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Business Analysis and Valuation

USING FINANCIAL STATEMENTS


THIRD ASIA-PACIFIC EDITION



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Guide to the text

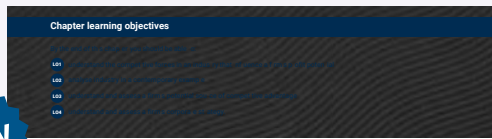
As you read this text you will find a number of features in every chapter to enhance your study of Business Analysis and Valuation and help you understand how the theory is applied in the real world.

PART-OPENING FEATURES



See the **Chapter List** outlining the chapters contained in each part for easy reference.

CHAPTER-OPENING FEATURES



NEW Industry evaluation

In analysing a firm's profit potential, an analyst has to first assess the profit potential of each of the industries in which the firm competes. There are systematic differences between the profitability of various industries which can change over time as industries evolve. Figure 2.1 provides 10-year growth rates from 1996 to 2005 and 2006 to 2015 for Australian and New Zealand industry groups which reflect the changing nature of these economies during those periods.

Identify the key concepts that the chapter will cover with the **NEW Learning Objectives** at the start of each chapter.



Find the main heading covering each learning outcome quickly with **NEW LO icons**.



At the end of the chapter, test your comprehension of the learning objectives with the **Checking and Applying Your Learning** questions.

FEATURES WITHIN CHAPTERS

Critically analyse key concepts introduced in the chapter with **Key Analysis Questions** boxes.

KEY ANALYSIS QUESTIONS

A number of business questions will be useful to an analyst assessing the various elements of operating management.

- Are the firm's margins consistent with its strategy? Should they usually be less or more?
- Are the firm's margins changing? If so, is this due to changes in its operating strategy, changes in its operating costs, or changes in its operating revenue?
- Is the firm managing its operating costs? If so, how? Are there any other factors driving these costs? Are there any other factors driving these revenues?
- Are the firm's tax policies sustainable? Or is the current tax rate influenced by one-time tax credits?
- Do the firm's tax planning strategies lead to other business costs? For example, if the operations are located in tax havens, how does this affect the company's profit margins and asset utilisation? Are the benefits of tax planning strategies (reduced tax) greater than the increased business costs?

Link chapter concepts to real world examples with the **NEW Kathmandu Case** boxes.

ANALYSIS OF KATHMANDU'S CASH FLOW

Kathmandu and Super Retail Group reported their cash flows using the indirect method for the cash flow statement. Figure 5.14 recasts these statements using the approach discussed above so that we can analyse the two companies' cash flow dynamics.

Cash flow recast is presented in Figure 5.14 shows Kathmandu had operating cash inflow before working capital changes of \$70.7 million in 2017. In 2018, Kathmandu invested more heavily in its operating working capital than in 2017. This is due to higher operating cash inflows before working capital changes of \$83.3 million in 2018 compared with \$70.7 million in 2017.

Both Kathmandu and Super Retail Group needed heavily in operating long-term assets in 2018. Kathmandu paid \$82.4 million to acquire Obuz, a US-based outdoor footwear brand. While investing \$1 million in P.E. the payment for this acquisition meant that free cash flow to debt and equity in 2018 was negative, in contrast to 2017.

Kathmandu borrowed to help fund the acquisition. After taking into account the impact of the borrowing and loan repayments, Kathmandu still consistently positive free cash flow to debt and equity in 2018. The results in Figure 5.10 show that the acquisition. Despite this capital raising and debt, Kathmandu still consistently positive free cash flow to debt and equity in 2018. The results in Figure 5.10 show that

Analyse and apply key chapter concepts in real world contexts with **Case Study** boxes.

PRIVATE EQUITY

Private equity buyouts have become a viable alternative to a trade sale or the appointment of a successor of an Australian family and privately owned business. One reason why private investment firms have become an important group of players in the acquisition market is that private equity firms offer to buy the target firm with the cooperation of management in these cases, and then take the

NEW Industry Insights from real professionals and researchers contextualise key chapter concepts. Apply your understanding with reflective activity questions.

A PRACTITIONER ADVISES

Australian financial analyst on the benefits of the framework of financial analysis:

The real world is complex and keeps changing. You need a framework to be able to understand the real world. If you don't have a framework to work with, then you actually can't operationalise anything, even if reality is different to what the text book would say. If you don't have the framework in this textbook, then everything is unexplainable and everything is just random, and you can't make a forecast and you can't plan ahead.

This textbook provides such a framework, to give you a way of thinking about value, and to enable you to make a forecast and plan ahead. It provides order, and helps you to pull apart real-world complexity. This textbook gives you a way to think about how to communicate that complexity. But you can't hold it too tightly because the real world is different.

The framework of the four steps of financial statement analysis (business strategy analysis, accounting analysis, financial analysis and prospective analysis) in this textbook gives you a way of communicating the complexity of the real world.

Financial analysis is about helping decision-makers, but also importantly, learning about it will give you empathy for decision makers, which will make you a better advisor. Decision makers have a very difficult job to do, and if you can understand where they're coming from, and you can understand the problems they have and you can help them solve their problems in a constructive way – that's actually understanding how to answer a question that somebody has. And that's going beyond just being a service provider, to actually help someone do what they need to do, better.

Reflective activity: What techniques do you use in other subject areas, or in other activities that you undertake, to help you to understand a complex situation, and to represent it in a simplified manner to enable decisions to be made? Some examples of complex situations might be a strategy for a sports game, or planning an overseas trip on your own within a tight budget.



INDUSTRY INSIGHT

END-OF-CHAPTER FEATURES

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

Review your understanding of the key chapter topics with the **Summary**.

Find relevant case studies in Part 4 to extend on chapter concepts with the **Case Link**.

SUMMARY
Equity security analysis is the evaluation of a firm and its prospects from the perspective of a current or potential investor in the firm's shares. Security analysis is one component of a larger investment process that involves:

- 1 establishing the objectives of the investor or fund
- 2 forming expectations about the return of individual securities
- 3 combining individual securities to maximise progress towards the investor's objectives

Some security analysis is a day that a firm possesses the proper desired characteristics prior to its portfolio. However, especially for buy-side and sell-side security analysts, such activity will be rewarding for those with the strongest comparative advantage. Those analysts will be able to identify any mispricing on the market and exert pressure on the price to correct the mispricing. The types of effort that are productive in this domain depend on:

- the degree of market efficiency. A large body of evidence exists that supports a high degree of efficiency in active share markets. Past studies have represented the debate on this issue in practice. A wide variety of approaches to fund

SUMMARY
Equity security analysis is the evaluation of a firm and its prospects from the perspective of a current or potential investor in the firm's shares. Security analysis is one component of a larger investment process that involves:

- 1 establishing the objectives of the investor or fund

Understanding that positions the analyst to interpret new information on as it arrives and infer its implications. Finally, the chapter summarises some key findings of the research on the performance of both sell-side and buy-side security analysts.

CHECKING AND APPLYING YOUR LEARNING

- 1 What does market efficiency mean? How does market efficiency relate to the speed at which information is reflected in share prices and to the secondary with which investors can trade? (LO1)
- 2 Deep to many years of research, the evidence on market efficiency described in this chapter appears to be inconclusive. Some argue that this is because researchers have been unable to link company fundamentals to share prices precisely. (LO1)
- 3 Peter Low, a professor of finance and mathematical statistics, 'I have collected massive amounts of data on markets and the companies listed on them, going back 50 years in some cases. The power of computer algorithms means that I can predict future share prices and the factors that lead to those changes. I can beat any analyst's fundamental analysis, so there's no point in using technical analysis.' (LO1)
- 4 What is the difference between fundamental and technical analysis? Can you think of any trading strategies that use technical analysis? What are the strengths and weaknesses of each? (LO1)
- 5 Investment funds come in many different types. Investment strategies include income funds (focus on shares with high dividend yields), growth funds (invest in shares that are expected to have high capital appreciation value), and short funds (bet against shares). They consider to be overvalued. What types of news are likely to lead to a decline in share prices? (LO2)
- 6 Why don't analysts follow small firms? What practices present, and what investment opportunities exist? (LO2)
- 7 Biomedico Company went public. You are a sophisticated investor. fundamental analysis as a way to identify future growth shares. Which of the following characteristics would you focus on in deciding whether to follow this company? (LO2)
 - a. Its industry
 - b. The market capitalisation
 - c. The average number of shares traded per day
 - d. The bid-ask spread for the shares
- 8 Whether the underwriter that brought the firm public is a highly regarded investment bank.

CASE LINK
Concepts from this chapter are used in the following case studies:

- Case 10 Diligent (Part 1): Revenue recognition problems.

CASE LINK
Concepts from this chapter are used in the following case studies:

- Case 10 Diligent (Part 1): Revenue recognition problems.

ENDNOTES

- 1 Investment grade credit bonds have received a credit rating by Moody's of Baa or higher or a credit rating by Standard & Poor's of BBB or above. We discuss these rating categories in more detail in Chapter 10.
- 2 See ASIC Report 439 Snapshot of the Australian hedge funds sector, available at <https://www.asic.gov.au/media/3278608/report439-publication-19-2013.pdf>.
- 3 These figures are from Hedge Fund Research (HFR).

PART 4: FURTHER CASE STUDIES

Part 4 contains further **APAC Case Studies** to help you develop strong skills in applying the financial analysis framework to real-world situations.



PART 4

CASE STUDY

CASE 1 QANTAS

This case relates to Chapters 2, 3, 4, 5, 6, 7 and 8.

Part A Introduction

Qantas is the largest operator within the Australian air transport industry. Various events and changes that have occurred within the industry over the past decade have resulted in high levels of both media and regulatory scrutiny for the company. Qantas offers a range of passenger services (passenger air transport) operating in a domestic market in which it is dominant as well as in international markets where there is more competition. Within both of these markets, Qantas has worked hard to develop and maintain a competitive advantage to enhance profitability.

Background and history

Queensland and Northern Territory Aerial Services Limited (Qantas) was established in Queensland in 1920 and initially provided joyriding and demonstration flights. Its operations were expanded in 1922 to include scheduled airmail services between the towns of Charleville and Cononry, subsidised by the Australian government. It was on this route that commercial passenger aircraft were first introduced to Australia in 1924. Qantas began overseas passenger services in 1935 with flights between Darwin and Singapore. Both the domestic and international operations of Qantas expanded significantly in the years leading up to World War II.

As the international air transport industry expanded so did the role of government in managing air operations. This included involvement in negotiating air traffic rights, determining airfares between countries and in developing international standards for operations through organisations such as the International Civil Aviation Organisation. Such increasing involvement, along with a

The domestic air transport industry was also highly regulated at this time. After acquiring Qantas, the government transferred the airlines domestic operations to the newly formed, government-owned Trans-Australia Airline (TAA), later to become Australian Airlines. TAA along with the privately owned Ansett Australia Ltd operated under what became known as the 'Two Airlines policy' with the objective of maintaining two economically viable operators in the domestic market. The policy sought to ensure he provision of interstate services by regulating air line management matters such as timetables, fare levels and route structures. Thus the domestic air transport industry was as so forced to operate in a highly regulated and protected environment.

The most significant development in the air transport industry over the period 1950 to 1980 was the continually increasing capacity of aircraft. This saw a reduction in seat per kilometre costs which was partially reflected in reduced airfares, fueling consumer demand and contributing to rapid growth in the air line industry. Management and administrative practices also developed during this period in line with new technological developments. These addressed many aspects of airline operations including computerised reservation systems, ticketing systems and ticket distribution procedures, as well as settlement of accounts for ticket sales. Organisations such as the International Air Transport Association developed to facilitate inter-airline relationships and the distribution of tickets through travel agencies. Although subsequent technological developments may have allowed further improvements in such procedures, the heavy regulation of the industry meant that there were too many impediments and too few economic incentives to review these operations.

Further case studies

Guide to the online resources

FOR THE INSTRUCTOR

Cengage is pleased to provide you with a selection of resources that will help you to prepare your lectures and assessments when you choose this textbook for your course. Log in or request an account to access instructor resources at cengage.com.au/instructors for Australia or cengage.co.nz/instructors for New Zealand.

INSTRUCTOR SOLUTIONS MANUAL

The **Instructor Solutions Manual** includes solutions for all end-of-chapter questions and Excel case solutions.

WORD-BASED TEST BANK

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



POWERPOINT™ PRESENTATIONS

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

ARTWORK FROM THE TEXT

These digital files of graphs and flowcharts from the text can be used in a variety of media. Add them into your course management system, use them within student handouts or copy them into lecture presentations.

EXCEL CALCULATOR SHEETS

NEW Excel calculator sheets for use in conjunction with the data provided in the case studies.



ONLINE CASES

Two additional **NEW** online-only cases discussing companies Diligent and Rubicon.



Preface

Among business students, demand is growing for a course that provides a framework to understand and use financial statements. Such a course is relevant across a wide range of business disciplines: accounting, of course, but also finance, marketing, management, and economics, because financial statements are the basis for a wide range of business analyses. Managers use them to monitor and judge their firms' performance relative to competitors, to communicate with external investors, to help judge what financial policies they should pursue and to evaluate potential new businesses to acquire as part of their investment strategy. Securities analysts use financial statements to rate and value companies they recommend to clients. Bankers use them to decide whether to extend a loan to a client and to determine the loan's terms. Investment bankers use them as a basis to value and analyse prospective buyouts, mergers and acquisitions. Consultants use them as a basis for competitive analysis for their clients. The purpose of this book is to provide a framework for understanding and using financial statements for business students and practitioners.

An Asia–Pacific edition

As teachers or students of financial statement analysis, many of us have sought a quality textbook in this area that is contextualised for our region. Starting with the strong foundations provided by the highly successful US edition, the first Asia–Pacific edition addressed regional issues of terminology, institutional setting and accounting standards with a number of improvements. In particular, we rewrote Chapters 3 and 4 to streamline and better explain the process of accounting analysis, particularly in the context of International Financial Reporting Standards (IFRS). We used a DuPont-style ratio analysis in Chapter 5 to supplement operating vs. financial spread methodology. This provided a better method for diagnosing performance measurement. More focus was also placed on the elements of financial leverage and their impact on the firm's performance, and ratio formulas were more precisely specified to answer relevant business questions.

Our latest Asia–Pacific edition builds on these changes, revising all the material to ensure each chapter is relevant. We have included regionally recognised examples and case studies in the chapters, a new worked example throughout the book, and several new discussion questions and exercises at the end of each chapter.

- Additional references to recent research from Australasia as well as other regions are included in this edition, ensuring that the content continues to be informed by and consistent with the latest academic ideas and knowledge.
- All new Australasian firms and analyses are included as end-of-chapter case studies in this edition.
- This edition provides a further update of all chapters, to include the latest regulations, practices and examples from both the financial markets and research.
- Industry insights from practitioners and other experts have been added to each chapter to further bridge students' learning to industry contexts.
- Finally, a new Asia–Pacific example has been integrated across the chapters. Kathmandu Limited, an outdoor equipment and clothing retailer, is used to illustrate the concepts and practice of financial analysis. The retail industry in the region remains competitive and subject to ongoing competitive challenges, yet is well known to students.

Key features

This book differs from other texts in business and financial analysis in a number of important ways. We introduce and develop a framework for business analysis and valuation using financial statement data. We then show how to apply this framework to a variety of decision contexts.

Framework for analysis

We begin the book with a discussion of the role of accounting information and intermediaries in the economy, and how financial analysis can create value in well-functioning markets. We identify four key components of effective financial statement analysis:

- 1 business strategy analysis
- 2 accounting analysis
- 3 financial analysis
- 4 prospective analysis.

The first of the components, business strategy analysis, involves developing an understanding of the business and competitive strategy of the firm being analysed. Incorporating business strategy into financial statement analysis is one of the distinctive features of this book. Traditionally, other financial statement analysis books have ignored this step. However, beginning a financial statement analysis with a company's strategy provides an important foundation for the subsequent analysis. The strategy analysis section discusses contemporary tools for analysing a company's industry, its competitive position and sustainability within an industry and the company's corporate strategy.

Accounting analysis involves examining how accounting rules and conventions represent a firm's business economics and strategy in its financial statements and, if necessary, developing adjusted accounting measures of performance. In the accounting analysis section, we do not emphasise accounting rules. Instead, we develop general approaches to analysing assets, liabilities, equities, revenues and expenses. We believe this approach enables students to effectively evaluate a company's accounting choices and accrual estimates, even if learners have only a basic knowledge of accounting rules and standards. The material is also designed to allow students to make accounting adjustments rather than merely identifying questionable accounting practices.

Financial analysis involves analysing financial ratio and cash flow measures of the operating, financing and investing performance of a company relative to either key competitors or historical performance. Our distinctive approach focuses on using financial analysis to evaluate the effectiveness of a company's strategy and to make sound financial forecasts.

Finally, under prospective analysis, we show how to develop forecasted financial statements and how to use these to make estimates of a firm's value. Our discussion of valuation includes traditional discounted cash flow models as well as techniques that link value directly to accounting numbers. In discussing accounting-based valuation models, we integrate the latest academic research with traditional approaches, such as earnings and book value multiples that are widely used in practice.

While we cover all four components of business analysis and valuation in the book, we recognise that the extent of their use depends on the user's decision context. For example, bankers are likely to use business strategy analysis, accounting analysis, financial analysis and the forecasting portion of prospective analysis. They are less likely to be interested in formally valuing a prospective client.

Applying the framework to decision contexts

The next section of the book shows how our business analysis and valuation framework can be applied to the following decision contexts:

- securities analysis
- credit analysis
- merger and acquisition analysis
- governance and communication analysis.

For each of these topics we present an overview to provide a foundation for the class discussions. Where possible, we discuss relevant institutional details and any academic research useful in applying the analysis concepts developed earlier in the book. For example, the chapter on credit analysis shows how banks and rating agencies use financial statement data to develop analysis for lending decisions and to rate public debt issues. This chapter also presents academic research on how to determine whether a company is financially distressed.

Case approach

We have found that teaching a course in business analysis and valuation is significantly enhanced, both for teachers and students, by using cases as a pedagogical tool. Students want to develop ‘hands-on’ experience in business analysis and valuation so that they can apply the concepts in decision contexts similar to those they will encounter in the business world. Cases are a natural way to achieve this objective by presenting practical issues that might otherwise be ignored in a traditional classroom exercise.

Our cases present Australasian-focused business analysis and valuation issues in specific decision contexts, and we find that this makes the material more interesting for students. Each chapter contains a link to one or more case studies at the end of the book or online. These case studies are either based on, or directly drawn from, real company situations and challenges. They are designed to show the reader how the material in this book is related to real life business situations that they might encounter, to extend their learning to more complex questions and scenarios, and to give them experience with problems that do not always have a single or neat solution. They would be useful for instructors to use for a major assessment task, or in some cases, in an examination that uses a case-study approach. Many of the cases in this edition are new, and so provide up-to-date and authentic examples for these uses.

Because the cases are real or based on reality, they do not always neatly correspond to the content of an individual chapter. Although each chapter has a link to a case, we also indicate in each case the corresponding chapters that it draws on. So when you are using a case, it is advisable to check what parts of it are related to the chapter you are studying. You may be able to start a case when you are working through the first chapter that is mentioned, and to complete it later when the final chapter(s) have been covered. Or you might choose to wait until all of the chapters have been covered, and to use the case for revision and assimilation of material across several chapters.

Using the book

We designed the book so that it is flexible for courses in financial statement analysis for a variety of student audiences, from undergraduate students with Accounting or Finance majors through to post-graduate students in Masters programs in business, and even Executive Education Program participants. Depending upon the audience, the instructor can vary the manner in which the conceptual materials in the chapters, end-of-chapter questions and case examples are used.

Prerequisites

To get the most out of the book, students should have completed basic courses in financial accounting, finance and either business strategy or business economics. The text provides a concise overview of some of these topics, primarily as background for preparing the cases. But it would probably be difficult for students with no prior knowledge in these fields to use the chapters as stand-alone coverage of them. We have integrated only a small amount of business strategy into each case and do not include any cases that focus exclusively on business strategy analysis.

The extent of accounting knowledge required for the cases varies considerably. Some require only a basic understanding of accounting issues, whereas others require a more detailed knowledge at the level of a typical intermediate financial accounting course. However, we have found it possible to teach even these more complex cases to students without a strong accounting background by providing additional reading on the topic.

How to use the text and case materials

The materials can be used in a variety of ways. If the book is used for students with prior working experience or for executives, the instructor can use almost a pure case approach, adding relevant lecture sections as needed. When teaching students with little work experience, a lecture class can be presented first, followed by an appropriate case. It is also possible to use the book primarily for a lecture course and include some of the cases as in-class illustrations of the concepts discussed in the book.

Alternatively, lectures can be used as a follow-up to cases to more clearly lay out the conceptual issues raised in the case discussions. This may be appropriate when the book is used in undergraduate capstone subjects. In such a context, cases can be used in course projects that can be assigned to student teams.

About the authors

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PART

1

Framework

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A framework for business analysis and valuation using financial statements

Valuing an organisation is an important and regular



professional advisors and individual investors. Questions



■ How do I value my firm?

■ How do I value my investment?

■ How do I value my shares?

■ How do I value my company?

■ How do I value my business?

■ How do I value my firm?

■ How do I value my investment?

■ How do I value my shares?

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Chapter learning objectives

WKG6YHKL0KVER7VSGVSGH

L01



L02



L03

valuation.

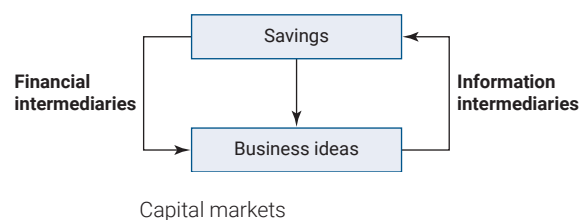
L01 The role of financial reporting in capital markets

A critical challenge for any economy is allocating savings to investment opportunities. Economies that do this well can benefit from innovation to create jobs and wealth at a rapid pace. In contrast, economies that manage this process poorly fail to fully support new business opportunities and do not maximise economic outcomes.

Different models for channelling savings into business investments have prevailed in different countries through history. The prevailing model in many countries in the world today is the market model, in which capital markets play an important role in channelling financial resources from savers to business enterprises that need capital.

Figure 1.1 provides a schematic representation of how capital markets typically work in a broad sense. Savings in any economy are widely distributed among households. Many aspiring entrepreneurs and existing companies would like to attract these savings to fund their business ideas. While both savers and those with business ideas want to connect, matching savings to business investment opportunities is complicated for at least three reasons. First, businesses typically have better information on the value of their investment opportunities than savers have. Second, communication from businesses to investors is not completely credible because investors know that businesses have an incentive to inflate the value of their ideas. Third, savers generally lack the financial sophistication needed to analyse and differentiate various business opportunities.

These information and incentive problems lead to what economists call the ‘lemons’ problem, which can potentially break down the functioning of the capital market.¹ It works like this.



Consider a situation where half the business ideas are ‘good’ and the other half are ‘bad’. If investors cannot distinguish between the two types of business ideas, entrepreneurs with bad ideas will try to claim that their ideas are as valuable as the good ideas. Recognising this possibility, investors value both good and bad ideas at an average level. Unfortunately, this penalises good ideas, and entrepreneurs with good ideas find the terms on which they can get financing in the capital market to be unattractive. As these entrepreneurs leave the capital market, the proportion of bad ideas in that market increases. Over time, bad ideas outnumber good ideas and investors lose confidence in this market.

The emergence of intermediaries can prevent such a market breakdown. There are several types of intermediaries in a sophisticated capital market system. Financial intermediaries, such as venture capital and private equity firms, banks, superannuation funds, managed funds and insurance companies, focus on aggregating funds from individual investors and distributing those funds to businesses seeking sources of capital. Information intermediaries, such as auditors and company audit committees, serve as credibility enhancers to provide an independent assessment of business ideas. Information analysers and advisors such as financial analysts, credit rating agencies and the financial press are another type of information intermediary that collect and analyse business information used to make business decisions. Transaction facilitators such as stock exchanges and brokerage houses play a crucial role in capital markets by providing a platform to facilitate buying and selling in markets. Finally, regulatory intermediaries such as the Australian Securities Exchange (ASX) and the Australian Securities and Investments Commission (ASIC) create appropriate regulatory policies to support the legal framework of the capital market system, while adjudicators such as the court system resolve disputes that arise between participants. In a well-functioning capital market, the market institutions described above add value by both helping investors distinguish good investment opportunities from bad ones and by directing funding to those business ideas deemed most promising.

Financial reporting plays a critical role in the effective functioning of capital markets. Information intermediaries add value either by enhancing the credibility of financial reports (as auditors do) or by analysing the information in the financial statements (as analysts and the rating agencies do). Financial intermediaries rely on information in the financial statements to analyse investment opportunities, and supplement this information from other sources.

It can surprise those who are new to business analysis to learn that financial reporting is an important source of information for valuation. It was also a surprise to many academics when this idea was presented in a seminal research paper published by Philip Brown and Ray Ball in 1968.² At that time, accounting reporting was widely viewed as a backroom function necessary for compliance and stewardship, but not producing useful information. Ball and Brown (1968) empirically demonstrated that accounting information conveyed, at the end of the year, much of the same information as was known to the share market from all available sources during the year. What was not known affected the share price in the expected direction and in a timely fashion when it was announced in the accounting report.

Ball and Brown (1968) relied on the hypothesis of market efficiency, which had been recently articulated by Eugene Fama in 1965.³ The efficient markets hypothesis states that asset prices reflect all available information. An implication of this hypothesis is that it is impossible for an investor to earn a riskless profit from trading on ‘new’ information. Paradoxically, the attempt by investors to earn a riskless profit leads to new information being incorporated into market prices, but also ensures that a riskless profit is not earned.

Does this imply that financial statement and valuation analysis is useful for identifying the value of a firm’s shares, but not for identifying profitable trading opportunities from

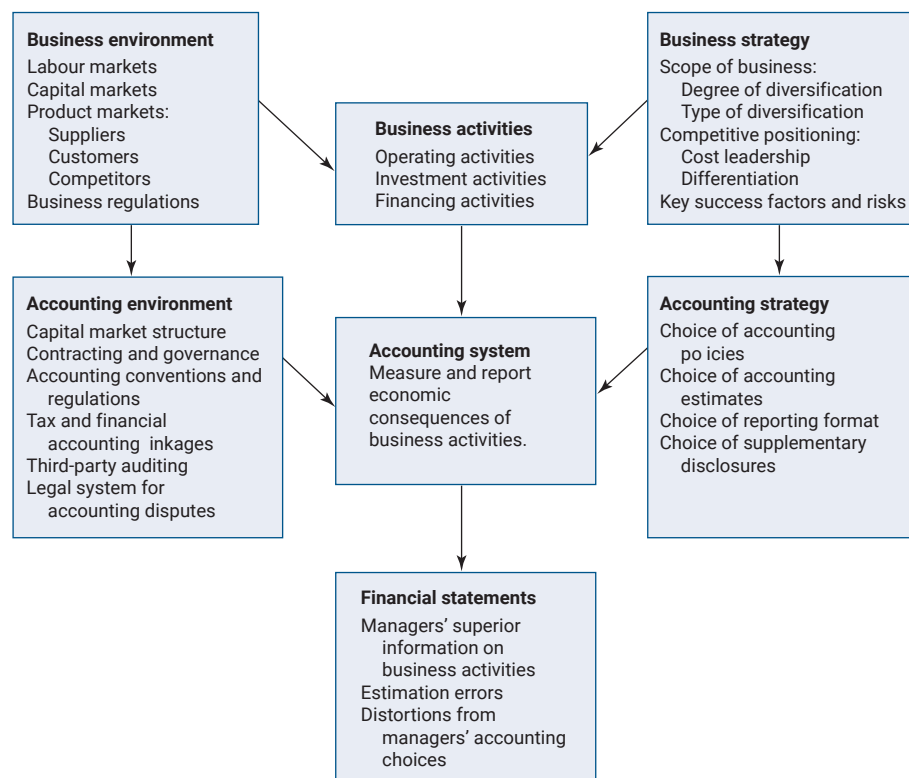
mispriced shares? In practice this conclusion does not hold. Many investors have made profitable investments using financial reporting and the techniques discussed in this book, based on their superior skills, unique sources of information, interpretation of information or timing.

In the following section, we discuss key aspects of the financial reporting system design that enable it to effectively play this vital role in the functioning of the capital markets.

LO2 From business activities to financial statements

Corporate managers are responsible for acquiring physical and financial resources from the firm's environment and using them to create value for the firm's investors. When the firm earns a return on its investment in excess of the cost of capital, it creates value. Managers formulate business strategies to achieve this goal, and they implement them through business activities. A firm's business activities are influenced by its economic environment and its own business strategy. The economic environment includes the firm's industry, its input and output markets, and the regulations under which it operates. The firm's business strategy determines how it positions itself in its environment to achieve a competitive advantage.

As shown in Figure 1.2, a firm's financial statements summarise the economic consequences of its business activities. The firm's business activities in any time period are too numerous to be



From business activities to financial statements

reported individually. Further, some of the activities undertaken by the firm are proprietary, so disclosing them in detail could be detrimental to the firm's competitive position. The accounting system provides a mechanism through which business activities are selected, measured and aggregated into financial statement data.

Intermediaries using financial statement data to undertake business analysis have to be aware that financial reports are influenced both by the firm's business activities and by its accounting system. A key aspect of financial statement analysis, therefore, involves understanding the influence of the accounting system on the quality of the financial statement data being used in the analysis. Some important features of the accounting systems are discussed in the following section.

Accounting system feature 1: Accrual accounting

One of the fundamental features of corporate financial reports is that they are prepared using accrual rather than cash accounting. Accrual accounting distinguishes between recording costs and benefits associated with economic activities and actually paying and receiving cash. Profit is the primary periodic performance index. To compute profit, the effects of economic transactions are recorded on the basis of *expected*, not necessarily *actual*, cash receipts and payments. Expected cash receipts from the delivery of products or services are recognised as revenues, and expected cash outflows associated with these revenues are recognised as expenses.

The need for accrual accounting arises from investors' demand for financial reports on a periodic basis. Because firms undertake economic transactions continually, the arbitrary closing of accounting books at the end of a reporting period leads to a fundamental measurement problem. Accounting for only cash receipts and payments does not report the full economic consequence of the transactions undertaken in a given period. Accrual accounting is designed to provide more complete information about a firm's periodic performance.

Accounting system feature 2: Accounting standards and auditing

The use of accrual accounting lies at the centre of many important complexities in corporate financial reporting. Because accrual accounting deals with *expectations* of future cash consequences of current events, it is subjective and relies on a variety of assumptions. Who should be charged with the primary responsibility of making these assumptions? In the current system, the task of making the appropriate estimates and assumptions to prepare the financial statements is delegated to a firm's managers because they have detailed knowledge of their firm's business. This responsibility is known as 'accounting discretion'.

The accounting discretion granted to managers is potentially valuable because it allows them to reflect their detailed knowledge in reported financial statements. However, managers can use accounting discretion to distort financial statement numbers. One obvious incentive to do so is where management's bonuses are based on accounting profits. The use of accounting numbers in contracts between the firm and outsiders provides another motivation for management distortion. Not all distortions are intended to misrepresent financial statement data. Managers may also unintentionally bias accounting estimates because of their lack of objectivity about their business. Whatever the reasons, the distortion of financial accounting numbers makes them less valuable to external users of financial statements. Therefore, the delegation of financial reporting decisions to corporate managers has both costs and benefits.

A number of accounting practices, such as accounting standards and independent audits, have evolved to ensure that managers use their accounting flexibility to objectively reflect their knowledge of the firm's business activities.

Accounting standards are developed to improve the quality of financial reporting. They often improve the consistency of accounting by recording similar economic transactions in a like manner. This increases comparability both over time and across organisations. The demand for international comparability of financial reports has led to over 100 countries worldwide, including Australia and New Zealand, adopting or permitting use of the International Financial Reporting Standards (IFRS) promulgated by the International Accounting Standards Board (IASB).

Increased consistency from accounting standards, however, comes at the expense of reduced flexibility for managers to reflect genuine business differences in their firm's financial statements. Accounting standards work best for economic transactions whose accounting treatment is not predicated on managers' proprietary information. When there is significant business judgement involved in assessing a transaction's economic consequences, standards that prevent managers from using their superior business knowledge do not improve the quality of financial reporting. Further, if accounting standards are too rigid, they may induce managers to expend economic resources to restructure business transactions in order to achieve a desired accounting result.

Accounting system feature 3: Managers' reporting strategy

Because the mechanisms that limit managers' accounting discretion add 'noise' to accounting data, it is not optimal to use accounting regulation to eliminate managerial flexibility completely. Furthermore, as accounting standards such as IFRS and the Generally Accepted Accounting Principles (GAAP) are revised to enable more widespread adoption or to reduce differences between regimes, the rigidity of accounting standards has become less of a concern. Accounting rules now often provide a broad set of alternatives managers can choose from. In practice, accounting systems leave considerable room for managers to influence financial statement data. A firm's reporting strategy – that is, the manner in which managers use their accounting discretion – has an important influence on the firm's financial statements.

Accounting regulations usually prescribe *minimum* disclosure requirements, but they do not restrict managers from *voluntarily* providing additional disclosures. Corporate managers can choose accounting and disclosure policies that make it more or less difficult for external users of financial reports to understand the true economic picture of their businesses.

A superior disclosure strategy will enable managers to communicate the underlying business reality to outside investors. One important constraint on a firm's disclosure strategy is the competitive dynamics in product markets. Disclosing proprietary information about business strategies and their expected economic consequences may hurt the firm's competitive position. Subject to this constraint, managers can use financial statements to provide information useful to investors in assessing their firm's true economic performance. Reporting on corporate environmental and social effects under the heading of 'sustainability' is one example of a voluntary disclosure that has emerged in response to investor demand for new information.

Managers can also use financial reporting strategies to manipulate investors' perceptions. Using the discretion granted to them, managers can make it difficult for investors to identify poor performance on a timely basis. For example, managers can choose accounting policies and

estimates to provide an optimistic assessment of the firm's true performance. They can also make it costly for investors to understand a firm's true performance by controlling the extent of information that is disclosed voluntarily.

The extent to which financial statements reveal the underlying business reality varies across organisations and across time for a given organisation. This variation in accounting quality provides both an important opportunity and a challenge in doing business analysis. The process through which analysts can separate noise from information in financial statements, and gain valuable business insights from financial statement analysis, is discussed in the following section.

Accounting system feature 4: Auditing

Auditing can be broadly defined as a verification of the integrity of the reported financial statements by someone independent of the preparer. This process ensures that managers use accounting rules and conventions consistently over time, and that their accounting estimates are reasonable. Therefore, auditing improves the quality of accounting data.

Third-party auditing may also reduce the quality of financial reporting because it constrains the kinds of accounting rules and conventions that evolve over time. For example, the IASB considers the views of auditors in the standard-setting process. Auditors are likely to argue against accounting standards producing numbers that are difficult to audit, even if the proposed rules produce relevant information for investors.

The legal environment in which accounting disputes between managers, auditors and investors are adjudicated can also have a significant effect on the quality of reported numbers. The threat of lawsuits and resulting penalties has the beneficial effect of improving the accuracy of disclosure. However, the potential for a significant legal liability may also discourage managers and auditors from supporting accounting proposals that require risky forecasts, such as forward-looking disclosures.

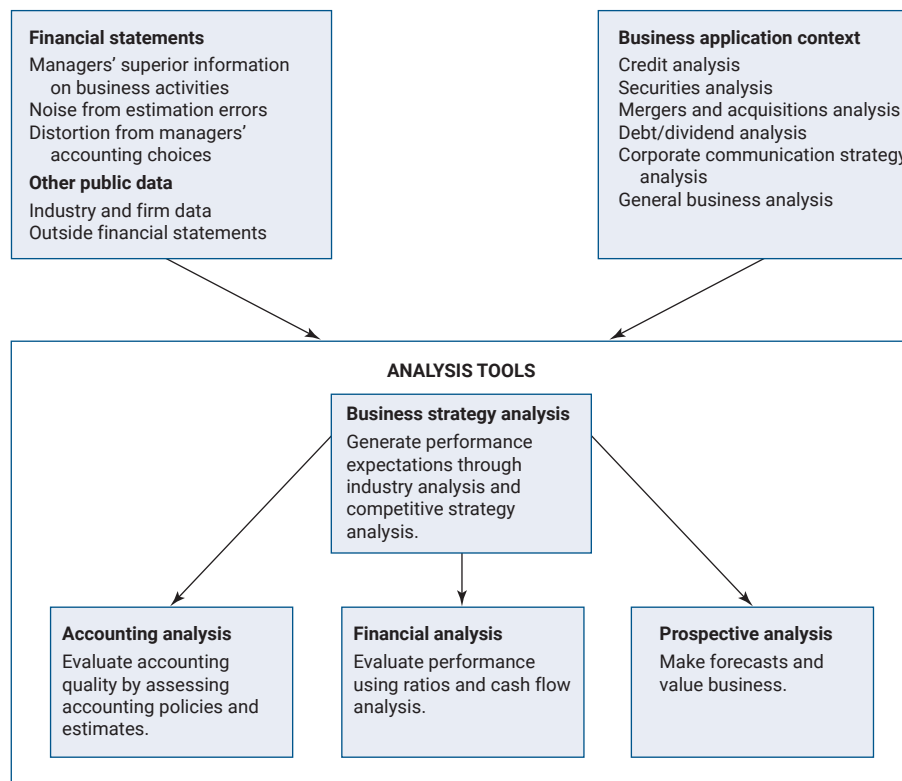
LO3 From financial statements to **SLGWVLL**

Because managers' insider knowledge is a source both of value and of distortion in accounting data, it is difficult for outside users of financial statements to separate true information from distortion and noise. Not being able to 'undo' accounting distortions completely, investors 'discount' a firm's reported accounting performance. In doing so, they make a probabilistic assessment of the extent to which a firm's reported numbers reflect its economic performance. As a result, investors can have only an imprecise assessment of an individual firm's performance. Financial and information intermediaries can add value by improving investors' understanding of a firm's current performance and its future prospects.

Effective financial statement analysis is valuable because it attempts to elicit managers' inside information from public financial statement data. Because intermediaries do not have direct or complete access to this inside information, they rely on their knowledge of the firm's industry and its competitive strategies to interpret financial statements. Successful intermediaries have at least as good an understanding of the industry economics as do the firm's managers, as well

as a reasonably good understanding of the firm's competitive strategy. Although outside analysts have an information disadvantage relative to the firm's managers, they may be more objective in evaluating the economic consequences of the firm's investment and operating decisions. Figure 1.3 provides a schematic overview of how business intermediaries use financial statements to accomplish four key steps:

- 1 business strategy analysis
- 2 accounting analysis
- 3 financial analysis
- 4 prospective analysis.



ehmVA Analysis using financial statements

Analysis step 1: Business strategy analysis

The purpose of business strategy analysis is to identify key profit drivers and business risks, and to assess the firm's profit potential at a qualitative level. Business strategy analysis involves analysing the potential for profit and growth within a firm's industry, and its strategy to create a sustainable competitive advantage. This qualitative analysis is an essential first step because it enables the analyst to frame the subsequent accounting and financial analysis better. For example, identifying the key success factors and key business risks allows the identification of key accounting policies. Assessment of a firm's competitive strategy facilitates evaluating whether current profitability is sustainable. Finally, business analysis enables the analyst to make sound assumptions in forecasting a firm's future performance.