 'N' Jerky provides the following summary of events in relation to his cash flows over the past year.

| Receipts                             | \$     | Payments                    | \$     |
|--------------------------------------|--------|-----------------------------|--------|
| Cash sales                           | 96 000 | Cash purchases of inventory | 39 000 |
| Collections from accounts receivable | 20 000 | Purchase of computers       | 5 200  |
| Sale of computer                     | 2 200  | Drawings                    | 28 000 |
| GST receipts                         | 9 600  | Wages                       | 29 000 |
| Commission revenue                   | 2 300  | GST payments                | 4 420  |

Using the relevant information from the lists above, calculate the net cash provided (or used) by investing activities.

#### **5 INVESTING ACTIVITIES**



Jacinta Wong, the proprietor of Anime Imports, provides the following information about her small business.

| Cash purchase of cash register              | \$2 880 |
|---|---------|
| Cash purchase of inventory                  | 42 500  |
| Cash sales of inventory                     | 87 500  |
| GST receipts                                | 8 750   |
| Cash received from sale of office equipment | 3 400   |
| Purchase of display equipment for cash      | 19 820  |
| Credit sales of inventory                   | 12 320  |
| GST payments                                | 6 520   |

Determine the net cash provided (or used) by investing activities. Show all workings.

#### **6 FINANCING ACTIVITIES**



During the year ended 30 June 2023, the owner of Shepparton Sports Store, Rob Sbaglia, contributed assets worth \$32 000 to his business. This consisted of \$15 000 cash and a vehicle valued at \$17 000. His other receipts for the year were as follows.

| Cash sales          | \$99 800 |
|---------------------|----------|
| GST receipts        | 9 980    |
| Accounts receivable | 28 000   |
| Loan                | 18 000   |

Sbaglia's cash payments for the year included the following.

| Accounts payable | \$65 800 |
|------------------|----------|
| Loan repayments  | 6 880    |
| Drawings         | 15 000   |
| Insurance        | 2 500    |
| New computer     | 3 580    |
| GST payments     | 608      |

Determine the net cash provided (or used) by financing activities over the year ended 30 June 2023.

#### **7 FINANCING ACTIVITIES**



The manager of Artisan Toys for Tots, Katrina Jansen, provides the following details about her business.

| Receipts            | \$     | Payments                     | \$     |
|---------------------|--------|------------------------------|--------|
| Cash sales          | 83 000 | Accounts payable             | 40 000 |
| Capital             | 32 000 | Loan repayments              | 3 200  |
| Loan                | 15 000 | Drawings                     | 14 800 |
| Accounts receivable | 10 500 | Purchase of office equipment | 3 500  |
| GST receipts        | 8 300  | GST payments                 | 350    |

Make a list of all the items relevant to financing activities and determine the net cash flow for the year in relation to financing.

#### **8 CLASSIFIED CASH FLOW STATEMENT**





Ismail Afif owns Afif's Islamic Clothing. She has prepared a simple statement of receipts and payments but is unsure how to prepare a formal cash flow statement. She has asked for your assistance in relation to the report prepared below.

# AFIF'S ISLAMIC CLOTHING: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 31 MAY 2023

| Receipts                             | \$      | \$      |
|--------------------------------------|---------|---------|
| Cash sales                           | 132 000 |         |
| Collections from accounts receivable | 21 700  |         |
| GST collections                      | 13 200  |         |
| Loan from bank                       | 22 000  | 188 900 |
| Less: Payments                       |         |         |
| Accounts payable                     | 41 000  |         |
| Cash purchases of inventory          | 22 000  |         |





| Wages                            | 31 400 |         |
|----------------------------------|--------|---------|
| Interest on loan                 | 1 000  |         |
| Office expenses                  | 3 000  |         |
| Purchase of delivery van         | 19 200 |         |
| Advertising                      | 1 200  |         |
| Purchase of office equipment     | 6 500  |         |
| GST payments                     | 5 190  |         |
| Loan repayments                  | 4 300  |         |
| Drawings                         | 37 000 | 162 790 |
| Excess of receipts over payments |        | 26 110  |
| Bank balance as at 1 June 2022   |        | (4 500) |
| Bank balance as at 31 May 2023   |        | 21 610  |

- **a** Prepare a cash flow statement, showing clearly the net cash provided (or used) by operating, investing and financing activities.
- **b** Comment on the results achieved by this business over the last year, with reference to the three areas of cash flows.



### 9 CLASSIFIED CASH FLOW STATEMENT



The following report has been submitted by the owner of Toohey's Hardware.

# TOOHEY'S HARDWARE: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 31 DECEMBER 2023

| Receipts                             | \$      | \$      |
|--------------------------------------|---------|---------|
| Cash sales                           | 128 900 |         |
| Collections from accounts receivable | 52 760  |         |
| Capital                              | 28 000  |         |
| Sale of delivery van                 | 6 800   |         |
| Interest revenue                     | 2 200   |         |
| GST receipts                         | 12 890  |         |
| Loan from Lucky Finance Co.          | 22 500  | 254 050 |
| Less: Payments                       |         |         |
| Accounts payable                     | 77 000  |         |
| Interest                             | 1 200   |         |
| Cash purchases – inventory           | 22 000  |         |
| Stationery expenses                  | 2 200   |         |
| Purchase of computer system          | 10 400  |         |
| Security expenses                    | 5 200   |         |
| Wages                                | 49 300  |         |
| GST payments                         | 3 980   |         |
| Loan repayments                      | 7 300   |         |
| Drawings                             | 53 000  | 231 580 |
| Excess of receipts over payments     |         | 22 470  |
| Bank balance as at 1 January 2023    |         | 2 100   |
| Bank balance as at 31 December 2023  |         | 24 570  |

- a Prepare a fully classified cash flow statement for the year ended 31 December 2023.
- **b** Comment on the firm's cash position at the end of 2023.



#### 10 CLASSIFIED CASH FLOW STATEMENT





Blake Monzon, the owner of Heidelberg Headstones, has prepared the following summary of his cash transactions.

## HEIDELBERG HEADSTONES: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 30 SEPTEMBER 2023

| Receipts                             | \$      | \$      |
|--------------------------------------|---------|---------|
| Cash sales                           | 220 000 |         |
| Collections from accounts receivable | 65 300  |         |
| Loan from CBA                        | 15 000  |         |
| Sale of shop fittings                | 3 220   |         |
| Commission revenue                   | 1 800   |         |
| Sale of equipment                    | 8 600   |         |
| GST receipts                         | 22 180  |         |
| Capital                              | 26 000  | 362 100 |
| Less: Payments                       |         |         |
| Wages                                | 48 000  |         |
| Cash purchases of inventory          | 29 000  |         |
| Accounts payable                     | 152 000 |         |
| Cleaning costs                       | 6 200   |         |
| Legal expenses                       | 3 800   |         |
| Purchase of equipment                | 36 000  |         |
| Marketing expenses                   | 4 500   |         |
| Loan repayments                      | 3 200   |         |
| GST payments                         | 9 200   |         |
| Purchase of shop fittings            | 12 500  |         |
| Drawings                             | 28 000  | 332 400 |
| Excess of receipts over payments     |         | 29 700  |
| Bank balance as at 1 October 2022    |         | (5 700) |
| Bank balance as at 30 September 2023 |         | 24 000  |

- a Prepare a fully classified cash flow statement for the year ended 30 September 2023.
- **b** Comment on the firm's cash position at the end of September 2023.

#### 11 JOURNALS TO CASH FLOW STATEMENT





The cash journals presented below have been produced by the owner of Ballarat Best Computers.

#### **CASH RECEIPTS JOURNAL**

| Date  | Details    | Receipt no. | Amount<br>banked<br>\$ | Accounts receivable | Cash<br>sales<br>\$ | Sundry<br>rec.<br>\$ | GST<br>received<br>\$ |
|-------|------------|-------------|------------------------|---------------------|---------------------|----------------------|-----------------------|
| Aug 1 | Cash sales | 654         | 1 980                  |                     | 1 800               |                      | 180                   |
| 2     | Loan – NAB | EFT         | 5 000                  |                     |                     | 5 000                |                       |
| 5     | A Pitson   | EFT         | 3 200                  | 3 200               |                     |                      |                       |
| 8     | Cash sales | 655         | 242                    |                     | 220                 |                      | 22                    |
| 11    | M Morath   | EFT         | 1 800                  | 1 800               |                     |                      |                       |
| 14    | Cash sales | 656         | 1 980                  |                     | 1 800               |                      | 180                   |
| 16    | G Giese    | EFT         | 2 700                  | 2 700               |                     |                      |                       |
| 17    | Cash sales | 657         | 319                    |                     | 290                 |                      | 29                    |





| Date   | Details           | Receipt no. | Amount<br>banked<br>\$ | Accounts receivable | Cash<br>sales<br>\$ | Sundry<br>rec.<br>\$ | GST<br>received<br>\$ |
|--------|-------------------|-------------|------------------------|---------------------|---------------------|----------------------|-----------------------|
| Aug 20 | Commission        | EFT         | 220                    |                     |                     | 200                  | 20                    |
| 23     | Sale of equipment | EFT         | 500                    |                     |                     | 500                  |                       |
| 26     | Cash sales        | 658         | 1 760                  |                     | 1 600               |                      | 160                   |
| 27     | Cash sales        | 659         | 1 760                  |                     | 1 600               |                      | 160                   |
| 29     | G Honey           | EFT         | 2 600                  | 2 600               |                     |                      |                       |
| 31     | Cash sales        | 660         | 1 925                  |                     | 1 750               |                      | 175                   |
| 31     | Totals            |             | 25 986                 | 10 300              | 9 060               | 5 700                | 926                   |

#### **CASH PAYMENTS JOURNAL**

| Date  | Details              | Cheque<br>no. | Total<br>paid<br>\$ | Accounts<br>payable<br>\$ | Wages<br>\$ | Drawings<br>\$ | Assets<br>\$ | Sundry<br>pay.<br>\$ | GST<br>paid<br>\$ |
|-------|----------------------|---------------|---------------------|---------------------------|-------------|----------------|--------------|----------------------|-------------------|
| Aug 1 | Drawings             | EFT           | 1 200               |                           |             | 1 200          |              |                      |                   |
| 2     | R James              | EFT           | 5 600               | 5 600                     |             |                |              |                      |                   |
| 3     | Shop fittings        | 346           | 13 200              |                           |             |                | 12 000       |                      | 1 200             |
| 6     | Wages                | EFT           | 1 200               |                           | 1200        |                |              |                      |                   |
| 9     | Stationery           | 347           | 253                 |                           |             |                |              | 230                  | 23                |
| 11    | Bento Pty Ltd        | EFT           | 4 300               | 4 300                     |             |                |              |                      |                   |
| 13    | Wages                | EFT           | 650                 |                           | 650         |                |              |                      |                   |
| 16    | Drawings             | EFT           | 2 000               |                           |             | 2 000          |              |                      |                   |
| 19    | Display<br>equipment | 348           | 4 950               |                           |             |                | 4 500        |                      | 450               |
| 19    | Wages                | EFT           | 600                 |                           | 600         |                |              |                      |                   |
| 25    | Loan r/p             | EFT           | 400                 |                           |             |                |              | 400                  |                   |
| 26    | Wages                | EFT           | 640                 |                           | 640         |                |              |                      |                   |
| 29    | Drawings             | EFT           | 2 800               |                           |             | 2 800          |              |                      |                   |
| 31    | Mania Trading        | 349           | 2 600               | 2 600                     |             |                |              |                      |                   |
| 31    | Totals               |               | 40 393              | 12 500                    | 3 090       | 6 000          | 16 500       | 630                  | 1 673             |

#### **Additional information:**

On 1 August 2023 the business had the following cash reserves: cash on hand - \$800; cash at bank - \$6200.

- a Prepare a fully classified cash flow statement for the month ended 31 August 2023.
- **b** Comment on the changes in the cash position of the business during August 2023.



#### 12 JOURNALS TO CASH FLOW STATEMENT



The owner of Berwick Mind & Spirit Bookstore, Graham Nash, has provided the following cash journals from his business.

#### **CASH RECEIPTS JOURNAL**

| Date  | Details    | Receipt |     | Accounts receivable | Cash<br>sales<br>\$ | Sundry<br>rec.<br>\$ | GST<br>received<br>\$ |
|-------|------------|---------|-----|---------------------|---------------------|----------------------|-----------------------|
| Sep 2 | Cash sales | 274     | 990 |                     | 900                 |                      | 90                    |
| 2     | Cash sales | 275     | 880 |                     | 800                 |                      | 80                    |







| Date | Details          | Receipt | Amount<br>banked<br>\$ | Accounts receivable | Discount<br>exp.<br>\$ | Cash<br>sales<br>\$ | Sundry<br>rec.<br>\$ | GST<br>received<br>\$ |
|------|------------------|---------|------------------------|---------------------|------------------------|---------------------|----------------------|-----------------------|
| 5    | M Cafra          | EFT     | 3 100                  | 3150                | 50                     |                     |                      |                       |
| 6    | Cash sales       | 276     | 770                    |                     |                        | 700                 |                      | 70                    |
| 9    | Cash sales       | 277     | 1 650                  |                     |                        | 1 500               |                      | 150                   |
| 12   | J Lombardo       | EFT     | 4 100                  | 4 140               | 40                     |                     |                      |                       |
| 14   | Cash sales       | 278     | 4 400                  |                     |                        | 4 000               |                      | 400                   |
| 16   | Cash sales       | 279     | 220                    |                     |                        | 200                 |                      | 20                    |
| 18   | Interest revenue | EFT     | 350                    |                     |                        |                     | 350                  |                       |
| 21   | Sale of computer | EFT     | 750                    |                     |                        |                     | 750                  |                       |
| 22   | Capital          | EFT     | 6 500                  |                     |                        |                     | 6 500                |                       |
| 24   | Cash sales       | 280     | 1 320                  |                     |                        | 1 200               |                      | 120                   |
| 26   | J Lo Presti      | EFT     | 5 200                  | 5 200               |                        |                     |                      |                       |
| 27   | M Simpson        | EFT     | 2 270                  | 2 300               | 30                     |                     |                      |                       |
| 29   | Cash sales       | 281     | 1 650                  |                     |                        | 1 500               |                      | 150                   |
| 30   | Totals           |         | 34 150                 | 14 790              | 120                    | 10 800              | 7600                 | 1 080                 |

#### **CASH PAYMENTS JOURNAL**

| Date  | Details            | Cheque<br>no. | Total<br>paid<br>\$ | Accounts<br>payable<br>\$ | Inventory<br>\$ | Drawings<br>\$ | Assets<br>\$ | Sundry<br>pay.<br>\$ | GST<br>paid<br>\$ |
|-------|--------------------|---------------|---------------------|---------------------------|-----------------|----------------|--------------|----------------------|-------------------|
| Sep 1 | J Wade             | EFT           | 2 200               | 2 200                     |                 |                |              |                      |                   |
| 3     | Display equipment  | EFT           | 3 520               |                           |                 |                | 3 200        |                      | 320               |
| 5     | Inventory          | 643           | 9 900               |                           | 9 000           |                |              |                      | 900               |
| 7     | Drawings           | EFT           | 2 400               |                           |                 | 2 400          |              |                      |                   |
| 10    | J Sweeney          | EFT           | 4 400               | 4 400                     |                 |                |              |                      |                   |
| 12    | Inventory          | 644           | 2 200               |                           | 2 000           |                |              |                      | 200               |
| 14    | Loan r/p           | EFT           | 1 650               |                           |                 |                |              | 1 650                |                   |
| 17    | Drawings           | EFT           | 1 800               |                           |                 | 1 800          |              |                      |                   |
| 20    | Advertising        | 645           | 550                 |                           |                 |                |              | 500                  | 50                |
| 24    | Laptop<br>computer | 646           | 880                 |                           |                 |                | 800          |                      | 80                |
| 27    | Inventory          | 647           | 990                 |                           | 900             |                |              |                      | 90                |
| 28    | N Smith            | EFT           | 2 230               | 2 230                     |                 |                |              |                      |                   |
| 28    | Loan r/p           | EFT           | 1 650               |                           |                 |                |              | 1 650                |                   |
| 30    | Totals             |               | 34 370              | 8 830                     | 11 900          | 4 200          | 4 000        | 3 800                | 1 640             |

#### **Additional information:**

The business maintains two bank accounts. On 1 September 2023, they had the following balances: account #1 \$2200; account #2 bank overdraft (\$850).

- a Prepare a fully classified cash flow statement for the month ended 30 September 2023.
- **b** Comment on the changes in the cash position of the business during September 2023.

#### 13 JOURNALS TO CASH FLOW STATEMENT



Adam Taylor, owner of AT's Barbecues & Camping Store, has prepared the following cash journals. He has also advised that his cash balance on 1 November 2023 was \$5460.

#### **CASH RECEIPTS JOURNAL**

| Date  | Details         | Receipt | Amount<br>banked<br>\$ | Accounts<br>receivable<br>\$ | Cash<br>sales<br>\$ | Sundry<br>rec.<br>\$ | GST<br>received<br>\$ |
|-------|-----------------|---------|------------------------|------------------------------|---------------------|----------------------|-----------------------|
| Nov 2 | Cash sales      | 7331    | 638                    |                              | 580                 |                      | 58                    |
| 7     | Cash sales      | 7332    | 825                    |                              | 750                 |                      | 75                    |
| 8     | Cash sales      | 7333    | 605                    |                              | 550                 |                      | 55                    |
| 11    | Cash sales      | 7334    | 726                    |                              | 660                 |                      | 66                    |
| 14    | Cash sales      | 7335    | 1 320                  |                              | 1 200               |                      | 120                   |
| 15    | Interest        | EFT     | 1 300                  |                              |                     | 1 300                |                       |
| 16    | Cash sales      | 7336    | 979                    |                              | 890                 |                      | 89                    |
| 22    | Cash sales      | 7337    | 2 178                  |                              | 1 980               |                      | 198                   |
| 23    | Sale of vehicle | EFT     | 9 000                  |                              |                     | 9 000                |                       |
| 26    | Cash sales      | 7339    | 1 375                  |                              | 1 250               |                      | 125                   |
| 30    | Capital         | EFT     | 15 000                 |                              |                     | 15 000               |                       |
| 30    | Totals          |         | 33 946                 | 0                            | 7 860               | 25 300               | 786                   |

#### **CASH PAYMENTS JOURNAL**

| Date  | Details          | Cheque<br>no. | Total<br>paid<br>\$ | Wages<br>\$ | Drawings<br>\$ | Inventory<br>\$ | Sundry<br>pay.<br>\$ | GST<br>paid<br>\$ |
|-------|------------------|---------------|---------------------|-------------|----------------|-----------------|----------------------|-------------------|
| Nov 4 | Inventory        | 1243          | 2 420               |             |                | 2 200           |                      | 220               |
| 9     | Wages            | EFT           | 1 550               | 1 550       |                |                 |                      |                   |
| 10    | Drawings         | EFT           | 1 870               |             | 1 870          |                 |                      |                   |
| 12    | Advertising      | 1244          | 1 760               |             |                |                 | 1 600                | 160               |
| 15    | Office furniture | 1245          | 3 300               |             |                |                 | 3 000                | 300               |
| 16    | Wages            | EFT           | 1 580               | 1 580       |                |                 |                      |                   |
| 18    | Drawings         | EFT           | 3 000               |             | 3 000          |                 |                      |                   |
| 22    | Wages            | EFT           | 1 600               | 1 600       |                |                 |                      |                   |
| 25    | Inventory        | 1246          | 4 400               |             |                | 4 000           |                      | 400               |
| 28    | Wages            | 1247          | 1 620               | 1 620       |                |                 |                      |                   |
| 28    | Computer         | 1248          | 2 750               |             |                |                 | 2 500                | 250               |
| 30    | Totals           |               | 25 850              | 6 350       | 4 870          | 6 200           | 7 100                | 1 330             |

- **a** Prepare a fully classified cash flow statement for the month ended 30 November 2023.
- **b** The owner is concerned about the cash flows of the business. Comment on the cash position of the firm and the results revealed by your report in relation to the three areas of cash flows.

#### 14 COMPARATIVE CASH FLOW STATEMENTS



The following cash flow statements relate to the business of Angela's Place, a local shop selling a range of fashion wear.

#### ANGELA'S PLACE: CASH FLOW STATEMENTS FOR YEARS ENDED 31 DECEMBER

|   | 2022     | 2023     |
|---|----------|----------|
| Cash flows from operating activities      | \$       | \$       |
| Cash sales                                | 85 000   | 92 000   |
| Collections from accounts receivable      | 32 700   | 33 000   |
| GST received                              | 8 500    | 9 200    |
| Payments to accounts payable              | (45 000) | (43 500) |
| Part-time wages                           | (32 000) | (38 000) |
| Advertising                               | (6 000)  | (8 000)  |
| GST paid                                  | (2 100)  | (1 180)  |
| Net cash provided by operating activities | 41 100   | 43 520   |
| Cash flows from investing activities      |          |          |
| Proceeds from sale of non-current assets  | 4 500    | 3 500    |
| Purchase of non-current assets            | (15 000) | (3 800)  |
| Net cash used in investing activities     | (10 500) | (300)    |
| Cash flows from financing activities      |          |          |
| Loan repayments                           | (12 000) | (12 000) |
| Capital injection                         | 30 000   | -        |
| Proprietor's drawings                     | (40 000) | (35 000) |
| Net cash used in financing activities     | (22 000) | (47 000) |
| Net increase (decrease) in cash held      | 8 600    | (3 780)  |
| Cash held at beginning of year            | 2 340    | 10 940   |
| Cash held at end of year                  | 10 940   | 7 160    |

Comment on the changes that have taken place over the period covered by the two reports shown above. Your comments should consider the changes that have occurred in operating, investing and financing activities.

#### 15 COMPARATIVE CASH FLOW STATEMENTS



The following cash flow statements relate to the business of Salim's Smartphones and Accessories. The owner is concerned about the bank overdraft situation and has asked for your assistance.

## SALIM'S SMARTPHONES AND ACCESSORIES: CASH FLOW STATEMENTS FOR YEARS ENDED 30 JUNE

|   | 2022     | 2023     |
|---|----------|----------|
| Cash flows from operating activities      | \$       | \$       |
| Cash sales                                | 150 000  | 145 000  |
| Collections from accounts receivable      | 45 000   | 50 000   |
| GST received                              | 15 000   | 14 500   |
| Payments to accounts payable              | (68 000) | (70 500) |
| Rent                                      | (82 000) | (82 000) |
| Advertising                               | (15 000) | (18 000) |
| GST paid                                  | (10 050) | (11 500) |
| Net cash provided by operating activities | 34 950   | 27 500   |
| Cash flows from investing activities      |          |          |
| Sale of computer                          | 1 300    | 0        |
| Purchase of computer                      | (3 500)  | 0        |
| Purchase of shop fittings                 | 0        | (15 000) |
| Net cash used in investing activities     | (2 200)  | (15 000) |
| Cash flows from financing activities      |          |          |
| Loan                                      | 12 000   | 0        |
| Loan repayments                           | 0        | (2 000)  |
| Capital contribution                      | 30 000   | 0        |
| Drawings                                  | (15 000) | (28 000) |
| Net cash used in financing activities     | 27 000   | (30 000) |
| Net increase (decrease) in cash held      | 59 750   | (17 500) |
| Cash held at beginning of year            | (2 800)  | 350      |
| Cash held at end of year                  | 56 950   | (17 150) |

Compare the two cash flow statements provided and discuss the changes that have occurred over the last 12 months. Your comments should consider the cash flows in the areas of operating, investing and financing activities.

#### **ETHICAL CONSIDERATIONS**



David Trump owns Trump Tyre and Auto, a small business with five employees. The shop has a prime position in the local shopping centre and has done very well for a number of years.

Trump has recently advertised for a new employee and has just interviewed six people for the position. The most impressive person interviewed was a female applicant. She has vast experience in the industry, good people skills and can start work with a week's notice. Trump is hesitant to employ her, however, because all the other employees on the shop floor are young men and he readily admits that the shop has quite a masculine culture.

Some of the other applicants were quite good, but the female applicant was the stand-out. Trump is unsure what to do and has asked you for your recommendation.

Discuss the pros and cons for Trump of deciding whether or not to employ the female applicant. Consider the financial implications, any issues for the workforce, the customers and, most importantly, the ethical considerations behind his decision.



What are the ethical implications of not hiring the best candidate, based on gender?

#### **CHAPTER CHECKLIST**

Now that you've finished Chapter 21, double-check your progress.

Are you ready for your Unit 2 assessment?

#### I have ...

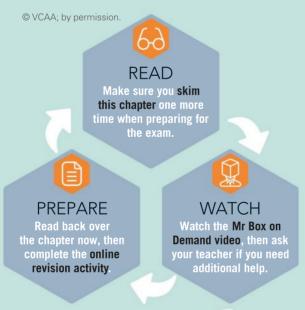
- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- ompleted the end-of-chapter activities
- Manded in my workbook for marking.

#### I understand ...

- documents used by a business to record financial transactions
- M historical and budgeted classified accounting reports for a trading business:
  - Cash Flow Statement
- of inventory and the impact it has on the Cash Flow Statement.

#### I can ...

- use correct accounting terminology
- will use ICT, including spreadsheets, to record transactions and construct appropriate graphical representations
- of prepare historical and budgeted accounting reports for a trading business using manual methods and ICT
- apply theoretical knowledge to simulated situations.





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Every trading business uses non-current assets (such as vehicles or furniture) that are under its control for more than 12 months. These assets become less effective or useful over time. As their effectiveness drops, part of their cost is written off – a process called depreciation.

In this chapter, you'll learn how non-current assets are valued, and how depreciation of that value is calculated and applied. You will also consider how owners and managers monitor the value and effectiveness of their non-current assets.

#### **LEARNING OBJECTIVES**

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

- explain how non-current assets are valued [22.1]
- define 'depreciation' [22.2]
- explain how depreciation complies with the period assumption [22.2]
- calculate depreciation under the straight-line method[22.2]
- explain the effect of depreciation on accounting reports [22.2]
- describe the purpose of asset registers [22.3]
- calculate and evaluate asset turnover and return on assets [22.3].



# 22.1 VALUATION OF NON-CURRENT ASSETS

Non-current assets can come under the control of a business entity in one of two ways. The business can simply buy a new asset, or the owner may make a capital contribution to the business in the form of a non-current asset. The way an asset is treated in the balance sheet depends on how it became part of the business.

#### **PURCHASING A NON-CURRENT ASSET**

When a business takes control of a non-current asset, the owner needs to determine the dollar value that *faithfully represents* this economic event.

When an asset is purchased, whether for cash or on credit, two elements must be identified:

- the invoiced cost of the asset, or the actual cost paid for the asset
- all other costs incurred to get the asset into a revenue-earning capacity.

Verifiability can be easily satisfied with the first element. The cost of a non-current asset can usually be verified by documentary evidence, such as an invoice, a cheque butt, an EFT document or a written contract.

The other costs relating to the purchase of an asset aren't always so easy to identify. Sometimes a business has to pay for one-off expenses, such as the delivery or installation of an asset. Such costs are necessary before the asset is ready to earn revenue. In this situation, the cost of the delivery and installation becomes part of the actual asset.

#### **EXAMPLE 22.1**

The management of Kensington Kitchens purchased a new vehicle for \$30 000 cash and paid the following.

| Government stamp duty      | \$1000         |
|----------------------------|----------------|
| Dealer's charges           | \$800          |
| Insurance and registration | \$900 per year |

The actual cost of the vehicle consists of the purchase price of \$30 000, plus the stamp duty of \$1000 and the dealer's charge of \$800: a total of \$31 800. These items must be paid in order to get the vehicle in a position to earn revenue for the business. Therefore, all of these payments actually become part of the cost of the asset.

Once such items have been paid, they don't occur again. This should be considered when deciding if an item is actually part of a non-current asset. If costs are only paid once when an asset is purchased, they should probably be considered as part of that asset.

However, this is not the case with insurance and registration. These items are not included in the cost of the vehicle, as they will be paid each period, usually on a yearly basis. They are therefore seen as separate expense items.

#### **EXAMPLE 22.2**

Kensington Kitchens also purchased a new computer system for \$8000 and paid the following.

| Installation fee | \$1000         |
|------------------|----------------|
| Service contract | \$500 per year |



The actual cost of the computer is \$9000. The installation must be paid in order to get the asset into a revenue-earning capacity, and therefore becomes part of the cost of the asset.

The service contract is an annual expense that doesn't have to be paid before the asset is usable, so it's not part of the asset's cost.

As you can see, the true cost of a non-current asset is not simply its invoice price. To satisfy *faithful representation*, the true cost of an asset when it's acquired should include all costs incurred in preparing the asset to produce revenue for the business.

#### CAPITAL CONTRIBUTION OF A NON-CURRENT ASSET

Rather than purchasing an asset for their business, a business owner may simply contribute a personal asset. Most capital contributions take the form of cash, particularly when a business is first set up. However, a business owner may also contribute things such as office furniture, computer equipment and vehicles.

By definition, when an asset is contributed from an owner's personal assets, it's a second-hand asset. This means that a business document, such as an invoice, won't be received when this asset is contributed. So how is such an asset valued?

For example, consider a vehicle that the owner purchased for private use four years ago at a cost of \$45 000. Would the value of \$45 000 faithfully represent the value of the asset at the time it was contributed to the business? Most people would answer 'no' to this, but what value can be used instead?

**Fair value** is a term used to determine the value of an asset that is being contributed by an owner. Fair value is simply an estimate of the asset's value at that time. Fair values may be gained from sworn valuers or, depending on the asset, an expert working in the field.

Fair value is an estimate, so it cannot satisfy *verifiability*. However, it can be argued that a current estimated value would be more relevant than the price paid for the asset years ago. The demands of *relevance* therefore outweigh the demands of *verifiability*, so a fair value is therefore considered acceptable.

fair value an estimate of the value of a non-current asset contributed to a business

#### 22.1 CHECK YOUR UNDERSTANDING



- 1 When a non-current asset is purchased, how can verifiability be satisfied?
- 2 'If a business owner buys an asset, all they need to do is record its cost price.' Do you agree with this statement? Explain your answer fully.
- **a** When an asset is contributed to a business by the owner, *fair value* is used to determine its value. Explain what this term means.
  - **b** Does fair value satisfy *verifiability*? Explain your answer fully.

## 22.2

# DEPRECIATION OF NON-CURRENT ASSETS

Non-current assets such as vehicles, furniture and equipment cannot be included as expenses in an income statement because they are not used up in one accounting period. However, such assets do represent a 'cost' to the business. How can this be represented?

A unique feature of non-current assets is that their cost generates an economic benefit to the firm over a number of years. For example, a delivery van may be a useful asset to a business for five years, as it helps to earn revenue for the firm during that time by delivering goods.

Under accrual accounting, revenue for the period is matched with the relevant expenses for that period. Therefore, if the delivery van is expected to be used for five years, it's logical to 'write off' its cost over that time.

**Depreciation** is the process of allocating the cost of a non-current asset over its **useful life**. It attempts to write off a portion of a non-current asset as an expense each accounting period.

#### depreciation

the process of allocating the cost of a non-current asset over its effective useful life

#### useful life

an estimate of the time a business expects to use an asset to generate revenue

# straight-line method of depreciation

a method of depreciation that allocates a fixed amount of cost to each reporting period

#### residual value

an estimate of how much an asset will be sold for when it is disposed of at the end of its useful life

#### CALCULATING DEPRECIATION

There are several methods of calculating depreciation on non-current assets. One simple method is covered in this unit of your VCE course; a second, more complex method is introduced in Units 3 & 4.

The **straight-line method of depreciation**, also known as the fixed instalment method, allocates depreciation at the same rate each year. To calculate depreciation under this method, three items need to be known. These are:

- 1 the original cost of the asset
- 2 the estimated life of the asset (usually expressed in years)
- **3** the estimated **residual value** (also known as scrap value) of the asset how much is expected to be received for the asset at the end of its useful life, when it is sold or 'scrapped'.

The amount of depreciation allocated each year under the straight-line method is called the depreciation expense, and is calculated using the following formula.

Depreciation expense = Cost — residual value

Estimated life





#### **EXAMPLE 22.3**

Brunswick Blinds purchases a new delivery van. The following details are supplied.

| Date of purchase         | 1 July 2023 |
|--------------------------|-------------|
| Purchase cost            | \$45 000    |
| Estimated useful life    | 4 years     |
| Estimated residual value | \$9000      |

Depreciation expense = 
$$\frac{\text{Cost} - \text{residual value}}{\text{Estimated life}}$$
$$= \frac{\$45\ 000 - \$9\ 000}{4}$$
$$= \frac{\$36\ 000}{4} = \$9\ 000\ \text{per annum}$$

\$9000 will be treated as an expense in each of the four years the van is under the control of the business.

The depreciation expense can also be expressed as a percentage of the asset's cost. To calculate the annual rate, the following formula is used.

#### **EXAMPLE 22.4**

For Brunswick Blinds, the depreciation rate for their new delivery van is:

Note that some practical exercises (and exam questions) will simply state that an asset has to be depreciated at a fixed percentage each period. For example, a computer costing \$2000 is to be depreciated at 30% per annum. In this scenario, you simply apply the fixed percentage to the cost of the asset:  $30\% \times \$2000 = \$600$  depreciation for the year.

Also note that, in some cases, a business may not own an asset for the entire period. If your accounting period is for 12 months and you purchase an asset halfway through the period, you won't allocate the entire year's depreciation. Depreciation should be calculated for the year and then divided by two, giving you six months' depreciation for the asset.

Always check the date of purchase and only allocate a full year's depreciation if the asset has been under the control of the entity for the full year. This approach satisfies the period assumption, and also complies with accrual accounting, as profit is defined as revenue earned less expenses incurred over the same period of time.

#### DEPRECIATION AND ACCOUNTING REPORTS

At the end of each accounting period, depreciation causes a two-fold effect on the accounting reports of the firm.

BEST PRACTICE
Remember:
Depreciation
allocates the cost of

allocates the cost of an asset over periods. It doesn't attempt to report current market value.

## accumulated depreciation

a negative asset; the total amount of depreciation allocated from the time a business acquired an asset until the present date

carrying value the original cost of an asset less

of an asset less its accumulated depreciation at a particular date First, it reduces the firm's profit each year, as it creates a depreciation expense. For example, Brunswick Blinds' profit would be reduced by the delivery van's depreciation expense of \$9000 each yearly accounting period. The allocation of depreciation increases expenses, which leads to a decrease in net profit and owner's equity.

Second, depreciation creates a negative asset in the balance sheet, known as **accumulated depreciation**. It represents the total depreciation written off the asset so far. The accumulated depreciation amount is deducted from the original cost of the asset in the firm's balance sheet.

Figure 22.1 shows how the balance sheets for Brunswick Blinds would appear over the van's expected four years of useful life.

FIGURE 22.1 Balance sheet (extracts) as at 30 June

|                                | 2024<br>\$ | 2025<br>\$ | 2026<br>\$ | 2027<br>\$ |
|--------------------------------|------------|------------|------------|------------|
| Non-current assets             |            |            |            |            |
| Delivery van                   | 45 000     | 45 000     | 45 000     | 45 000     |
| Less: Accumulated depreciation | 9 000      | 18 000     | 27 000     | 36 000     |
|                                | 36 000     | 27 000     | 18 000     | 9 000      |

Note that the original cost of an asset (or its agreed value at the time of contribution) is shown in the balance sheet throughout the asset's life. The accumulated depreciation is then deducted from the original cost. The amount that remains is known as the asset's **carrying value** (or book value).

The carrying value of an asset always includes the original estimate of its residual value, as well as any depreciation still to be written off. In figure 22.1, after depreciation was allocated on 30 June 2024, the business still carries the cost of \$36 000 on its books for the delivery van.

Depreciation of a non-current asset is listed in the income statement as an expense, along with items such as wages, advertising, rent and so on.

For our Brunswick Blinds example, an extract from an income statement could look like Figure 22.2.

FIGURE 22.2 Income statement (extract) for year ended 30 June 2024

| Gross profit                 |        | \$150 000 |
|------------------------------|--------|-----------|
| Less: Other expenses         |        |           |
| Wages                        | 22 000 |           |
| Advertising                  | 4 000  |           |
| Rent                         | 75 000 |           |
| Depreciation of delivery van | 9 000  | 110 000   |
| Net profit                   |        | \$40 000  |

#### 22.2 CHECK YOUR UNDERSTANDING



- 1 How does depreciation help satisfy the demands of accrual accounting?
- 2 State the formula used to determine depreciation under the straight-line method.
- 3 What is the 'carrying value' of an asset? How is it calculated?

## 22.3 MANAGING NON-CURRENT ASSETS

Non-current assets are acquired for the purpose of generating revenue, so it's important that they are maintained well, protected from theft or abuse, and replaced if they are losing their productive capacity. Management therefore needs to monitor the business's assets, and measure their performance in some way.

#### ASSET REGISTERS

If a business has a large number of non-current assets, the owner may decide to use an additional accounting record known as an asset register. This records the details of a non-current asset throughout its life in the business.

The details kept can vary from business to business, but a typical asset register may contain the:

- original cost of the asset
- supplier's name (i.e. where the asset was purchased)
- registration number or serial number (if applicable)
- insurance details of the asset (if applicable)
- estimated residual value
- estimated useful life
- details of depreciation allocated throughout the asset's life.

Figure 22.3 shows the asset register created by Brunswick Blinds for their delivery van.

#### FIGURE 22.3 Asset register

| Asset:<br>Purchase cost:<br>Estimated life:<br>Supplier: | Delivery van<br>\$45 000<br>4 years<br>Mazda |                       | Nev<br>Sec<br>Esti<br>resi | del:<br>n/<br>ond-hand:<br>imated<br>idual:<br>gistration: | 2023 E<br>New<br>\$9000<br>BOM- |                |
|--|--|-----------------------|----------------------------|--|---------------------------------|----------------|
| Insurance:<br>Depreciation method:                       |  |                       |                            | CV – compr<br>aight-line m                                 |                                 |                |
| Date   | Details                                      | Depreciati<br>expense |                            | Accumul<br>deprecia  |                                 | Carrying value |
| Jul 1 2023   | Purchase                                     |                       |                            |  |                                 | \$45 000       |
| Jun 30 2024  | Depreciation                                 | \$9 (                 | 000                        |  | \$9 000                         | \$36 000       |
| Jun 30 2025  | Depreciation                                 | \$9 (                 | 000                        | \$   | 18 000                          | \$27 000       |
| Jun 30 2026  | Depreciation                                 | \$9 (                 | 000                        | \$   | 27 000                          | \$18 000       |
| Jun 30 2027  | Depreciation                                 | \$9 (                 | 000                        | \$   | 36 000                          | \$9 000        |

A business with numerous non-current assets maintains an asset register for each one. For example, if Brunswick Blinds owns three vehicles, it would keep three separate registers.

When preparing an income statement, the depreciation on each vehicle has already been calculated separately. The total depreciation is calculated by adding up the figures from the three asset registers. It can then be noted in the income statement for the business.

Similarly, when preparing the balance sheet, the figures in the three asset registers are added together and one total figure is then shown in the balance sheet.

asset register a record of the details of a non-current asset throughout its life

in the business



If Brunswick Blinds purchased three delivery vans at the same time, and all three were going to be depreciated at the same rate, the balance sheet as at 30 June 2024 would show the following.

| Non-current assets             |           |           |
|--------------------------------|-----------|-----------|
| Vehicles                       | \$135 000 |           |
| Less: Accumulated depreciation | 27 000    | \$108 000 |

This is the preferred approach if a business has many assets – it would clutter up the balance sheet if a business listed all 30 of its computers individually. It's common practice to group similar types of assets and to report them in summarised form in the balance sheet.

#### FINANCIAL INDICATORS AND NON-CURRENT ASSETS

The two key financial indicators used to measure the performance of a firm's assets are asset turnover and return on total assets.

#### **Asset turnover**

Asset turnover measures how effective assets have been in generating sales revenue for the business. It compares the amount of sales revenue earned in a period with the investment made in the assets of the business.

#### **EXAMPLE 22.5**

Ultimate VR Gaming Gear provides the following data.

| Total sales for the year       | \$275 000 |
|--------------------------------|-----------|
| Sales returns for the year     | \$3 000   |
| Total assets as at 1 January   | \$66 000  |
| Total assets as at 31 December | \$70 000  |

#### asset turnover

a financial indicator that evaluates the effectiveness of assets in generating sales revenue

Net sales = \$275 000 - \$3 000 = \$272 000

Average assets = 
$$\left(\frac{$66\ 000 + $70\ 000}{2}\right)$$
 = \$68 000

Asset turnover =  $\left(\frac{$272\ 000}{$68\ 000}\right)$  = 400%

This means that sales represent a return of 400% on the investment in assets. Another way of looking at this is that the investment in assets has turned into sales four times over the last 12 months. A further interpretation is that for every dollar invested in assets, the business generated \$4 worth of sales.

The more times a business can generate sales, the more likely it is to earn an overall profit. Therefore, if the trend in this indicator goes from 200% to 300%, and from 300% to 400%, the assets of the firm would be viewed as more productive and more able to generate sales.

This should always be one of the goals of management. If a business has idle assets, such as unsold inventory or unused machinery, its ability to generate sales revenue will decrease. The financial indicator would reflect this decline at the end of the period.

#### Return on total assets

The **return on total assets** compares the profit earned by the business with the amount invested in the firm's assets.

The return on assets is calculated as follows.

The difference between the return on assets and the asset turnover is that the net profit margin affects the final return on assets. Rather than comparing sales to assets, it is a comparison of *profit* to assets. The amount of the sales dollar consumed by expenses will therefore affect the return on assets result.



return on total assets

a financial indicator that compares net profit earned with the investment in total assets

#### **EXAMPLE 22.6**

Ultimate VR Gaming Gear provides additional data.

| Net profit for the year        | \$6 800  |
|--------------------------------|----------|
| Total assets as at 1 January   | \$66 000 |
| Total assets as at 31 December | \$70 000 |

Therefore, return on assets would be:

Return on assets = 
$$\frac{$6\,800}{$68\,000}$$
 = 10%

Many owners would expect a higher return than available elsewhere because of two main factors. These are:

- the extra financial risk taken by the owner by investing in a business
- the extra hours the owner works to try to make their business successful.

The trend in the indicator is also important. An owner may be pleased if the indicator moves from 10% to 12%, and then from 12% to 15%. These changes indicate that the business's assets are being used to generate a greater profit for every dollar that the owner has invested in them. If the return on assets is decreasing, less profit is being earned; the owner should investigate and take corrective action.

The return on assets should be considered along with the other financial indicators you've learnt about. For example, problems may be identified if stock turnover has slowed. Similarly, a slower debtors' turnover may ultimately affect the return on assets. Non-current assets that are older and in need of additional maintenance may also affect the return on assets.

Finally, if the net profit margin is falling, this may indicate poor control over expenses. If net profit falls, so too will the return on assets.

#### 22.3 CHECK YOUR UNDERSTANDING



- 1 What is the purpose of an asset register?
- 2 'Asset turnover reflects how productive assets are.' Do you agree? Explain your answer fully.
- 3 Consider the components of the return on assets and explain the factors that may cause this indicator to change from year to year.

# 22

## CHAPTER REVIEW

#### **KEY CONTENT**

- **[22.1]**
- Non-current assets can come under the control of a business entity in one of two ways. If the business buys a new asset, the recorded value needs to include any additional costs incurred in preparing the asset for generating revenue. This is also done if the owner donates a second-hand asset as a capital contribution to the business but, in this case, an estimated fair value is used as the asset's 'original' cost.
- **[22.2]**
- Depreciation is the process of allocating the cost of a non-current asset over its useful life. It attempts to write off a portion of a non-current asset as an expense each accounting period. The straight-line method allocates depreciation at the same rate each year. Depreciation is treated as an expense in the income statement, reducing the firm's profit. It also creates a negative asset in the balance sheet, known as accumulated depreciation.
- [22.3]
- Non-current assets must be monitored and managed in order to maximise their productive capacity. Companies with many assets should use asset registers to record the details of assets throughout their life. The two key financial indicators used to measure the performance of a firm's assets are asset turnover and return on total assets.

#### **CHAPTER 22 EXERCISES**

#### 1 DEPRECIATION OF DELIVERY VAN



Essendon Butchers purchases a second-hand delivery van on 1 July 2023 for \$12 000 cash. It is expected to be used for three years and then sold for approximately \$4800.

- a Calculate the annual depreciation expense to be charged on the van under the straight-line method of depreciation.
- **b** What is the percentage rate of depreciation per annum?
- **c** What would be the value of accumulated depreciation of the van as at 30 June 2024 and 30 June 2025?

#### 2 DEPRECIATION OF COMPUTER



Natali Mikulic, the owner of Hawthorn Fashions, purchases a computer for the office on 1 April 2023. It costs the firm \$3000, plus an installation and set-up fee of \$1000, and is expected to be used by the business for two years. After that time, it will be scrapped for an estimated \$800.

- a Calculate the annual depreciation expense under the straight-line method of depreciation.
- **b** Calculate the annual depreciation expense as a percentage of the asset's cost.
- **c** What item, relating to the computer, would appear in the income statement for the year ended 31 March 2024?
- **d** What item, relating to the computer, would appear in the balance sheet as at 31 March 2024?
- e What is the carrying value of the computer as at 31 March 2024?



#### 3 DEPRECIATION OF FORKLIFTS



On 1 October 2023, United Sports Wholesalers purchases four forklifts at a cost of \$15 000 each, plus GST of \$1500 each. The forklifts are expected to be used for five years, before being sold for about \$3000 each.

- a What is the yearly depreciation expense per forklift?
- **b** What is the total annual expense for depreciation of the forklifts?
- Using Excel, design an asset register for one forklift and record depreciation, accumulated depreciation and the carrying value of the forklift from 1 October 2023 until 30 September 2026.
- **d** Prepare an extract from the balance sheet showing the original cost, accumulated depreciation and carrying value of the forklifts as at 30 September 2024, 2025 and 2026.



#### 4 DEPRECIATION OF VEHICLE - PART YEAR



Fidget Factory buys a new Holden Commodore from Melbourne Holden on 1 July 2023. The business pays \$40 000 cash (excluding GST) for the vehicle, plus a dealer's delivery fee of \$2000. The owner expects to use the car for three years, before trading it in for approximately \$15 000.

- a Calculate the yearly depreciation rate for the vehicle.
- **b** Prepare an extract from the balance sheet showing all details of the vehicle as at 31 December 2023, 2024 and 2025.
- c Design an asset register for the vehicle and record all details for the years 2023, 2024 and 2025.

#### **5 DEPRECIATION OF SHOP FITTINGS – PART YEAR**



Laverton Laundry Supplies purchases new shop fittings on 1 April 2023 at a cost of \$22 000, plus \$2200 GST. The fittings are expected to last for eight years and then be scrapped completely – that is, no residual value is expected to be received at all. It also costs the business \$2000 to have the fittings installed in its shop. The accounting period ends on 31 December each year.

- a Calculate the yearly depreciation expense for the shop fittings.
- **b** Calculate the amount of depreciation to be expensed for the year ended 31 December 2023.
- c Prepare an extract from the balance sheet showing all details of the shop fittings as at 31 December 2023, 2024 and 2025.



#### **6 INCOME STATEMENT AND BALANCE SHEET**



The following information relates to the business of CBD Solar for the year ended 30 November 2023.

| Cash sales       | \$72 000 | Advertising       | \$1 100 |
|------------------|----------|-------------------|---------|
| Cash at bank     | 1 200    | Office equipment  | 6 000   |
| Vehicles         | 30 000   | GST received      | 7 200   |
| Rent             | 15 000   | GST paid          | 3 600   |
| Loan from NAB    | 7 000    | Capital – Mannix  | 29 500  |
| Cost of sales    | 24 000   | Assistant's wages | 15 000  |
| Interest on loan | 1 200    | Drawings          | 8 000   |
| Inventory        | 20 000   | Accounts payable  | 9 400   |

#### Additional information:

- The office equipment must be depreciated by \$600.
- The vehicles must be depreciated by \$7000.
- a Prepare an income statement for the year ended 30 November 2023 under the accrual method of accounting.
- **b** Prepare a classified balance sheet as at 30 November 2023.

#### 7 INCOME STATEMENT AND BALANCE SHEET





Sorrento Shoe Studio supplies the following information from its accounting records.

| Sales                                       | \$96 000 | Capital – Feelgood      | \$74 320 |
|---|----------|-------------------------|----------|
| Assistant's wages                           | 22 000   | Repairs and maintenance | 1 700    |
| Cost of sales                               | 38 000   | Insurance               | 3 400    |
| Inventory                                   | 21 500   | Cash at bank            | 3 100    |
| Loan from EZ Finance                        |          | GST receipts            | 9 600    |
| (due 30/9/24)                               | 5 600    | Interest on loans       | 5 600    |
| Office equipment                            | 9 000    | Cleaning expenses       | 4 500    |
| Telephone bills                             | 400      | Stationery expenses     | 200      |
| Premises                                    | 120 000  | Mortgage on premises    | 55 000   |
| Drawings                                    | 10 200   | GST payments            | 4 520    |
| Accumulated depreciation – office equipment | 3 600    |                         |          |

#### **Additional information:**

The office equipment must be depreciated by 20% p.a. on cost.

- a Prepare an income statement for the year ended 31 December 2023.
- **b** Prepare a classified balance sheet as at 31 December 2023.

#### **8 INCOME STATEMENT AND BALANCE SHEET**





The following information relates to the business of Liberty Prosthetics and Wheelchairs.

| Sales                     | \$53 000 | Vehicles           | \$64 000 |
|---------------------------|----------|--------------------|----------|
| Insurance                 | 1 200    | Telephone expenses | 640      |
| Cost of sales             | 21 000   | Stationery expense | 650      |
| Vehicle repairs           | 890      | Capital – M Randi  | 69 760   |
| Assistant's wages         | 22 550   | Advertising        | 970      |
| Accounts payable          | 1 320    | Petrol expense     | 2 780    |
| Office equipment          | 5 600    | Drawings           | 10 000   |
| Accumulated depreciation: |          | Interest on loan   | 400      |
| – Office equipment        | 1 800    | Bank overdraft     | 1 413    |
| – Vehicles                | 24 000   | Inventory loss     | 1 200    |
| Inventory                 | 22 000   | GST paid           | 2 713    |
| GST collected             | 5 300    |                    |          |

#### **Additional information:**

- Office equipment is to be depreciated 15% on cost.
- Vehicles are to be depreciated 25% on cost.

Using the relevant information from the above list, prepare an income statement for the year ended 31 December 2023 and a classified balance sheet as at 31 December 2023.



#### 9 INCOME STATEMENT AND BALANCE SHEET



The owner of Bridgewater Boat Parts supplies the following information. He asks you to prepare an income statement and a classified balance sheet at the end of the yearly period, 30 June 2023.

| Advertising               | \$1 400 | Bank overdraft      | \$1 200 |
|---------------------------|---------|---------------------|---------|
| Drawings                  | 6 500   | Equipment           | 12 400  |
| Office furniture          | 2 400   | Sales               | 48 000  |
| Cost of sales             | 16 830  | Wages               | 18 200  |
| Inventory                 | 21 500  | Cartage in          | 250     |
| Insurance                 | 890     | Stationery expenses | 600     |
| Telephone bills           | 580     | Rent                | 12 000  |
| Accumulated depreciation: |         | Capital – Babic     | 27 362  |
| – Equipment               | 4 960   | Accounts payable    | 9 680   |
| – Office furniture        | 720     | GST collections     | 4 800   |
| GST payments              | 3 172   |                     |         |

#### **Additional information:**

- Office furniture is to be depreciated 10% on cost.
- Equipment is to be depreciated 20% on cost.

#### **10 ASSET TURNOVER**



The owner of Carlton Cabinets reports that the assets of the business have increased from \$290 000 to \$330 000 over the past 12 months. In the current accounting period, which just concluded, the business generated total sales of \$420 000. The asset turnover achieved in the previous period was 115%.

- a Calculate the asset turnover achieved in the most recent period.
- **b** Taking into account last year's result, comment on the results achieved in asset turnover in the current period.

#### 11 ASSET TURNOVER



The following information has been provided by the owner of Brighton Swimwear, Melina Acosta.

| Total assets as at         | 30 June 2023 | \$320 000 |
|----------------------------|--------------|-----------|
|                            | 30 June 2024 | \$340 000 |
|                            | 30 June 2025 | \$380 000 |
| Sales for the year ended   | 30 June 2024 | \$570 000 |
|                            | 30 June 2025 | \$575 000 |
| Sales returns for the year | 30 June 2024 | \$5 000   |
| Sales returns for the year | 30 June 2025 | \$9 000   |

- a Calculate the asset turnover achieved by the business for the years ended 30 June 2024 and 30 June 2025.
- **b** Comment on the results achieved over the two years. Do you think the business has improved or deteriorated in terms of its use of assets to generate revenue? Discuss.

#### 12 RETURN ON ASSETS



Jasper Felix, owner of Newport Games & Sports, provides the following information for your use.

|                         | 31 December 2023 | 31 December 2024 |
|-------------------------|------------------|------------------|
| Total assets            | \$450 000        | \$480 000        |
| Net profit for the year |                  | \$9 000          |

- a Calculate the return on assets for Jasper Felix's business for the year ended 31 December 2024.
- **b** Taking into account the returns available in the general money market, comment on whether Felix's return on assets would be acceptable.

#### 13 RETURN ON SALE AND RETURN ON ASSETS



Consider the following financial data from Wyndham Costume Shop, which is owned and operated by Alannah Mitchell.

|               | 2022      | 2023      | 2024      | 2025      |
|---------------|-----------|-----------|-----------|-----------|
| Total sales   |           | \$142 000 | \$150 000 | \$155 000 |
| Sales returns |           | \$2 000   | \$ 2 000  | \$3 000   |
| Net profit    |           | \$30 000  | \$32 000  | \$40 000  |
| Total assets  | \$330 000 | \$340 000 | \$360 000 | \$420 000 |

- **a** Calculate the following financial indicators for the years 2023, 2024 and 2025. Express each one as a percentage.
  - i Net profit margin
  - ii Asset turnover
  - iii Return on assets
- **b** Taking into account the trend in your answers for part **a**, comment on the performance of this business in relation to:
  - i net profit performance.
  - ii how effectively it uses its assets to generate sales.
  - iii how effectively it uses its assets to produce a profit.

#### CASE STUDY



Captain Snores is a small business that sells a range of bedroom furniture and accessories. The owner of the firm, Ryan Perez, has built the business up over several years. He believes it is successful because of the free delivery service he offers to all customers. Perez maintains a delivery vehicle in order to provide this service.

At the end of the previous period, the following report was prepared.

#### **CAPTAIN SNORES: BALANCE SHEET AS AT 31 DECEMBER 2022**

| Assets              | \$      | Liabilities      | \$     | \$     | \$     |
|---------------------|---------|------------------|--------|--------|--------|
| Cash at bank        | 2 190   | Accounts payable | 3 200  |        |        |
| Accounts receivable | 8 670   | GST debt         | 2 200  |        | 5 400  |
| Inventory           | 52 300  | Owner's equity   |        |        |        |
| Delivery vehicle    | 28 000  | Capital          | 65 430 |        |        |
| – accumulated dep'n | (8 000) | Plus: Net profit | 32 000 |        |        |
| Office furniture    | 6 400   |                  |        | 97 430 |        |
| – accumulated dep'n | (1 200) | Less: Drawings   |        | 14 470 | 82 960 |
|                     | 88 360  |                  |        |        | 88 360 |

Perez provided the following summary of events in relation to the 2023 yearly period.

| Cash sales                         | \$92 400 | Cost of sales                   | \$72 900 |
|------------------------------------|----------|---------------------------------|----------|
| Credit sales                       | 51 900   | Stationery expenses             | 540      |
| Cartage inwards                    | 2 430    | Prepaid security expenses       | 1 200    |
| GST receipts                       | 9 240    | GST payments                    | 5 750    |
| Inventory loss                     | 1 250    | Customs duty                    | 860      |
| Wages                              | 25 400   | Prepaid insurance               | 1 560    |
| Advertising                        | 1 200    | Drawings                        | 32 000   |
| Electricity                        | 980      | Prepaid rent                    | 45 500   |
| Vehicle expenses                   | 2 200    | Telephone expenses              | 1 020    |
| GST charged to accounts receivable | 5 190    | GST charged by accounts payable | 2 120    |

#### Additional information:

- The delivery vehicle was originally purchased for \$28 000. It has an estimated useful life of four years and an estimated scrap value of \$12 000.
- The office furniture was purchased for \$6400 and has an estimated residual value of \$400. It is expected to be used in the business for 10 years.
- **a** Calculate the amount of expense incurred for each of the following items.
  - i Depreciation of vehicle ii Depreciation of office furniture.
- **b** Prepare an income statement for the year ended 31 December 2023.
- **c** Prepare two extracts from the firm's balance sheet as at 31 December 2023. The first should include all non-current assets controlled by the business, including the relevant amounts for accumulated depreciation. The second extract should present the owner's equity section of the report.
- **d** Comment on the owner's level of drawings, in terms of the profit result for 2023. What potential problem might this create? Discuss.
- **e** For how many more years does Perez expect to use his two non-current assets? Explain how you determined these two figures.
- **f** What is the GST situation at the end of December 2023? Show all workings, and explain how your final figure should be reported.



#### **ETHICAL CONSIDERATIONS**



Tanya Jeffries operates a small business selling a range of prints and posters. She's concerned about her return on assets, which has been decreasing in recent years. A lot of her inventory is produced by local artists and these items have become quite expensive to buy.

Recently, Jeffries was put in touch with an importer who can supply a range of products that might suit her shop. His prices are significantly lower than her current suppliers are charging, and Jeffries is tempted to buy the imported goods to help reduce her costs. She is sure that her profit can improve and this will increase her return on assets. However, she suspects that some of the importer's artworks are unlicensed copies of original pieces, or of copyrighted artwork that he does not have the right to reproduce.

Jeffries has asked for your advice. Would she be making the correct decision if she chose to import the products? Discuss this issue, taking into account the financial, social and ethical considerations that Jeffries should consider.



#### **CHAPTER CHECKLIST**

Now that you've finished Chapter 22, double-check your progress.

Are you ready for your Unit 2 assessment?

#### I have ...

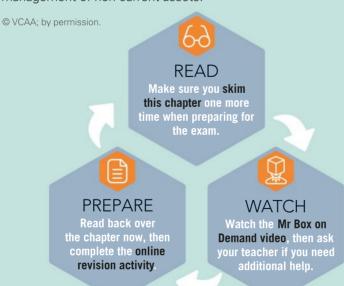
- completed all 'Check Your Understanding' questions
- ompleted all exercises
- completed the end-of-chapter activities
- Manded in my workbook for marking.

#### I understand ...

- documents used by a business to record financial transactions
- current and non-current assets
- of indicators to measure business performance in relation to non-current assets
- valuation of a non-current asset
- straight-line method of depreciation
- of reporting depreciation in the Income Statement and Balance Sheet
- strategies for effective non-current asset management, including the use of asset registers
- of ethical considerations faced by business owners when purchasing and managing non-current assets.

#### I can ...

- use correct accounting terminology
- distinguish between current and non-current assets
- of identify, classify, record and report financial data and information using manual processes and ICT, including spreadsheets
- determine the valuation of a non-current asset
- select and justify strategies to improve the business performance in relation to management of non-current assets.







# BUDGETING FOR A SMALL BUSINESS

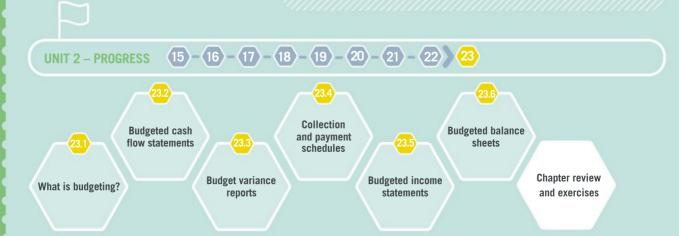
The owner of a trading business must be able to plan and control the business's activities. The most important accounting tools for this planning are the budget, and the reports that are used to create and shape that budget.

In this final Chapter of Unit 2, you will learn why budgeting is so vital for a successful business, consider possible variances in a budget, and create a variety of budgeting reports.

#### **LEARNING OBJECTIVES**

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

- list a variety of budgets prepared by small businesses[23.1]
- identify the information required to prepare a budgeted cash flow statement [23.2]
- prepare a formal budgeted cash flow statement to identify a cash surplus or deficit [23.2]
- prepare a budget variance report for both cash and profit, including variances in both dollar and percentage terms [23.3]
- prepare a report to management, commenting on significant budget variances [23.3]
- prepare schedules of collections from accounts receivable and schedules of payments to accounts payable [23.4]
- identify the information required to prepare a budgeted income statement [23.5]
- prepare a budgeted income statement to identify a budgeted profit or loss [23.5]
- prepare a budgeted balance sheet [23.6].



## 23.1 WHAT IS BUDGETING?

#### budget

a financial plan that sets out the expected transactions for future accounting periods

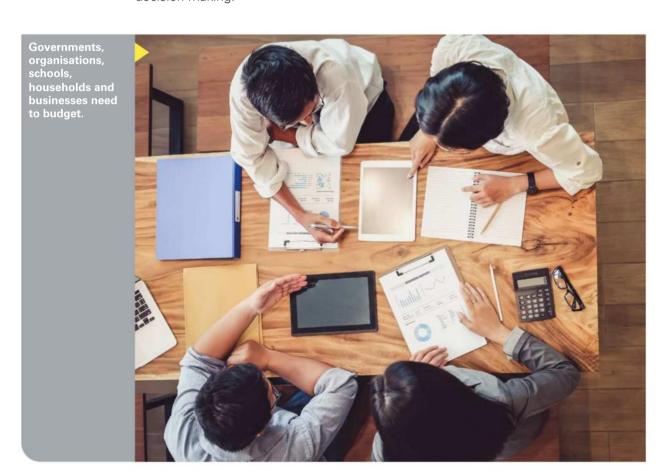
A budget is simply a financial plan for the future. Governments have them, schools have them, households have them - you may even have a personal budget.

In accounting, budgeting is the process of predicting future financial transactions to enable management to improve its decision making. If management can draw up a budget to estimate what's likely to occur in the future, it will be better prepared for when it actually happens. Also, if the predicted events are unsatisfactory, management can try to change the situation and achieve a better outcome.

Another part of budgeting occurs when management decides to set a target of achievement for some time in the future. Examples are setting a sales target of \$75 000 for a guarter, or trying to raise \$40 000 in cash by the end of six months.

Budgeting has a controlling role to play as well. If a business has a number of separate departments, each one can be given a budgeted amount to spend during each accounting period. This puts a ceiling on expenditure, ensuring that the firm doesn't overspend.

All of these examples have one thing in common: they all rely on estimating future financial transactions in order to plan and control the outcomes of management decision-making.



#### TYPES OF BUDGETS

A business can prepare many different types of budgets. Depending on the firm's size, these may include the following.

- Sales budgets are used to predict a future revenue target or market share (in both quantity and total revenue).
- Purchases budgets are used by trading firms to estimate the goods required to meet a sales target (in both quantity and cost).
- Materials budgets estimate the material requirements for the period, if a firm manufactures goods rather than buying them from a wholesaler.
- Labour budgets predict the number of employees required and the total cost of labour expenses.
- Expense budgets are used to estimate all the costs that are likely to be incurred in trying to meet the budgeted revenue for the next period.

#### BUDGETED ACCOUNTING REPORTS

In order to create and manage budgets, businesses draw on information from budgeted accounting reports. These are reports that predict future financial transactions for the business, rather than reporting actual transactions that have occurred.

There are three key budgeted accounting reports that businesses create, which are versions of the key reports that you have already studied.

- Budgeted cash flow statements are used to predict all the future cash inflows and outflows of the firm, with the final figure being an estimate of the balance of cash at bank.
- Budgeted income statements summarise all the estimates of future revenues and expenses for a particular period, with the end result being a budgeted net profit (or net loss).
- Budgeted balance sheets list estimates of the values of assets, liabilities and the future owner's equity in the business.

This chapter will concentrate on budgeted cash flows, budgeted income statements and budgeted balance sheets. However, it's important to realise that when management is preparing a budget for a small business, the information it needs may in fact come from another type of budget.

All of these budgets connect with one another to make up the master budget of the business. Master budgets have a degree of risk: an error in estimating one item in one budget may lead to a further error in another budget. However, keep in mind that a budget is only a plan; it isn't expected to be perfect. Management should think of budgeting as a starting point when planning its future decisions.

#### master budget

the overall planning strategy of a business, which consists of many smaller budgets

#### 23.1 **CHECK YOUR UNDERSTANDING**



- 1 Explain what accountants mean by the term 'budgeting'.
- 2 Discuss two reasons why a small business owner should prepare budgets regularly.
- 3 Outline the role budgeting can play in helping a firm to control its expenditure.
- 4 Name, and briefly describe, four different types of budgets.

## 23.2 BUDGETED CASH FLOW STATEMENTS

Control over cash is a major objective for all businesses. An adequate cash flow is necessary for basic survival, to pay off loans and buy new assets. A business must plan ahead to anticipate its cash needs.

A budgeted cash flow statement is like a normal cash flow statement, except for one important difference. While a cash flow statement reports on what has happened in terms of cash flows, a budgeted cash flow statement estimates what is expected to occur in the future.

The budgeted statement lists all the anticipated cash inflows and cash outflows under the usual three headings of operating, investing and financing activities. It predicts a future cash surplus (or deficit) for a period. This surplus (or deficit) is then added to the bank balance at the start of the budget period to produce an estimated bank balance in the future.

#### PREPARING A BUDGETED CASH FLOW STATEMENT

Consider the following situation. Chris Chisholm owns Armadale Aeronautics, a small business that sells model aircraft kits and parts. She wants to purchase a new computer for the office at a cost of \$2500. On 1 July 2023, the business had only \$400 cash at bank. Chisholm supplies the following information about her business.

- 1 Last year, she earned cash sales of \$8000 (plus GST) during July. So far this year, her sales have been up by about 10% on last year's figures.
- 2 Chisholm purchases all her inventory on credit and expects to buy approximately \$4000 worth of goods during July (plus GST). Accounts payable due before the end of July amount to \$3400.
- 3 The monthly performance report of the firm shows the following regular expenses: rent \$1900 (plus GST of \$190), wages \$800, and van expenses \$200 (plus GST of \$20).
- 4 In addition to the above expenses, the annual insurance premium on Chisholm's delivery van is due on 14 July each year. This costs \$550 (plus GST of \$55).
- **5** The business has loan repayments of \$375 per month.
- 6 Chisholm usually withdraws \$250 per week for personal spending.

When preparing a budgeted cash flow statement, management should consider only cash inflows and outflows. The amount of goods purchased on credit (part of item 2) is not a cash flow, so it's irrelevant to the budgeted cash flow statement. However, the amount expected to be paid to accounts payable is relevant, as it involves a movement of cash.

#### budgeted cash flow statement

a report that shows estimates of cash receipts and cash payments, and an estimated cash balance, at a particular point in the future



Keeping these points in mind, a budgeted cash flow statement can be prepared as shown in Figure 23.1.

FIGURE 23.1 Budgeted cash flow statement

#### ARMADALE AERONAUTICS: BUDGETED CASH FLOW STATEMENT FOR MONTH ENDING 31 JULY 2023

| Cash flows from operating activities      | \$      | \$      |
|---|---------|---------|
| Cash sales (\$8000 + 10% increase)        | 8 800   |         |
| GST receipts                              | 880     |         |
| Accounts payable                          | (3 400) |         |
| Rent                                      | (1 900) |         |
| Wages                                     | (800)   |         |
| Van expenses                              | (200)   |         |
| Insurance of van                          | (550)   |         |
| GST payments                              | (265)   |         |
| Net cash provided by operating activities |         | 2 565   |
| Cash flows from investing activities      |         |         |
| Nil                                       |         | Nil     |
| Cash flows from financing activities      |         |         |
| Loan repayments                           | (375)   |         |
| Drawings                                  | (1 000) |         |
| Net cash used in financing activities     |         | (1 375) |
| Increase (decrease) in cash held          |         | 1 190   |
| Bank balance 1 July 2023                  |         | 400     |
| Estimated bank balance 31 July 2023       |         | \$1 590 |

Chisholm can use this budgeted cash flow statement to evaluate whether she can afford to buy the computer, valued at \$2500.



As the statement predicts a balance of only \$1590 at the end of July, it appears there won't be sufficient cash available for the purchase. Chisholm may decide to:

- wait until later to buy the computer
- borrow the money
- put in some additional capital
- cut back on drawings
- try to reduce expenses, if possible.

If she decides to wait until the business has sufficient cash to buy the computer, she may extend the budget period to see what lies ahead. Figure 23.2 shows a budgeted cash flow statement prepared for a three-month period.

FIGURE 23.2 Quarterly budgeted cash flow statement

## ARMADALE AERONAUTICS: BUDGETED CASH FLOW STATEMENT FOR QUARTER ENDING 30 SEPTEMBER 2023

| Cash flows from operating activities      | July<br>\$ | August<br>\$ | September<br>\$ |
|---|------------|--------------|-----------------|
| Cash sales                                | 8 800      | 9 000        | 9 000           |
| GST receipts                              | 880        | 900          | 900             |
| Accounts payable                          | (3 400)    | (4 000)      | (4 000)         |
| Rent                                      | (1 900)    | (1 900)      | (1 900)         |
| Wages                                     | (800)      | (800)        | (800)           |
| Van expenses                              | (200)      | (220)        | (220)           |
| Insurance of van                          | (550)      | -            | -               |
| GST payments                              | (265)      | (210)        | (210)           |
| Net cash provided by operating activities | 2 565      | 2 770        | 2 770           |
| Cash flows from investing activities      |            |              |                 |
| Nil                                       | Nil        | Nil          | Nil             |
| Cash flows from financing activities      |            |              |                 |
| Loan repayments                           | (375)      | (375)        | (375)           |
| Drawings                                  | (1 000)    | (1 000)      | (1 000)         |
| Net cash used in financing activities     | (1 375)    | (1 375)      | (1 375)         |
| Increase (decrease) in cash held          | 1 190      | 1 395        | 1 395           |
| Bank balance 1st of month                 | 400        | 1 590        | 2 985           |
| Estimated bank balance end of month       | 1 590      | 2 985        | 4 380           |

#### **EVALUATING THE BUDGETED CASH FLOW STATEMENT**

Once a budgeted cash flow statement is created, evaluating it requires considering both the final results and the larger context of the business. It's not just about numbers – it's what the numbers mean and what they imply.

If we look at the quarterly budget for Armadale Aeronautics, it appears to indicate that there will be cash available by the end of August to buy the computer for \$2500. However, this would leave only an estimated \$485 in the bank – and that's if the budget proves to be accurate! It would only take one unexpected payment to use up the available cash. It may be wise for Chisholm to have a buffer zone or safety margin, with a minimum amount of cash kept in the firm's bank account.

Otherwise, the business may be forced to go into overdraft (if available), which costs money in terms of interest.

The other important factor to keep in mind is that the longer the budget period, the less reliable the estimates will be. Note how in Figure 23.2 the estimated balance at the end of July becomes the opening balance for August. The final balance for August becomes the balance at the start of September. If the budget for July proves to be inaccurate, the budget for the following two months will be unreliable. For example, if the expected increase in sales doesn't take place in July, the predicted cash balances for August and September won't be accurate.

Much of the data used in a budgeted cash flow statement is based on past records and experience. Apart from this, a budget becomes a matter of opinion. Budgeting is basically prediction; it's one of the few areas in accounting where the information isn't verifiable. None of the business documents used can tell us exactly what will happen in the future. However, although the demands of verifiability cannot be satisfied when preparing a budget, the quality of relevance is important. That is, all expected cash inflows and outflows should be reported if they are likely to occur.

The accuracy of a budget depends on the expertise of the person who prepares it and the predictability of the items included in it. Some industries - and some businesses – are fairly stable. Others are more volatile and subject to change. Remember: a budget is a planning tool, and not a report based on fact.

#### **BUDGETED CASH FLOW STATEMENTS AND DECISION-MAKING**

Once the statement is evaluated, the next step is making decisions in response to the result of the budget.

First, management must decide how much cash to maintain in the firm's normal bank account. Once this has been decided, there are two possible scenarios.

- 1 There is a surplus amount of cash available.
- 2 The business is expected to suffer from a shortage of cash in the future.

#### Cash surplus

A budgeted cash flow statement may predict that a cash surplus will be available above and beyond the firm's normal requirements. As the interest on a standard business account is either very low or non-existent, a decision should be made about what to do with the excess cash. There are a number of possibilities, including:

- pay off some liabilities
- invest internally by purchasing non-current assets
- withdraw some cash for personal use (although this may adversely affect the firm)
- invest the cash externally.

There are a number of things to consider if the cash is invested externally, such as interest rates, security, length of investment and access to the money. The highest interest rate may not necessarily be the best choice if it means the money is tied up and can't be withdrawn if a cash shortage occurs. It may be necessary to accept a lower rate of interest and invest the money 'at call', or at short-term notice (e.g. 30 days).

The key to investing such funds is flexibility, as the primary use of the money should always be within the business. A firm should always exercise caution and only invest funds externally if the cash is clearly in excess of its needs.

cash surplus a situation in which a business is likely to have more cash than it needs some time in the future

#### Cash shortages

cash shortage

a situation in which a business is likely to have insufficient cash some time in the future The problem of a **cash shortage** isn't as easy to solve. If a budget predicts a shortage, the firm should take steps to improve the situation before this occurs. Possible actions may include:

- reducing the level of drawings
- contributing additional capital
- reducing the level of expenses
- postponing the payment of expenses
- postponing the purchase of additional assets
- generating additional revenue
- offering incentives to accounts receivable to encourage payment for example, discounts
- borrowing money externally.

From what you learnt about sources of finance for small business in Unit 1, you know that the length of any type of borrowing should match the purpose of the spending. If a business anticipates a short-term shortage of cash, the best solution may be a bank overdraft. Long-term projects usually require long-term finance (e.g. a loan over 10 years).

If a shortage is expected to continue for a longer period of time, the business must identify the causes, as it may indicate that a larger problem exists. Shortages revealed by a budgeted cash flow statement may be a warning of more serious trouble. If a business has insufficient capital or has purchased non-current assets on short-term finance, it may soon have a liquidity problem.

Therefore, the budgeted cash flow statement is one part of the overall plan for where the business is heading and how it will be financed.

#### 23.2 CHECK YOUR UNDERSTANDING



- 1 Describe the key steps involved in preparing a budgeted cash flow statement.
- 2 Explain the two possible outcomes of a budgeted cash flow statement.
- 3 If a business predicts it will have excess cash at bank in the future, what are some of the alternatives management should consider?
- 4 A firm has just completed its budgeted cash flow statement and estimates that it will have a serious cash shortage for the next three months. Make a list of the possible steps management could follow to remedy this situation.

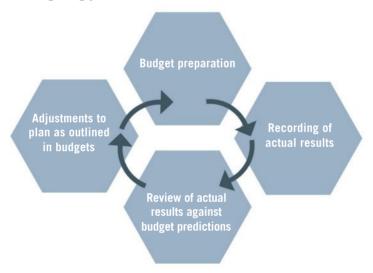
## 23.3 BUDGET VARIANCE REPORTS

The budgeting process isn't complete when a budgeted cash flow statement has been drawn up and a predicted cash balance calculated. In fact, this is only the start of the budgeting process. The next step is to check the progress of the budget.

When the quarterly budgeted cash flow statement was prepared for Armadale Aeronautics (see Figure 23.2), the point was made that, if the first month's estimates were wrong, the estimates for the following two months would also be wrong. Therefore, after the first month, the budget should be reviewed. If necessary, any adjustments can then be made to the budget for the following two months.

When a budget has been prepared on a month-by-month basis, this process of review should occur at the end of each month. The adjustments made should be used as a learning process to improve the accuracy of budgets in the future. Figure 23.3 shows how budgeting is a continuous process that's always under review.

FIGURE 23.3 The budgeting process



#### **VARIANCE**

The budget review process can be done informally, but the preferred approach is to prepare a formal report. A budget variance report compares the budget estimates with the actual results achieved, and highlights any differences between them. These differences are known as budget variances, and may be either favourable or unfavourable.

A favourable variance occurs when the actual result is better than the budgeted result. If sales revenue was budgeted to be \$5000 and the actual result was \$6000, this would be referred to as a \$1000 favourable variance, or as a variance 20% above budget (\$1000 / \$5000 = 20%).

In terms of expenses, if the budgeted amount was \$400 and the actual amount paid was only \$300, this would also be seen as a favourable variance. This is because the result was better for the firm than was expected - that is, \$100 or 25% (\$100 / \$400) better than budget.

An unfavourable variance is when the actual results are worse than were predicted in the budget. This occurs when revenue is less than predicted, or when expenses are greater than the budget estimates.

#### variance

the difference between a budget estimate and an actual result

#### favourable variance

when the actual result for a particular item is better than that estimated in a budget

#### unfavourable variance

when the actual result for a particular item is worse than that estimated in a budget

The budget variance report allows management to review the budgeted cash flow statement. All variances are labelled with either a 'U' (for unfavourable) or an 'F' (for favourable).

The Comments section is very important; if reasons can be found for variances of either type, they should be noted for future reference when planning the next budget.

The budgeted cash flow statement prepared for Armadale Aeronautics in Figure 23.1 is used to create the formal budget variance report shown in Figure 23.4.

#### FIGURE 23.4 Budget variance report

## ARMADALE AERONAUTICS: BUDGETED VARIANCE REPORT FOR MONTH ENDING 31 JULY 2023

|   | Budget  | Actual  | Va  | riance  |                                 |
|---|---------|---------|-----|---------|---------------------------------|
| Cash flows from operating activities      | \$      | \$      | \$  | %       | Comments                        |
| Cash sales                                | 8 800   | 8 200   | 600 | 6.8% U  | Special promotion by competitor |
| GST receipts                              | 880     | 820     | 60  | 6.8% U  |                                 |
| Accounts payable                          | (3 400) | (3 500) | 100 | 2.9% U  |                                 |
| Rent                                      | (1 900) | (1 900) | Nil |         |                                 |
| Wages                                     | (800)   | (800)   | Nil |         |                                 |
| Van expenses                              | (200)   | (160)   | 40  | 20.0% F | Fall in revenue                 |
| Insurance of van                          | (550)   | (600)   | 50  | 9.1% U  | Unexpected premium increase     |
| GST payments                              | (265)   | (270)   | 5   | 1.9% U  |                                 |
| Net cash provided by operating activities | 2 565   | 1 790   | 775 | 30.2% U |                                 |
| Cash flows from investing activities      |         |         |     |         |                                 |
| Nil                                       | Nil     |         |     |         |                                 |
| Cash flows from financing activities      |         |         |     |         |                                 |
| Loan repayments                           | (375)   | (400)   | 25  | 6.7% U  | Increase in interest rates      |
| Drawings                                  | (1 000) | (800)   | 200 | 20.0% F | Lower sales                     |
| Net cash used in financing activities     | (1 375) | (1 200) | 175 | 12.7% F |                                 |
| Increase (decrease) in cash held          | 1 190   | 590     | 600 | 50.4% U |                                 |
| Bank balance 1 July 2023                  | 400     | 400     |     |         |                                 |
| Estimated bank balance 31 July 2023       | 1 590   | 990     | 600 | 37.7% U |                                 |



#### **INTERPRETING VARIANCE REPORTS**

The variance report in Figure 23.4 shows the impact of not achieving the sales target in July. Adding to this problem, more cash than expected was paid to accounts payable when sales were falling. The end result was that the bank balance at the end of July was almost 40% below what was predicted. This is a clear case of a budget plan not reflecting the actual situation!

As a budget is based on estimates, variances are expected to occur and should not necessarily create concern. However, significant variances require action. It's a matter of opinion when a variance becomes significant. In many cases, a variance of 10% or more may be seen as significant, whereas less than this may be insignificant. The problem with a rule like this is that some industries are more volatile than others, which makes it more difficult to prepare budgets for them.

When budgeting for a real business, management's emphasis is on what past experiences have taught it and how accurate the budget is normally. If budgets prove to be very accurate, management may investigate a variance of even 5%. On the other hand, management of an unpredictable business may tolerate all variances under 10% without further investigation. As with most budgeting processes, these sorts of decisions depend mostly on previous experience.



# **CHECK YOUR UNDERSTANDING**



- 1 What is a budget variance report? What is its purpose?
- 2 Explain the meaning of the term 'variance'.
- 3 Distinguish between a favourable variance and an unfavourable variance.
- 4 Explain the following statement: 'Budgeting is a continuous process.'

# 23.4 COLLECTION AND PAYMENT SCHEDULES

Businesses that offer credit to customers, or that buy inventory on credit terms, need to reflect the activities of accounts receivable and accounts payable in their budgeting. They can do this by creating schedules that predict when accounts will be paid.

# **COLLECTION SCHEDULES**

One of the most difficult items to predict accurately is the revenue that a business expects to earn in the future. The firm can take its past experiences into account, but circumstances change and the future is never certain.

However, even when the revenue figure has been estimated, there's a further complication: will the revenue be on a cash basis, or will customers take advantage of the firm's credit facility? The budgeted cash flow statement only shows actual cash flows. So, if credit sales occur, the firm must prepare a schedule to show when it expects credit sales to turn into cash receipts.

Consider the example of Commercial Cleaning Supplies. This trading business prepares a budgeted cash flow statement for the quarter starting 1 July 2023. It reports that over the last three months it has achieved the following revenue (including 10% GST).

April: \$40 000May: \$45 000June: \$48 000

Based on past experience and extensive market research, management makes the following estimates of revenue (including 10% GST) for the next three months.

July: \$48 000August: \$50 000September: \$52 000

A study of the firm's past records indicates that, of the total revenue earned, approximately 60% was on a cash basis; the other 40% was made on credit. When management looks at the information required for the budgeted cash flow statement of July, August and September, it needs estimates of the actual cash receipts resulting from the above revenue figures.

## Revenue breakdown

First, break down the total revenue into cash and credit percentages, as shown in Figure 23.5.

FIGURE 23.5 Cash/credit sales analysis table

| Month     | Total sales | Cash sales | Credit sales |
|-----------|-------------|------------|--------------|
|           |             | 60%        | 40%          |
| July      | \$48 000    | \$28 800   | \$19 200     |
| August    | 50 000      | 30 000     | 20 000       |
| September | 52 000      | 31 200     | 20 800       |

This table provides the cash sales data required for the budgeted cash flow statement. As cash sales result is an immediate cash inflow, the figures under 'Cash sales' can go straight into the budgeted cash flow statement. However, the dollar amounts for credit sales still aren't cash flows.

The firm's history of accounts receivable shows that 70% of accounts are usually settled in the month after the invoice is issued, 20% in the second month after issue, and the remaining 10% during the third month after sales are charged. Using this data, management can prepare a schedule of collections, as shown in Figure 23.6.

FIGURE 23.6 Accounts receivable collections schedule

|                     |                    | Collections in: |              |                 |  |  |
|---------------------|--------------------|-----------------|--------------|-----------------|--|--|
| Month               | Credit sales<br>\$ | July<br>\$      | August<br>\$ | September<br>\$ |  |  |
| April               | 16 000             | 1 600           | _            | _               |  |  |
| May                 | 18 000             | 3 600           | 1 800        | _               |  |  |
| June                | 19 200             | 13 440          | 3 840        | 1 920           |  |  |
| July                | 19 200             | _               | 13 440       | 3 840           |  |  |
| August              | 20 000             | _               | _            | 14 000          |  |  |
| September           | 20 800             | _               | _            | _               |  |  |
| Total cash received |                    | 18 640          | 19 080       | 19 760          |  |  |

To explain the details of these figures, let's examine two months in detail.

In April, total revenue was \$40 000. Credit sales are 40% of the total, so credit sales in the table are \$16 000. Of April's credit sales, 70% would've been collected in May, 20% in June, and the remaining 10% is expected during July. Of these three months, only July is relevant to the budget period. So, 10% of April's credit sales are expected to be collected during July (10% of \$16 000 = \$1600).

In June, credit sales were 40% of \$48 000, or \$19 200. Over the three-month staggered collection period, 70% (\$13 440) is expected to be collected in July, 20% (\$3840) in August and 10% (\$1920) in September. Adding all three collection figures gives the total credit sales for June.

(September credit sales will be collected during October, November and December, so they're irrelevant to the cash flows for the September quarter.)

# Updating the budgeted cash flow statement

By combining the information in Figures 23.5 and 23.6, the estimated business receipts would be shown in a budgeted cash flow statement, as shown in Figure 23.7.

FIGURE 23.7 Budgeted cash flow statement (extract) using collection schedules data

# COMMERCIAL CLEANING SUPPLIES: BUDGETED CASH FLOW STATEMENT FOR **QUARTER ENDING 30 SEPTEMBER 2023**

| Cash flows from operating activities | July<br>\$ | Aug<br>\$ | Sept<br>\$ |
|--------------------------------------|------------|-----------|------------|
| Cash sales                           | 26 182     | 27 273    | 28 364     |
| GST receipts                         | 2 618      | 2 727     | 2 836      |
| Collections from accounts receivable | 18 640     | 19 080    | 19 760     |
| Total inflows                        | 47 440     | 49 080    | 50 960     |

Note that cash sales have been divided by 11 to determine the GST component for each month. For example, in July, the estimated cash sales amount of \$28,800 (including GST) was divided by 11 to determine the GST of \$2618. Taking this \$2618 from the \$28 800 total, actual cash sales expected can be determined: \$28 800 - \$2618 = \$26 182. (Always check whether the predictions for future transactions include GST.)

### schedule of collections

a table used by businesses that sell on credit to predict cash inflows from accounts receivable

# **PAYMENT SCHEDULES**

If a business purchases goods or services on credit, another problem arises in the budgeting process. The budgeted cash flow statement must show the actual cash outflow to accounts payable, and not the amount of credit purchases.

Just as a schedule was prepared to calculate the collections from accounts receivable, a **schedule of payments** can be used to find the cash expected to be paid to accounts payable.

Let's return to the example of Commercial Cleaning Supplies. This business purchases its cleaning products on credit. Accounts are usually settled in the month following purchase to take advantage of a 2% discount. Monthly purchases are expected to be as follows (all figures include 10% GST).

June (actual): \$20 000July (estimated): \$22 000

August (estimated): \$24 000

September (estimated): \$25 000

Figure 23.8 shows a schedule of payments to accounts payable.

# FIGURE 23.8 Accounts payable payments schedule

|                | Credit          |            | Collections in: |                 |  |  |
|----------------|-----------------|------------|-----------------|-----------------|--|--|
| Month          | purchases<br>\$ | July<br>\$ | August<br>\$    | September<br>\$ |  |  |
| June           | 20 000          | 19 600     | _               | _               |  |  |
| July           | 22 000          | _          | 21 560          | _               |  |  |
| August         | 24 000          | _          | _               | 23 520          |  |  |
| September      | 25 000          | _          | _               | _               |  |  |
| Total payments |                 | 19 600     | 21 560          | 23 520          |  |  |

The figures shown as payments are the credit purchases for the previous month, minus the 2% discount on offer for prompt payment. Therefore, the June purchases of \$20 000 are expected to be paid in July after 2% has been deducted;  $$20\ 000 - $400 = $19\ 600$ . The payments listed in the schedule can then be entered straight into the budgeted cash flow statement of the business.

Payments to accounts payable can also be staggered over several months, as with credit sales. However, each business determines its own pattern of paying accounts payable. This means that the payments schedule is normally easier to predict than collections from accounts receivable.

# 23.4 CHECK YOUR UNDERSTANDING



- 1 Describe the purpose of a schedule of collections from accounts receivable.
- 2 Discuss the following statement from a small business owner: 'I only have two suppliers, so I don't need to do a schedule of payments to accounts payable.'
- 3 'Budgeted data is just guesswork, so it can't satisfy the demands of *verifiability*.'
  Discuss this statement, with reference to a qualitative characteristic that supports the budgeting process.

schedule of

a table used by

businesses that purchase on credit to

predict cash outflows

to accounts payable

payments

# 23.5 BUDGETED INCOME STATEMENTS

Earning a profit is a basic objective for most small business owners. To achieve this, they need to have information relating to the firm's future earning potential. A second important report, the budgeted income statement, helps the business predict its future profit performance by examining predicted revenues and expenses over a given period of time.

A budgeted income statement is a prediction of a business's future profit performance. As such, it forces management to consider future profits. If management isn't satisfied with the predicted result (e.g. if a net loss is predicted), it should try to make changes that will improve the situation before the budget period commences. For example, it may review its predicted expenses for the budget period. Ideally, management should carry out such reviews regularly in order to set goals for the future and try to improve the profit of the business.

The format of the budgeted income statement is exactly the same as that of the standard income statement (see Chapter 20). The only difference is that the dollar values in the budgeted report are predictions, rather than historical results. The usual definition of profit is used in the budgeted income statement: budgeted profit equals revenues expected to be earned, minus the expenses expected to be incurred during a given period.

# THE DIFFERENCES BETWEEN STATEMENTS

It's important to distinguish between the items relevant to a budgeted cash flow statement and those that are used to prepare a budgeted income statement. Figure 23.9 highlights the differences between the two types of reports.

FIGURE 23.9 A comparison of budgeted cash flow statements and budgeted income statements

| Items in a budgeted income statement | Items in a budgeted cash flow statement |
|--------------------------------------|---|
| Revenue earned                       | Revenue received                        |
| Expenses incurred                    | Expenses paid                           |
| Credit sales                         | Collections from accounts receivable    |
| Bad debts                            | Payments to accounts payable/suppliers  |
| <ul> <li>Inventory losses</li> </ul> | Cash paid for new assets                |
| Depreciation                         | Capital contributions by owner          |
|                                      | Cash withdrawals by the owner           |
|                                      | Cash from new loans                     |
|                                      | Cash paid for loan repayments           |

In summary, the budgeted income statement reports on future estimates of revenues and expenses. The budgeted cash flow statement, on the other hand, reports on all expected cash inflows and outflows, whether or not the items involve revenues and expenses.

#### budgeted income statement

a report that shows estimates of revenues and expenses over a period of time, and the expected net profit to be made

# PREPARING A BUDGETED INCOME STATEMENT

Let's use an extended example to demonstrate how to prepare a budgeted income statement, and how it differs from a budgeted cash flow statement.

The owner of Moorabbin Mobiles provides the following information.

- Estimated sales for July are \$9000, with \$8000 of these sales expected to be collected during July. The remaining \$1000 is expected to be collected in August.
- Inventory to be purchased during July will cost about \$5000. It is expected that about \$4000 worth of inventory will be sold in July.
- Expenses expected in July:
  - Rent \$2000
  - Advertising \$500
  - Part-time wages \$600.
- Other payments expected in July:
  - Cash drawings by the owner \$900
  - Loan repayments \$800.

Given this information, a budgeted income statement can be prepared as shown in Figure 23.10.

# FIGURE 23.10 Budgeted income statement

# MOORABBIN MOBILES: BUDGETED INCOME STATEMENT FOR MONTH ENDING 31 JULY 2023

| Revenue              | \$    | \$    |
|----------------------|-------|-------|
| Sales                |       | 9 000 |
| Less: Cost of sales  |       | 4 000 |
| Gross profit         |       | 5 000 |
| Rent                 | 2 000 |       |
| Advertising          | 500   |       |
| Part-time wages      | 500   | 3 000 |
| Estimated net profit |       | 2 000 |

Some points to note in this statement:

- Sales expected to be earned during the month are reported, not just how much cash is expected to be received from customers.
- Inventory expected to be used during July is shown as 'Cost of sales' in this budget. It doesn't matter how much is paid for inventory the amount expected to be used to earn the sales of \$9000 should be used as the estimate.
- The expenses of rent, advertising and wages are all reported in the usual fashion.
- Both loan repayments and drawings are excluded from the budgeted income statement. While these items would be reported in a budgeted cash flow statement, they don't relate to revenues and expenses. Loan repayments relate to liabilities, and drawings are reported as a reduction in owner's equity. As the income statement is attempting to predict profit performance, neither of these two cash payments is relevant. Remember, when preparing a budgeted income statement, only revenue and expense items are considered.

# BUDGETED INCOME STATEMENTS AND VARIANCE REPORTS

If a predicted net profit isn't achieved at the end of a budgeted period, management should ask why this occurred. Therefore, as with budgeted cash flow statements, a variance report should be prepared for all budgeted income statements in order to identify both problems and areas of success.

The format of the variance report for the budgeted income statement is basically the same as that shown earlier (p. 418). Budgeted figures are reported, along with actual results, to identify all the variances for the period. As with budgeted cash flow statements, if a budgeted income statement is prepared on a month-by-month basis, the review process using the variance report should also occur at the end of each month.

The budget variance report for an income statement allows the business owner to review the profit performance of their business. All variances are labelled with a 'U' for unfavourable or an 'F' for favourable.

FIGURE 23.11 Budgeted income statement variance report

# MOORABBIN MOBILES: BUDGETED VARIANCE REPORT FOR MONTH ENDING 31 JULY 2023

|                          | Budget  | Actual  | Variance |               |
|--------------------------|---------|---------|----------|---------------|
| Revenue                  | \$      | \$      | \$       | %             |
| Sales                    | 9 000   | 10 000  | 1 000    | 11.1% F       |
| Less: Cost of sales      | 4 000   | 4 400   | 400      | 10.0% U       |
| Gross profit             | 5 000   | 5 600   | 600      | 12% F         |
| Rent                     | 2 000   | 2 000   | Nil      | _             |
| Advertising              | 500     | 600     | 100      | 20 <b>%</b> U |
| Part-time wages          | 500     | 550     | 50       | 10% U         |
| Total expenses           | 3 000   | 3 150   | 150      | 5% U          |
| Net profit for the month | \$2 000 | \$2 450 | \$450    | 22.5% F       |

This business owner would probably be pleased with the firm's performance in July. The variance report shows that the business performed even better than expected, with higher sales than predicted. This increased level of revenue caused an increase in some expenses, with the most significant increase being in cost of sales. However, the higher level of sales more than covered this increase in expenses, so the result was a positive profit for the owner.

As with all types of budgets, a variance report should be prepared for all budgeted income statements. The business owner can then use the results of the variance report in setting future budgets for the business. If the results aren't satisfactory, the owner may have to reduce expenses or look for new sources of revenue. As with all budgets, the business owner would be better prepared if a formal system of budgeting had been put in place.

#### 23.5 CHECK YOUR UNDERSTANDING



- 1 Explain the purpose of a budgeted income statement.
- 2 State three cash flow items that would not be included in a budgeted income statement.
- 3 A business owner has just prepared a budgeted income statement and is unhappy with the predicted result. Suggest two ways in which the owner may try to improve the profit performance of the business.

# 23.6 BUDGETED BALANCE SHEETS

### budgeted balance sheet

a report that shows estimated values for assets, liabilities and owner's equity at a particular point in time

A third type of budget is the budgeted balance sheet, which is a statement of a firm's predicted financial position at a particular date in the future. A budgeted balance sheet can be used to:

- report on the future situation of the firm's non-current assets (i.e. capital spending)
- examine the firm's future liquidity position
- evaluate the firm's gearing in the future
- show future details of the owner's equity in the business, including details of future profits and drawings.

The format of a budgeted balance sheet is virtually the same as that of a standard balance sheet. The only difference is that, in a budgeted balance sheet, the dollar values are based on estimates of future events rather than being a report based on historical events.

The budgeted balance sheet can be classified in the usual fashion to allow management to examine changes in liquidity. The estimated future current assets can be compared with the expected current liabilities. This should help management ensure that the future plans won't adversely affect the business. The results of liquidity analysis from a budgeted balance sheet should be read together with the budgeted cash flows to ensure that the firm will have enough liquidity to meet both its current and future needs.

# PREPARING A BUDGETED BALANCE SHEET

In order to prepare a budgeted balance sheet, you need to refer to the budgeted cash flows and the budgeted income statement. This is because there are important relationships between the different reports.

For example, the budgeted cash flow statement determines the predicted bank balance at some time in the future. This will result in either a current asset or current liability being reported in the budgeted balance sheet (depending on the cash balance). The budgeted income statement determines a budgeted profit figure, which will be added to the owner's capital in the budgeted balance sheet.

These examples show how a financial item in one budget may lead to another item. in a different budget. A logical starting point is the latest historical balance sheet. This provides factual data about the firm's assets and liabilities. Management then uses the budget to predict what is likely to happen to the business in the future.

Let's consider the current balance sheet of Victoriana Vintage, a trading business that sells vintage and artisanal furniture.

# FIGURE 23.12 Balance sheet

### VICTORIANA VINTAGE: BALANCE SHEET AS AT 30 JUNE 2023

| Current assets                 | \$     | \$     | Current liabilities | \$      | \$     |
|--------------------------------|--------|--------|---------------------|---------|--------|
| Accounts receivable            | 4 250  |        | Bank overdraft      | 580     |        |
| Inventory                      | 51 000 | 55 250 | GST debt            | 200     |        |
|                                |        |        | Accounts payable    | 6 600   | 7 380  |
| Non-current assets             |        |        | Owner's equity      |         |        |
| Shop fittings                  | 12 000 |        | Capital             | 56 000  |        |
| Less: Accumulated depreciation | 2 400  | 9 600  | Plus: Net profit    | 3 470   |        |
|                                |        |        | Less: Drawings      | (2 000) | 57 470 |
| Total assets                   |        | 64 850 | Total equities      |         | 64 850 |

Additional information has been extracted from the budgeted cash flows and budgeted income statement already prepared for the business.

From the budgeted cash flows for July:

Estimated balance at the end of July: \$608

Collections from accounts receivable: \$6800

Payments to accounts payable: \$5800

Cash drawings by the owner: \$3000

GST expected to be collected on cash sales: \$900

GST expected to be paid: \$500

From the *budgeted income statement* for July:

Budgeted net profit: \$3588

Estimated credit sales: \$10 000

Depreciation of fittings: \$200

Cost of sales: \$9000

Other information:

 Management expects to have to buy about \$7000 of inventory (plus GST) during July. All purchases are made on credit.

## Initial calculations

In order to prepare an accurate budgeted balance sheet, a number of calculations are required first. These depend on the information provided, but the basic objective is always to answer management's questions, such as:

- How much do we expect to be owed by accounts receivable on 31 July?
- How much do we expect to owe accounts payable at the end of July?
- What value do we report as the estimated inventory on hand?

The following calculations show one approach to finding the required answers.

### THE AMOUNT OWING BY ACCOUNTS RECEIVABLE:

| Balance as per previous balance sheet (30/6/23) | \$4 250 |         |
|---|---------|---------|
| Plus: Credit sales predicted for July (+ GST)   | 11 000  | 15 250  |
| Less: Estimated collections in July             |         | 6 800   |
| Estimated amount owing as at 31 July            |         | \$8 450 |

### THE AMOUNT OWING TO ACCOUNTS PAYABLE:

| Balance as per previous balance sheet (30/6/23) | \$6 600 |         |
|---|---------|---------|
| Plus: Credit purchases predicted for July       | 7 700   | 14 300  |
| Less: Estimated payments in July                |         | 5 800   |
| Estimated amount owing as at 31 July            |         | \$8 500 |

### THE AMOUNT OF INVENTORY ON HAND ON 31 JULY:

| Balance as per previous balance sheet (30/6/23) | \$51 000 |          |
|---|----------|----------|
| Plus: Credit purchases predicted for July       | 7 000    | 58 000   |
| Less: Predicted cost of sales for July          |          | 9 000    |
| Estimated amount of inventory as at 31 July     |          | \$49 000 |

### TO DETERMINE THE GST DEBT OR REFUND AS AT 31 JULY:

| GST owing as at 30 June               | \$200 |       |
|---------------------------------------|-------|-------|
| Plus: GST collected on cash sales     | 900   |       |
| Plus: GST charged on credit sales     | 1 000 | 2 100 |
| Less: GST paid on expense             | 500   |       |
| Less: GST charged by accounts payable | 700   | 1 200 |
| GST owing as at 31 July               |       | \$900 |

After these calculations are made, and the other information provided is considered, the budgeted balance sheet can be completed.

FIGURE 23.13 Budgeted balance sheet

### VICTORIANA VINTAGE: BUDGETED BALANCE SHEET AS AT 31 JULY 2023

| Current assets                 | \$     | \$     | Current liabilities | \$      | \$     |
|--------------------------------|--------|--------|---------------------|---------|--------|
| Cash at bank                   | 608    |        | GST debt            | 900     |        |
| Accounts receivable            | 8 450  |        | Accounts payable    | 8 500   | 9 400  |
| Inventory                      | 49 000 | 58 018 |                     |         |        |
|                                |        |        |                     |         |        |
| Non-current assets             |        |        | Owner's equity      |         |        |
| Shop fittings                  | 12000  |        | Capital             | 57 470  |        |
| Less: Accumulated depreciation | 2 600  | 9 400  | Plus: Net profit    | 3 588   |        |
|                                |        |        | Less: Drawings      | (3 000) | 58 058 |
| Total assets                   |        | 67 418 | Total equities      |         | 67 458 |

# **EVALUATING THE BUDGETED BALANCE SHEET**

The accounting equation of assets = liabilities + owner's equity still holds true in a budgeted balance sheet. The budgeted balance provides the owner of the business with predictions of where the business might be in one month's time.

For Victoriana Vintage, if the owner's predictions come true, the bank balance will no longer be in overdraft. The amounts owing by accounts receivable, and to accounts payable, are expected to increase significantly. If the owner is worried about the small bank balance, they may decide to cut back on their personal drawings.

These are simple observations from the budgeted balance sheet shown in our example. In a real-world situation, budgeted reports provide a lot more information on which to base decisions, especially when they are read together.

## 23.6 CHECK YOUR UNDERSTANDING



- 1 Explain the purpose of a budgeted balance sheet.
- 2 A budgeted balance sheet is said to have links to other budgets. Identify four items that could appear in a budgeted balance sheet and which are based on financial data reported in other budgets.
- 3 Explain how a business owner can determine the predicted GST of their business as part of the budgeting process.

# 23

# **CHAPTER REVIEW**

# **KEY CONTENT**

- Budgeting is the process of predicting future financial transactions to enable management to improve its decision making. A business can prepare many different types of budgets, in areas such as sales, purchases, materials, labour and expenses. Budgeted accounting reports are used to predict future financial transactions for the business.
- [23.2] While a cash flow statement reports on what has happened in terms of cash flows, a budgeted cash flow statement estimates what is expected to occur in the future. It lists all the anticipated cash inflows and cash outflows under the usual headings and predicts a future cash surplus (or deficit) for a period.
- Budgeted cash flow statements should be reviewed at the end of each reporting period. A budget variance report compares the budget estimates with the actual results achieved, and highlights any differences between them. These differences are known as budget variances, and may be either favourable or unfavourable.
- Businesses that offer credit to customers, or that buy inventory on credit terms, need to reflect the activities of accounts receivable and accounts payable in their budgeting. If there are credit sales, a collection schedule shows when credit sales are expected to turn into cash receipts. For credit purchases, a payment schedule predicts cash outflows to accounts payable.
- The budgeted income statement shows estimates of revenues and expenses over a period of time, and the expected net profit to be made for that period. As with budgeted cash flow statements, a variance report should be prepared for all budgeted income statements in order to identify both problems and areas of success.
- The budgeted balance sheet shows estimated values for assets, liabilities and owner's equity at a particular point in time. Its format is the same as that of a standard balance sheet, except that the dollar values are based on estimates of future events. The information for the budgeted balance sheet is drawn from the budgeted cash flows and the budgeted income statement.

# **CHAPTER 23 EXERCISES**

# 1 BUDGETED CASH FLOWS FOR A MONTH





David Fang, the owner of Peninsula Scuba Supplies, is concerned about the amount of cash the business has in the bank. On 1 August 2023, the balance of the account was \$850. Fang supplies the following estimates of the transactions he expects to have during August.

| Credit sales                 | \$2 000 | Cash sales                        | \$6 000 | Wages        | \$400 |
|------------------------------|---------|-----------------------------------|---------|--------------|-------|
| Advertising                  | 600     | Office expenses                   | 1 200   | Rent         | 2 000 |
| Credit purchases             | 4 000   | GST receipts                      | 600     | GST payments | 380   |
| Payments to accounts payable | 3 600   | Receipts from accounts receivable | 1 000   | Drawings     | 4 000 |

- a Using any of the above information that is relevant, prepare a budgeted cash flow statement for Peninsula Scuba Supplies for the month of August 2023.
- **b** Comment on the firm's cash position.

**c** Describe two practical steps that Fang could take to try to improve the situation predicted for August.



# **2 BUDGETED CASH FLOWS FOR A QUARTER**



Gayle Mathews is the proprietor of Donvale Trading. She wants to buy \$7000 worth of new equipment for the business.

On 1 October 2023, the business only had \$3200 in the bank. Over the last few months, the business's sales have been around \$8000 per month. It only deals on a cash basis. Mathews is confident she can increase her revenue over the next few months to the following amounts: October \$9000, November \$9500 and December \$10 000.

The following transactions are expected to occur over the next quarter.

|                  | October<br>\$ | November<br>\$ | December<br>\$ |
|------------------|---------------|----------------|----------------|
| Wages            | 3 000         | 3 200          | 3 200          |
| Advertising      | 300           | 400            | 500            |
| Cash purchases   | 2 000         | 2 200          | 2 400          |
| Vehicle expenses | 300           | 300            | 300            |
| Drawings         | 2 200         | 2 200          | 2 400          |

In addition to the above transactions, Donvale Trading's GST transactions are expected to include the following.

|                 | October<br>\$ | November<br>\$ | December<br>\$ |
|-----------------|---------------|----------------|----------------|
| GST collections | 900           | 950            | 1 000          |
| GST payments    | 260           | 290            | 320            |

- a Prepare a budgeted cash flow statement for Donvale Trading for the quarter ending 31 December 2023. Your budget should show the estimated bank balance at the end of each month.
- **b** In which month, if any, should Mathews purchase the new equipment costing \$7000? Give reasons for your answer.
- **c** Does your budgeted cash flow statement prepared in part **a** satisfy the requirement of *verifiability*? Explain your answer fully.



## 3 BUDGETED CASH FLOWS FOR A QUARTER



The following information relates to Hobby HQ, a small business owned and operated by Adam Tieppo.

|                            | July<br>\$ | August<br>\$ | September<br>\$ |
|----------------------------|------------|--------------|-----------------|
| Estimated sales (all cash) | 6 500      | 6 500        | 7 000           |
| GST receipts               | 650        | 650          | 700             |
| Regular expenses:          |            |              |                 |
| – Wages                    | 1 200      | 1 500        | 1 500           |
| – Cleaning                 | 320        | 320          | 320             |
| – Office expenses          | 100        | 100          | 100             |
| – Payments to suppliers    | 3 250      | 3 250        | 3 500           |
| – GST payments             | 367        | 367          | 392             |

In addition to the above items, the firm's annual insurance premium of \$1350 (plus GST of \$135) is due on 16 August. Loan repayments of \$1600 per quarter are payable on

10 January, 10 April, 10 July and 10 October each year. Tieppo normally withdraws \$1600 per month for private use. The business has \$1600 in the bank on 30 June 2023.

- a Prepare a budgeted cash flow statement for Hobby HQ for the three months ending 30 September 2023.
- **b** Write a report to Tieppo commenting on the liquidity situation revealed by the budgeted cash flow statement prepared in part **a**. Your report should recommend any necessary action he should take.
- **c** What is Tieppo's position expected to be in relation to GST at the end of the quarter ending 30 September 2023? What are the implications of this for planning future cash transactions?

# 4 SCHEDULE OF COLLECTIONS – ACCOUNTS RECEIVABLE





Scoresby Landscaping provides credit to its regular customers. Based on past experiences, about 75% of its total sales are on credit. Of these sales, approximately 60% of the accounts receivable pay in the month after the service was provided; the other 40% pay in the second month after the credit has been granted.

The following revenue data was made available by the management of the business.

| Month     | Total sales (including GST) |             |  |
|-----------|-----------------------------|-------------|--|
| July      | \$20 000                    | (actual)    |  |
| August    | 22 000                      | (actual)    |  |
| September | 22 000                      | (estimated) |  |
| October   | 24 000                      | (estimated) |  |
| November  | 26 000                      | (estimated) |  |

- a Prepare a table to show the breakdown of sales revenue into cash and credit sales on a monthly basis (from July to November).
- **b** Using the credit sales data from the table in part **a**, prepare a schedule of collections from accounts receivable for September, October and November.
- Prepare a budgeted cash flow statement extract, showing how the information derived from the tables would appear under the heading of 'Cash flows from operating activities' for September, October and November. (*Hint*: don't forget to separate cash sales from the GST expected to be collected; divide the cash sales by 11.)

# 5 SCHEDULE OF COLLECTIONS AND SCHEDULE OF PAYMENTS





The following sales information relates to the business trading as The Organic Nursery, owned by Orla McLynskey.

| Month    | Actual sales* | Month | Estimated sales* |
|----------|---------------|-------|------------------|
| January  | \$40 000      | April | \$35000          |
| February | 37 000        | May   | 30 000           |
| March    | 35 000        | June  | 25 000           |

<sup>\*</sup>Note: all figures provided for sales include 10% GST.

Past revenue data shows that 70% of the total sales charged have been on a cash basis, with only 30% being made on credit. Customers granted credit usually pay as follows.

- 60% pay one month after the job is completed.
- 30% pay two months after the invoice date.
- The remaining 10% usually pay in the third month after the goods have been provided.

McLynskey also supplies the following information relating to the purchases of inventory for the business, which are usually made on a credit basis.

| March | \$20 000 | (actual)    |
|-------|----------|-------------|
| April | \$18 000 | (estimated) |
| May   | \$16 000 | (estimated) |
| June  | \$14 000 | (estimated) |

Amounts owing to accounts payable are all settled in the month after purchase, to take advantage of a 5% discount.

- **a** Prepare a table and calculate the dollar amounts of both cash and credit sales for the months from January to June.
- **b** Prepare a schedule of collections from accounts receivable for the quarterly budget period of April to June.
- **c** Calculate the amount of GST expected to be collected on cash sales during April, May and June.
- **d** Draw up a schedule of payments to accounts payable showing clearly the actual cash to be paid to accounts payable in April, May and June.



# **6 BUDGETED CASH FLOW STATEMENT**



Joseph Zaita is the proprietor of JZ Music. He supplied the following information regarding his business.

| Balance of bank account on 1 August 2023             |                | \$2300 |
|--|----------------|--------|
| Sales over the last two months, including GST, were: |                |        |
| June   | – Cash sales   | 16 000 |
|  | – Credit sales | 18 000 |
| July   | – Cash sales   | 18 000 |
|  | – Credit sales | 20 000 |

During August, all sales are expected to be 10% higher than the July figures. The usual trend for Zaita's business is that 80% of credit customers pay in the month after invoice, with the other 20% paying in the second month after being charged.

The business had the following purchases during July (including GST).

| Cash   | \$1 100 |
|--------|---------|
| Credit | 9 900   |

During August, Zaita expects to have cash purchases of \$1000 and credit purchases of \$10 000. It is his policy to pay accounts payable in the month after purchase.

The firm's regular payments include the following.

| Advertising     | \$1000 per month, plus GST |
|-----------------|----------------------------|
| Wages           | 4000 per month             |
| Drawings        | 1000 per month             |
| Loan repayments | 800 per month              |

The firm is also paying an annual rates bill of \$4800 by instalments, with \$1200 being payable on 10 February, 10 May, 10 August and 10 November.

During August, Zaita plans to buy some new office furniture at a cost of about \$2500, plus GST. On 27 August, he expects to pay a deposit of \$2000 on a new recording and sound system, costing \$20 000. The sound system should be available some time during September. No GST has to be paid on the sound system during August.

- a Prepare a budgeted cash flow statement for JZ Music for the month of August 2023.
- **b** Comment on the cash position of the business, taking into account that it expects to pay for the remainder of the sound system in September.
- c If Zaita decides not to pay cash for the sound system, what type of finance would you recommend as appropriate for such an asset? Give reasons for your answer.

# 7 CASH BUDGET VARIANCE REPORT





Jan Abbey prepares a budgeted cash flow statement for her business, Abbey's Fryers, on a regular basis. However, she's concerned that, even though her budget estimated a cash balance of \$2150 at the end of November, the bank statement she just received indicates something very different.

After looking at her cash records, Abbey found the following differences between her budget and the actual cash flows.

|   | Budget  | Actual  |
|---|---------|---------|
| Cash flows from operating activities      | \$      | \$      |
| Cash sales                                | 12000   | 13 000  |
| Collections from accounts receivable      | 6000    | 2 400   |
| GST receipts                              | 1 200   | 1 300   |
| Wages                                     | (5 500) | (2 600) |
| Advertising                               | (800)   | (400)   |
| Rent                                      | (2 400) | (2 400) |
| Payments to suppliers                     | (6 600) | (6 800) |
| Office expenses                           | (400)   | (420)   |
| GST payments                              | (1 020) | (1 302) |
| Net cash provided by operating activities | 2 480   | 2 778   |
| Cash flows from investing activities      |         |         |
| Purchase of computer                      | _       | (3 000) |
| Net cash used in investing activities     | _       | (3 000) |
| Cash flows from financing activities      |         |         |
| Loan repayments                           | (600)   | (700)   |
| Drawings                                  | (1 200) | (1 800) |
| Net cash used in financing activities     | (1 800) | (2 500) |
| Increase/decrease in cash held            | 680     | (2 722) |
| Bank balance 1 November 2023              | 1 500   | 1 500   |
| Bank balance 30 November 2023             | 2180    | (1 222) |

- **a** Prepare a budget variance report, including variances in dollar amounts and percentages, for Abbey's Fryers for November 2023.
- **b** Write a report to Abbey, explaining why the business didn't achieve the projected cash figure. Your report should include both positive and negative features of the budget.
- **c** Based on the events that occurred during November, comment on Abbey's approach to budgeting.



# SPREADSHEET 8 CASH BUDGET VARIANCE REPORT



The following comparison of budgeted cash flows and actual cash flows has been prepared for Donaldson's Dry Cleaning for the quarter ending 30 September 2023.

|   | Budget   | Actual   |
|---|----------|----------|
| Cash flows from operating activities      | \$       | \$       |
| Cash sales                                | 24 000   | 32 000   |
| Collections from accounts receivable      | 12 000   | 14 500   |
| GST receipts                              | 2 400    | 3 200    |
| Wages                                     | (6 000)  | (6 500)  |
| Insurance                                 | (800)    | (840)    |
| Payments to suppliers                     | (14 000) | (16 400) |
| Postage & telephone                       | (400)    | (380)    |
| Cleaning                                  | (1 200)  | (1 200)  |
| GST payments                              | (2 140)  | (2 342)  |
| Net cash provided by operating activities | 13 860   | 22 038   |
| Cash flows from investing activities      |          |          |
| Purchase of new equipment                 | (5 000)  | (4 600)  |
| Net cash used in investing activities     | (5 000)  | (4 600)  |
| Cash flows from financing activities      |          |          |
| Loan from ABC Finance                     | 5 000    |          |
| Drawings                                  | (4 500)  | (3 800)  |
| Net cash used in financing activities     | 500      | (3 800)  |

The business had \$500 in the bank on 1 July 2023.

- a Prepare a budget variance report for the quarter ending 30 September 2023 to reveal the significant differences between the budgeted and actual data.
- **b** What was the predicted cash balance on 30 September?
- c What was the actual cash balance on 30 September?
- d State, and explain, the main causes of the difference between the budgeted and actual bank balance.
- e Do you think a quarterly period is appropriate for budgeted cash flow statements? Give reasons for your answer.



# 9 BUDGETED CASH FLOWS AND INCOME STATEMENT



David Santacroce is the owner of a business called Scrambler, which sells designer bags and satchels.

The transactions listed below are those he expects to occur during the month of October 2023.

- Total sales are predicted to be \$16 000, plus GST. Half of the sales are expected to be collected during October, and the other half in November.
- The business applies a mark-up of 100% on all goods sold.
- Inventory at the start of October was \$30 500. Cash purchases of inventory should be about \$3000. GST of 10% will be payable on all purchases paid for during October.
- The monthly rent payment of \$2000 is expected to be paid on 1 October (plus \$200 GST).
- Wages for October are predicted to be \$2000.
- Santacroce has arranged for newspaper advertising during October at a cost of \$1400, plus GST. This will be paid in October.
- Santacroce intends to withdraw \$500 per week for personal use.

- A loan of \$10 000 from NAB is expected to be granted on 14 October.
- The balance of the firm's bank account on 1 October 2023 is \$2700.
- In the balance sheet as at 30 September, the owner's capital was reported as \$64 000.
- a Prepare a budgeted cash flow statement for Scrambler for the month of October 2023.
- **b** Prepare a budgeted income statement for October to determine a budgeted net profit figure.
- **c** Make a list of any items that you have included in the budgeted cash flow statement that you did NOT include in the budgeted income statement.
- **d** Explain why some items are reported in a budgeted cash flow statement but not in a budgeted income statement.
- e Review the above items and identify those to be reported in a balance sheet. Prepare an extract from the budgeted balance sheet to show the current assets and owner's equity sections as at 31 October 2023.

# 10 FROM BALANCE SHEET TO BUDGETED BALANCE SHEET





Lisa Gannon is the proprietor of Bayside Books. She provides the following accounting report.

# **BAYSIDE BOOKS: BALANCE SHEET AS AT 31 AUGUST 2023**

| Assets              | \$      | Liabilities              | \$     | \$      |
|---------------------|---------|--------------------------|--------|---------|
| Accounts receivable | 3 200   | Bank overdraft           | 1 100  |         |
| Inventory           | 75 000  | Accounts payable         | 2 900  |         |
| Equipment           | 26 800  | GST liability            | 1 000  |         |
| Vehicle             | 30 000  | Loan – TY Finance        | 24 000 | 29 000  |
|                     |         | Owner's equity – capital |        | 106 000 |
|                     | 135 000 |                          |        | 135 000 |

During September 2023, Gannon expects the following to occur.

- Of the accounts receivable at 31 August, \$3000 is expected to be collected in September, with the other \$200 expected to be received in October.
- Credit sales to be earned in September should be about \$2500 (plus GST), while cash sales are expected to be \$7800 (plus GST). All credit customers are offered 30 days' credit, and all of them are expected to settle their accounts in October.
- All accounts payable owed money at 31 August will be paid during September.
- Gannon has decided to pay cash on delivery for all purchases from now on. In September, she anticipates buying inventory costing \$5400 (plus GST).
- Cost of sales in September is estimated to be \$4500.
- The usual monthly expenses paid in cash are: wages \$2500, petrol \$280 (plus GST) and advertising \$400 (plus GST).
- The business pays its GST monthly. The GST liability from 31 August is due for payment on 28 September.
- Gannon expects to repay \$5000 to TY Finance on 27 September, and she usually withdraws \$300 per week from the business.
- **a** Prepare a budgeted cash flow statement for Bayside Books for the month ending 30 September 2023.
- **b** Write a brief comment on the liquidity of the business.
- **c** Prepare a budgeted income statement for Bayside Books for the month ending 30 September 2023.
- d Write a brief comment on the expected profit result of the business.
- e Explain why the two budgets show different results for the budget period.
- f Prepare a budgeted balance sheet as at 30 September 2023.



# 11 FROM BALANCE SHEET TO BUDGETED BALANCE SHEET



The following balance sheet relates to a small business trading under the name of Wizard's Wardrobe, owned by Megan Egan.

### WIZARD'S WARDROBE: BALANCE SHEET AS AT 31 MARCH 2023

| Assets              | \$     | Liabilities       | \$     |
|---------------------|--------|-------------------|--------|
| Cash at bank        | 3 500  | Accounts payable  | 2 700  |
| Accounts receivable | 4 400  | GST debt          | 1 500  |
| Inventory           | 70 800 | Loan from R Biggs | 3 500  |
| Vehicle             | 16 800 | Owner's equity    |        |
|                     |        | Capital – Egan    | 87 800 |
|                     | 95 500 |                   | 95 500 |

According to the owner's plans, the following is expected to occur in April 2023.

- Sales to be earned during the month will be \$10 000, of which \$7500 will be on a cash basis (plus 10% GST). Sales charged to accounts receivable are usually received in the month following the sale.
- Accounts receivable as at 31 March are all expected to pay during April.
- Inventory worth \$5500 (including GST) is expected to be purchased on credit during April. Accounts payable will be paid \$2500 during April.
- New equipment will be purchased during April at a cost of \$2000 (plus GST), which will be paid in cash.
- Advertising costs for April will be \$500 (plus GST), all of which will be paid by EFT in April.
- On 18 April, R Biggs will be paid \$1100, which includes \$100 interest.
- Other expenses for April are expected to be wages \$2450 and petrol \$230 (plus GST).
- Egan expects to withdraw a total of \$1600 during April.
- The GST owing in the March balance sheet will also be paid during April.
- a Prepare a budgeted cash flow statement for the month of April 2023.
- **b** Prepare a budgeted income statement for the month of April 2023.
- c Prepare a budgeted balance sheet as of April 2023.
- **d** Write a brief comment on the results revealed by your three budgets.



# 12 VARIANCE REPORT - INCOME STATEMENT



The following comparison of budgeted and actual data has been prepared for Constantino's Cookware for the month ending 30 June 2023.

|                       | Budget | Actual |
|-----------------------|--------|--------|
| Revenue               | \$     | \$     |
| Sales                 | 12 000 | 11 000 |
| Less: Cost of sales   | 5 200  | 5 000  |
| Gross profit          | 6 800  | 6 000  |
| Less: Stock loss      | 500    | 900    |
| Adjusted gross profit | 6 300  | 5 100  |
| Less: Expenses        |        |        |
| Rent                  | 1 350  | 1 350  |
| Advertising           | 300    | 600    |
| Insurance             | 150    | 150    |
| Wages                 | 600    | 1 000  |

- a Prepare an income statement variance report for the month ending 30 June 2023 to reveal the significant differences between the budgeted and actual data.
- **b** What was the predicted net profit for June?
- c What was the actual net profit for June?
- d Explain why the predicted result wasn't achieved in June 2023.

# 13 VARIANCE REPORT – INCOME STATEMENT





The owner of Pandora's Box is concerned about how his business is performing lately. His knowledge of accounting isn't strong, but he regularly prepares budgets and has offered the following for your consideration.

# **BUDGETED INCOME STATEMENT FOR JULY 2023**

| Revenue:         | \$     | \$     | \$      |
|------------------|--------|--------|---------|
| Sales            | 12 000 |        |         |
| Bank loan        | 5 000  |        |         |
| GST collected    | 1 200  | 18 200 |         |
| Expenses:        |        |        |         |
| Wages            | 5 000  |        |         |
| Cost of sales    | 1 000  |        |         |
| Office expenses  | 600    |        |         |
| Insurance        | 1 200  |        |         |
| GST paid         | 280    |        |         |
| Loan repayments  | 500    |        |         |
| Stock loss       | 500    |        |         |
| Owner's drawings | 12 000 | 21 080 |         |
| Net profit       |        |        | (2 880) |

At the end of July 2023, the actual results reported by the owner were as follows.

# **INCOME STATEMENT FOR JULY 2023 (ACTUAL RESULTS)**

| Revenue:              | \$     | \$     | \$      |
|-----------------------|--------|--------|---------|
| Cleaning sales        | 14 000 |        |         |
| Bank loan             | 5 000  |        |         |
| GST collected         | 1 400  | 20 400 |         |
| Expenses:             |        |        |         |
| Wages                 | 6 000  |        |         |
| Cleaning materials    | 1 000  |        |         |
| Office expenses       | 500    |        |         |
| Insurance (12 months) | 1 200  |        |         |
| GST paid              | 270    |        |         |
| Loan repayments       | 500    |        |         |
| Stock loss            | 800    |        |         |
| Owner's drawings      | 14 000 | 24 270 |         |
| Net profit            |        |        | (3 870) |

- a It appears that this owner has included some irrelevant items in his reports. Redraft his budgeted income statement to accurately predict his budgeted net profit for the month of July 2023.
- **b** Prepare an income statement variance report for Pandora's Box to reveal the actual result for July and all variances for the month.
- **c** Comment on the owner's concerns, given that both the budgeted and actual results for July indicated a net loss for the month. Explain why this occurred, and describe the true situation.

# SPREADSHEET

# **CASE STUDY**



Johnny Fieschi is the owner of Astronomica, a business selling telescopes and astronomical charts, as well as binoculars and other optical devices.

Fieschi is worried; at the end of December 2022, there is only \$260 in the business bank account. Fieschi's other concern is that he would like to purchase a new vehicle (costing about \$25 000) for the business, but doesn't know when he will have the \$10 000 deposit required.

One of his friends has advised him to prepare a forecast of his future transactions, but he is unsure how to do this. He has asked for your help, and provides the following information about his business.

(Note: you don't need to take GST into account in this activity.)

- The January–March quarter is Fieschi's busiest time of year. In 2022 he earned the following revenue: January \$12 000, February \$14 000 and March \$15 000. Business then slowed down a little in the next quarter, when he earned the following revenue: April \$14 000, May \$12 000 and June \$10 000. Fieschi is confident that revenue will be higher in the early part of 2023. He has already accepted orders for sales in January 2023 for a total of \$13 500, all of which are expected to be paid for in January.
- For the months of February and March, Fieschi expects to earn sales about 10% higher than the previous year, but in the quarter April–June he expects his revenue to be about 5% lower than in the same quarter last year.
- Fieschi has tried various mark-ups over the years. He has realised that some of his products aren't available elsewhere, and therefore he currently works on a mark-up of 200% on all optical items sold.
- The business employs two assistants who are each paid on Friday. One is employed full-time and is usually paid \$550 per week. The other assistant is employed on a casual basis. During the busiest months (January–March), the casual employee will probably be paid about \$500 per week. In the period April–June, his wages will drop back to about \$400 per week. *Note*: in 2023, there are four paydays in each month, with the exception of March, June, September and December when there are five Fridays and therefore five paydays.
- The firm has one van, which delivers all large orders to customers. Petrol expenses for the van are usually about \$200 per month, but in the January–March quarter this will go up to about \$240 per month. The van is due for a service in February and this will cost about \$320.
- The insurance on the van is due on 2 March each year. It is expected to cost \$640 this year. Registration of the vehicle is due on 11 June and should be about \$840.
- Fieschi advertises his business through Google Ads, at a cost of \$150 per month.

- New equipment will have to be purchased during February at a cost of \$3800. Fieschi has set up a credit arrangement to help with this purchase. The supplier has agreed to take a \$1000 deposit on delivery of the equipment; the balance will be paid off at \$400 per month.
- Fieschi does his office work at home. He usually incurs office expenses for the business at around \$100 per month.
- Loan repayments of \$1500 are due on 15 February, 15 May, 15 August and 15 November.
- Fieschi usually withdraws \$500 each Friday for personal use.
- a A spreadsheet is recommended for this case study. Prepare a budgeted cash flow statement for Astronomica for the period January-June 2023. Your budget should show the anticipated cash balance at the end of each month. Keep a copy of the spreadsheet for use with part c.
- **b** In which month will Fieschi be able to afford the \$10 000 deposit for a new vehicle? Give reasons for your answer.
- c Fieschi has had second thoughts about the expected downturn in business in the April-June period. He is considering a new advertising strategy; it will cost him \$100 more each month (for April-June) but is expected to increase his revenue during this quarter by 8%. However, wages will increase by \$150 per week, and the extra jobs will increase the amount of materials used. Redraft your budget and note the changes in the estimated bank balances. Should Fieschi go ahead with this advertising plan? Give reasons for your answer.

# **CHAPTER CHECKLIST**

Now that you've finished Chapter 23, double-check your progress.

Are you ready for your Unit 2 assessment?

## I have ...

- ompleted all 'Check Your Understanding' questions
- ompleted all exercises
- ompleted the end-of-chapter activities
- Manded in my workbook for marking.

## I understand ...

- ocuments used by a business to record financial transactions
- Main historical and budgeted classified accounting reports for a trading business:
  - Cash Flow Statement
  - Income Statement
  - Balance Sheet.
- or reporting of accounts receivable and accounts payable in the Cash Flow Statement, Income Statement and Balance Sheet.

### I can ...

- use correct accounting terminology
- prepare historical and budgeted accounting reports for a trading business using manual methods and ICT.
  - © VCAA; by permission.





# **PREPARE**

Read back over the chapter now, then complete the online revision activity.



### \A/ATCH

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