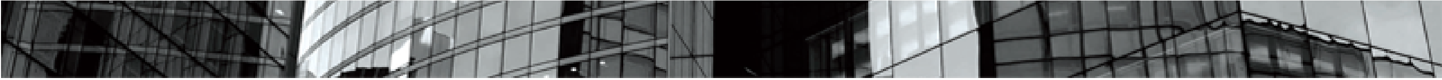
Pearl TAN | LIM Chu Yeong | KUAH Ee Wen

# ADVANCED FINANCIAL ACCOUNTING

## AN IFRS® STANDARDS APPROACH



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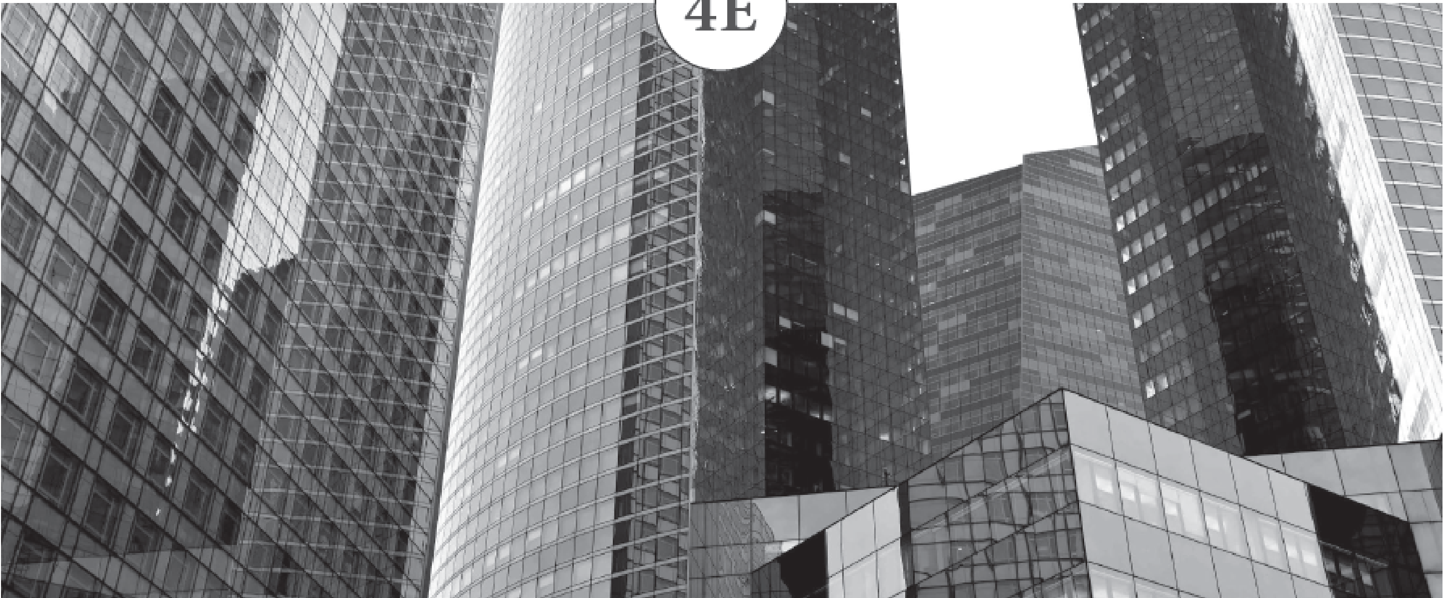

Pearl TAN | LIM Chu Yeong | KUAH Ee Wen

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FOURTH EDITION

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*This book is dedicated to our students, past and present.*

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# PREFACE

With the internationalization of accounting standards and their rapid rate of change, accounting students worldwide need to have a rigorous understanding of International Accounting Standards (IAS® Standards) and International Financial Reporting Standards (IFRS® Standards) as well as the ability to apply the recognition, measurement and disclosure requirements of these standards to complex transactions. The learning curve for aspiring accountants in today's dynamic accounting environment is steep and the challenge for accounting students is to develop expertise with insight.

As accounting educators who have taught advanced financial accounting for several years and who have worked in senior-level positions in auditing and corporate accounting, we understand the challenges that accounting students face. As a result, we have, over the years, developed approaches and explanations to help accounting students learn complex rules in a rigorous, analytical and insightful manner. In this new edition, we present the rigour of the requirements of accounting standards as applied to complex transactions, with generous explanations and many illustrations.

As accounting professors, we believe that students learn best when they understand the rationale for the accounting methods or procedures used. Hence, this textbook has many generous explanations of the accounting entries and procedures used. We also highlight the analytical relationships among complex financial statement numbers in business combinations, foreign currency translation and accounting for taxes on income. Students may use these analytical relationships to check or reconcile their calculations.

We have developed unique analytical procedures that help students to derive reported items in consolidated financial statements independently of consolidated journal entries. These analytical checks are useful in more ways than one. They develop a deeper understanding of the components that are included in the final numbers reported. They also provide an independent means of checking the results of the consolidation process.



The author team includes a co-author who is a practitioner with many years of auditing experience and who is actively engaged in technical development and training in his firm. Our practitioner co-author brings valuable new content and insights on complex accounting issues. The new content benefits both advanced accounting students at undergraduate and postgraduate levels and practitioners alike. In today's dynamic landscape, this book also serves as a useful primer for practitioners who seek clarity of principles and processes in the application of accounting standards to complex accounting issues.

As accounting standards become more comprehensive and economic transactions become more complex, it is necessary for accounting professors to equip their students to deal with these issues with confidence. Inevitably, classroom time is limited but in many senior level courses, the more complex materials in the book may be used fruitfully by adopting professors to feature the topics as part of a project assignment. Accounting professors may ask their students to analyze the basis of conclusions on which the requirements are built or apply the principles to real-life cases. Examples of complex materials include reverse acquisitions, change in ownership interests in significant influence and joint control, common control and derivatives on own equity. The text provides the critical basis for further exploratory assignments.

We highlight below some of the special features in this text.

## Focus on IFRS Standards that deal with complex accounting

As with the 3rd edition, this new edition continues to provide in-depth coverage of International Financial Reporting Standards that deal with complex business phenomena. These standards include IFRS 9 *Financial Instruments,* IFRS 3 *Business Combinations*, IFRS 10 *Consolidated Financial Statements*, IAS 27 *Separate Financial Statements*, IAS 28 *Investments in Associates and Joint Ventures,* IAS 21*, The Effects of Changes in Foreign Exchange Rates,* IFRS 2 *Share-based Payment* among others. New and enhanced features relating to the application of the above standards are highlighted below.

## New and Enhanced Features

**Business combinations, consolidation, associates and joint arrangements**

- New illustrations and challenging end-of-chapter questions (Chapters 3, 4, 5, 6 and 7)
- Expanded material and in-depth explanations on changes in ownership interests with and without change in control (Chapter 7)
- New material and in-depth discussions on accounting for changes in ownership interests in joint arrangements (Chapter 7)
- New material on business combination without transfer of consideration, deemed acquisitions and deemed disposals (Chapter 7)
- Treatment of more complex intra-group transactions, including contract accounting under IFRS 15 (Chapter 5)
- Inclusion of the most recent amendments to existing standards on related topics – Sale or Contribution of Assets or Business between Investor and its Associate (Chapter 6)

**Translation of Foreign Currency Transactions and Foreign Operations (Chapter 8)**

- Illustrations on intercompany upstream and downstream transfers from/to foreign subsidiary.
- New challenging end-of-chapter questions

**Financial Instruments (Chapters 9 and 10)**

- Enhanced explanations and illustrations on classification and measurement under IFRS 9
- Detailed explanations and in-depth illustrations on interactions between interest income and expected credit loss
- Special issues associated with issuance of convertible bonds
- Enhanced explanations and illustrations on hedge accounting under IFRS 9
- Expanded explanation of the principles of IFRIC 16 Hedges of net investment in foreign operations
- New challenging end-of-chapter questions

**Operating Segments (Chapter 1)**

- New illustrations and end-of-chapter questions

**Derivative contracts on own equity (Chapter 15)**

- New chapter that deals with an area that is traditionally complex and difficult to account for
- Explore the rationale for such transactions
- Explains the relevant consideration and the accounting treatment

## Comprehensive Approach to the Learning of Accounting Standards

The text is grounded in the three "Cs" of sound accounting pedagogy:

- *Concepts:* It is principles-based to enhance students' conceptual understanding of the underlying rationale of accounting requirements. It provides generous explanations of the "why's" of specific accounting treatments right down to the most detailed journal entry.
- *Context:* It emphasizes the importance of understanding the economics of and motivations for the specific transactions that are the subject of accounting rules. It provides an operational perspective to the accounting issues to enhance students' understanding of the purpose of the accounting standards, their interpretation and analysis of the accounting procedures and the implications of different methods of accounting.
- *Competencies:* It provides a rigorous coverage of the complex requirements of IFRS® Standards and IAS® Standards has many comprehensive illustrations on their application. Challenging end-of-chapter problems provide the necessary practice that future accountants need to develop professional expertise.

## Coverage of Advanced Level Topics

The topics and the IAS and IFRS Standards covered in this text include:

**Accounting for Business Combinations and Consolidation**

IFRS 3 *Business Combinations*

IFRS 10 *Consolidated Financial Statements*

IFRS 11 *Joint Arrangements*

IAS 27 *Separate Financial Statements*

IAS 28 *Investments in Associates and Joint Ventures*



**Translation of Foreign Currency Transactions and Foreign Operations**

IAS 21 *The Effects of Changes in Foreign Exchange Rates*

**Accounting for Financial Instruments**

IFRS 9 *Financial Instruments*

IAS 32 *Financial Instruments: Presentation*

**Accounting for Income Taxes**

IAS 12 *Income Taxes*

**Earnings Per Share**

IAS 33 *Earnings per Share*

**Accounting for Executive Stock Options and Other Share-Based Payments**

IFRS 2 *Share-based Payment*

**Risk-Reporting Disclosures**

IFRS 7 *Financial Instruments: Disclosures*

IFRS 8 *Operating Segments*

IAS 24 *Related Party Disclosures*

IFRS 13 *Fair value measurement*

## Organization of This Text

Chapter 1 explains how a firm's exposure to risks and its strategies to manage risks give rise to the need to provide information to external stakeholders on risks, risk management and their effects. It explains the business context of firms that gives rise to risks and the need for firms to measure and manage risks. The rest of the book is devoted to explaining and illustrating the financial reporting effects of two major strategies that firms use to manage risks.

Businesses manage risk through operating and financial policies. This text focuses on two major risk management strategies and their impact on financial reporting. The first strategy relates to corporate acquisition policies. Businesses manage or diversify risk through inter-corporate investments. Mergers and acquisitions give rise to accounting issues with respect to the measurement of the enlarged economic entity as a reporting unit. Chapters 2 to 7, part of Chapter 8 and Chapter 14, explain and illustrate the consequential impact of a firm's merger and acquisition strategies on the reported income statement and statement of financial position of the group entity.

The other corporate strategy that is critical to risk management relates to financial policies of firms. Financial policies of firms give rise to different motivations for acquiring financial assets and incurring financial liabilities and adopting hedging strategies. Accounting for these financial assets and financial liabilities and hedging activities requires the provision of information that investors need to evaluate the risk creation or risk mitigation that arises from a firm's financial policies. The rest of Chapter 8 and Chapters 9 and 10 provide in-depth coverage of how the effects of a firm's financial policies are accounted for in the financial statements. Chapters 12 and 13 focus on the consequential impact of a firm's financial policies on earnings per share and stock compensation expense, respectively. Chapter 11 deals with tax effects in general, with special focus on the tax effects of the transactions dealt with in the earlier chapters. Chapter 15 is a new chapter that deals with derivatives issued on own equity. Derivatives such as call and/or put options written on non-controlling interests is an area that is traditionally complex and difficult to account for. In this edition, we explore the rationale for such transactions, the considerations that should be brought to bear and the eventual accounting treatment.

## Instructor Supplements

For this new edition, we have provided various supplemental materials to help instructors prepare and present the material in this text more effectively. The Online Learning Centre (**www.mheducation.asia/olc/tan4e**) provides instructors with the following teaching tools:

- Instructor's Manual
- Solutions Manual
- PowerPoint Presentation Slides
- Test Bank

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We are truly indebted to Mr Peter LEE Lip Nyean for his valuable contributions to the first two editions of the book. Mr LEE has retired from academia and has graciously asked for new co-authors to be engaged in the book's on-going efforts to renew and refresh itself. We are delighted that Mr KUAH Ee Wen has joined the team of authors. He brings to the third and fourth edition, fresh insights and significant practical perspectives to complex problems.

We thank the IFRS Foundation for their kind permission to allow us to reproduce certain extracts of the IFRS Standards and the IAS Standards. We are also indebted to Keppel Corporation Limited for giving us permission to publish extracts from its financial statements.

The authors also acknowledge the constructive feedback and comments from our fellow academics and practitioners, including Associate Professor LEE Kin Wai from Nanyang Technological University, Associate Professor CHNG Chee Kiong and Associate Professor (Adjunct) Sardool SINGH from National University of Singapore, Associate Professor LIM Chee Yeow from Singapore Management University, Dr Bernardine LOW from Singapore University of Social Sciences, Ms ONG Suat Ling and Ms CHANG Huan Ngee from Ernst & Young LLP. All errors and omissions are ours.

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**Pearl TAN Hock Neo**

**LIM Chu Yeong**

**KUAH Ee Wen**

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# CHAPTER

# 1

# Risk Reporting

## LEARNING OBJECTIVES

***After reading this chapter, you should be able to:***

- **LO1** Appreciate the broader economic context in which accounting information interacts with risks, valuation, and operating and financial strategies. The contextual background is relevant to understanding the specific accounting information in subsequent chapters;
- **LO2** Understand the interactions between uncertainty, risks, strategy, valuation, and information;
- **LO3** Compare the different modes of reporting — financial statement reporting, discretionary management disclosures, and summary metrics; and
- **LO4** Review an example of a financial risk metric.



## INTRODUCTION

Until recently, financial reporting largely focused on the financial performance and financial position of an enterprise — how well a firm is doing and how effectively the custodians (the managers) have managed the resources of the firm. In recent years, however, the scope of financial reporting has expanded to include the risks faced by business enterprises. Some of the requirements on risk reporting have been mandated in accounting standards such as International Financial Reporting Standard 7 Financial Instruments: Disclosures (hereinafter referred to as IFRS® 7)[1] while other disclosures on risk are required by regulatory bodies in each national jurisdiction.

The impetus for greater disclosure on risks is a direct response to the collapse of large and reputable companies such as Lehman Brothers (an investment bank that failed during the 2008 financial crisis), Enron (once ranked the seventh largest company among Fortune 500 companies), Barings (one of the oldest and most reputable of British banks), and Long Term Capital Management. Some of these corporate collapses had been the result of trading in financial instruments, particularly derivatives and complex financial instruments for which the disclosure of risk information had been grossly inadequate.

While risks are often associated with market forces, they also arise endogenously from a firm's choice of business strategies. The challenge facing business firms is one of balancing risks rather than eliminating risks altogether. This is because a specific business strategy may eliminate one type of risk but may give rise to another type of risk. For example, a firm tries to reduce its competitive risk in its own markets by setting up manufacturing facilities in a low-cost country. In doing so, it may face new, and different, kinds of risks such as political risk and foreign exchange risk. Thus, the focus of business firms is not so much on risk reduction as it is on risk management. Indeed, one of the themes in modern business management is integrated risk management, which takes a comprehensive view of the different sources of risks facing a business and the trade-offs in risks arising from different risk management strategies of that business.[2]

## UNCERTAINTY, RISK, AND EXPOSURE

The terms “uncertainty” and “risk” are often used interchangeably, although in the strategic management literature, they refer to different phenomena. There are a few interpretations of the term “uncertainty.” Uncertainty can be defined as future possible states or the occurrence or non-occurrence of future events. For example, when we refer to interest rate uncertainty, we generally mean the possibility of increases or decreases in future interest rates. Uncertainty has also been defined as the unpredictability of organizational and environmental variables that give rise to risks (as discussed in Miller, 1992).[3] In our view, uncertainties give rise to risk.

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### Perspectives of Risk

There are two ways of looking at risk. One perspective views risk as the probability of a loss incurred as a result of management decision-making or external conditions. This perspective is sometimes referred to as “downside risk.” The other perspective, which is found in finance theory, views risk as the variability in outcomes. “Volatility risk” is a term that is sometimes used to refer to this perspective of risk. Volatility risk contains both “potential for gain and exposure to loss.”[4] According to this perspective, the greater the variability of possible outcomes, the greater is the risk. Thus, excessive gains should merit investigation as should excessive losses because the gains could be due to firms taking on greater risks. IAS® 37 Provisions, Contingent Liabilities and Contingent Assets (hereinafter referred to as IAS 37)[5] adopts this perspective of risk.[6]

These two perspectives of risk can be distinguished by using the familiar bell-shaped probability distribution curve. The first perspective, which may be called a one-sided or one-tailed perspective, focuses on the left-hand tail of the distribution. The second perspective, which may be called a two-tailed perspective, focuses on the dispersion of the curve. Both perspectives have their place in the risk management strategies of firms as well as in risk reporting.

It would not be meaningful to talk about risk without also considering the concept of exposure. Even if uncertainties exist with respect to a particular factor, such as interest rate movement, risk exists only if there is exposure to the uncertainty. For example, a firm with no debt has no direct exposure to interest rate risks, although there may be high uncertainty in the interest rate environment. However, even if a firm has no interest rate obligations, it may be indirectly affected by interest rate volatility. For example, increases in interest rates raise the cost of borrowing for companies and individuals, which in turn affect the cost of doing business or the discretionary purchasing power of consumers. Hence, the ripple effect of interest rate volatility may affect the profitability of firms that do not have interest rate obligations.

## RISK ANALYSIS AND MEASUREMENT

In order to have a better understanding of a firm’s risks, investors require information to analyze the risks affecting a firm’s business, and assess the strategies and policies that management have in place to manage risks. There are many ways of analyzing risks. Finance theory distinguishes between systematic (or market) risks and unsystematic (or unique) risks. Systematic risks affect all firms and cannot be diversified away. They are also described as “market risks” as they affect all firms that are exposed to these risks. Unsystematic risks are also described as “idiosyncratic risks” or “firm-specific risks.” Examples of market risks are foreign exchange risk, interest rate risk, and the price risk of commodities. Unsystematic risks are specific to individual firms and can be reduced or eliminated by a firm’s strategies. Examples of unsystematic risks include the risks of product failure, litigation risk, credit problems,[7] poor liquidity, and business cyclical risks. Poor corporate governance and quality of human capital are also sources of unsystematic risks.

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A proper analysis of risks facilitates their measurement. The measurement of risks is an important part of the management process although it is recognized that this is not practical or possible for many risks. Firms often use a variety of methods to measure different types of risks. The more common measures of risks include:

1. Accounting measures, for example, contingency provisions, or probability weighted measures such as fair values;
2. Accounting ratios, for example, liquidity ratio, debt-equity ratio, and interest coverage ratio; and
3. Non-accounting measures, for example, summary metrics such as the Z-score for predicting the risk of bankruptcy or value at risk metrics.

Some of these measures are discussed in greater detail later in the chapter.

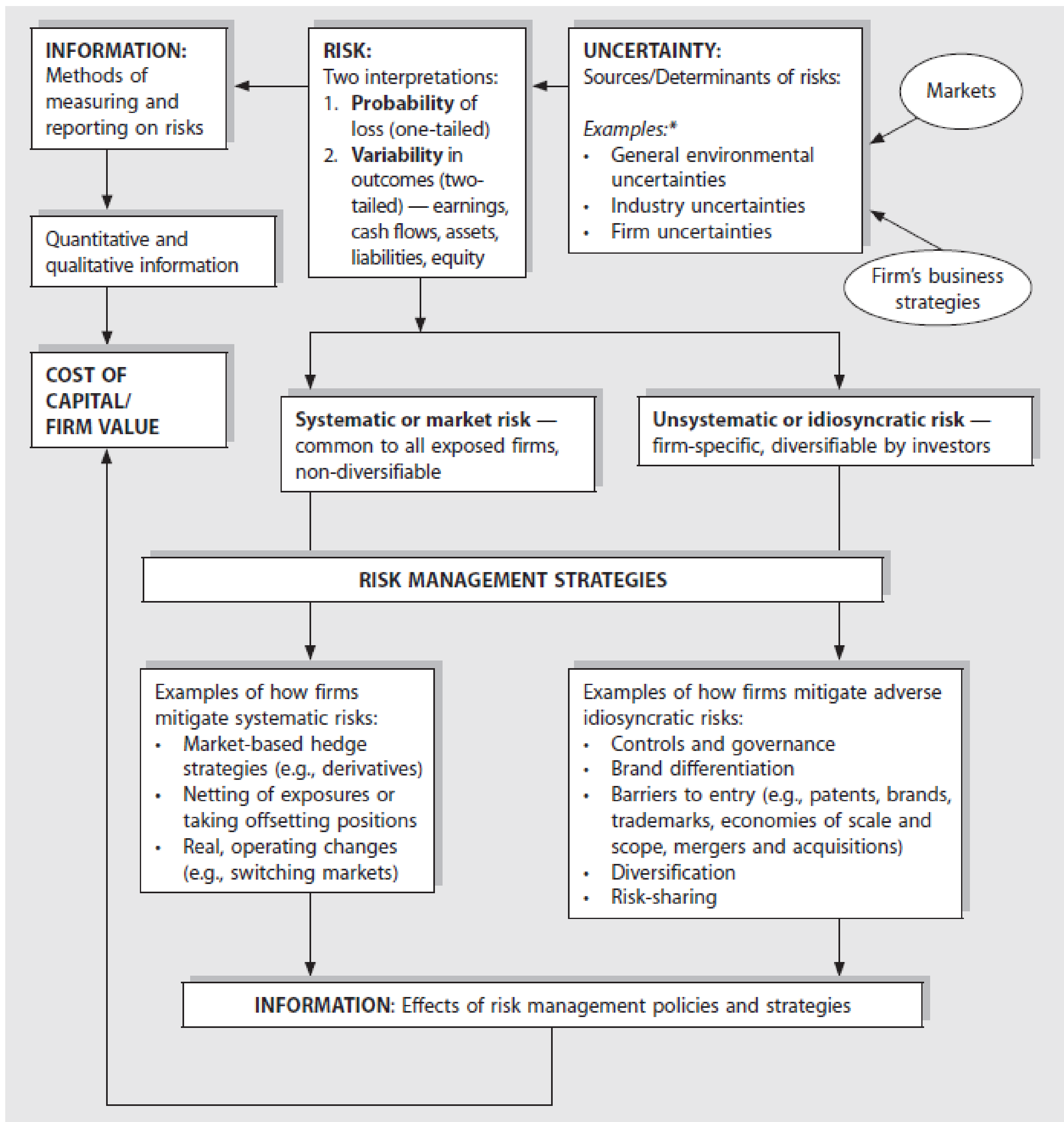
## RISK REPORTING

Business firms generally tend to focus on performance and business opportunities in their financial reports and are less open to discussion of their business and financial risks. However, there are a number of reasons why firms should be more transparent in their risk reporting. Those reasons are highlighted here.

1. If financial statements are to provide information that is useful and relevant to users, such information should be forward-looking and should aid users in assessing future earnings and cash flows. This includes the provision of information on a firm's risks and the effect of those risks on earnings and cash flows. Information on a firm's risks enables an investor to assess the nature, amount, and probability of the risks, and the mitigating effects of risk management strategies. This information will help the investor determine whether the firm's risk levels are tolerable, given the investor's risk appetite, and aid him or her in making a decision to buy, hold, or sell an investment.
2. The amount and quality of information on a firm's risks may have an effect on a firm's cost of capital (and ultimately a firm's value). Finance theory postulates that there is a relationship between risk and cost of capital (see Appendix 1A). This relationship is clearly reflected in the rating of corporate bonds. Corporate bonds of investment grade (grade A and above) are issued at a higher price while non-investment grade bonds (or junk bonds) are issued at a steep discount. The higher the perceived risk, the higher is the required rate of return or cost of capital. Investors' perceptions of a firm's risks may be influenced by the firm's risk disclosures. Thus, a firm that discloses inadequate information on its risks may have to pay a higher risk premium (higher cost of capital) as, in the eyes of the investors, the lack of information is a source of additional uncertainty regarding its future earnings and cash flows. On the other hand, a firm that provides adequate information on its operating and financial risks and its risk management strategies is more likely to avoid this problem. page 5 Thus, the cost of capital should be lower for a firm that provides adequate risk information compared to a firm with similar risks that provides inadequate risk information.[8] Research has examined the relationship between financial statement disclosure (including disclosure of information on risk) and the cost of capital, and there is some evidence to support such a relationship.[9]
3. Not all investors are equally informed. For example, analysts have access to key managers of the firms that they cover. From their discussions and site visits, they may be able to obtain additional information that is usually not available to other investors. This additional information is then passed on to their clients. If this additional information is provided to all investors, it should result in a "level playing field" for all types of investors.
4. Adequate risk information contributes to the protection of investors by drawing their attention to the risks that the firm is exposed to. In the process, management's accountability is enhanced.
5. Better risk disclosure may lead to better risk management. Managers are more likely to pay more attention to their risk management processes if they have to report on the risks that their firm is exposed to.

The interactions between uncertainty, risk, information, and cost of capital (and firm value) are summarized in Figure 1.1.

**FIGURE 1.1** **Interactions between uncertainty, risk, information, and value**




* Miller (1992), as cited in footnote 2.

## Risk Measurement and Reporting by Business Firms

As mentioned earlier, there are a number of ways to measure risk. Generally, firms use both accounting and non-accounting measures of risk. Accounting measures include point or range estimates, for example, provision for loss, fair values and aggregate measures such as debt-equity ratio. Non-accounting measures include summary metrics such as value at risk measures. Similarly, methods of risk reporting vary. These are generally categorized into quantitative and qualitative methods. For example, the Securities Exchange Commission (SEC) in the United States issued Financial Reporting Requirement (FRR) 48 that requires firms listed on the New York Stock Exchange to choose

among three formats of reporting on market risks: sensitivity analysis, value at risk, and the tabular format. The first two are quantitative measures while the last is a qualitative measure.

For our purpose, we classify risk information into the following three categories (see Figure 1.2):

1. *Accounting-based information*, for example, statement of financial position disclosures, cash flow impact, and footnote disclosures;
2. *Summary metrics* such as:
   - Value at risk (VaR)
   - Sensitivity analysis
   - Financial ratios
3. *Descriptive information*, for example, Chairman's Statement and Operational Review or Management Discussion and Analysis (MD&A).

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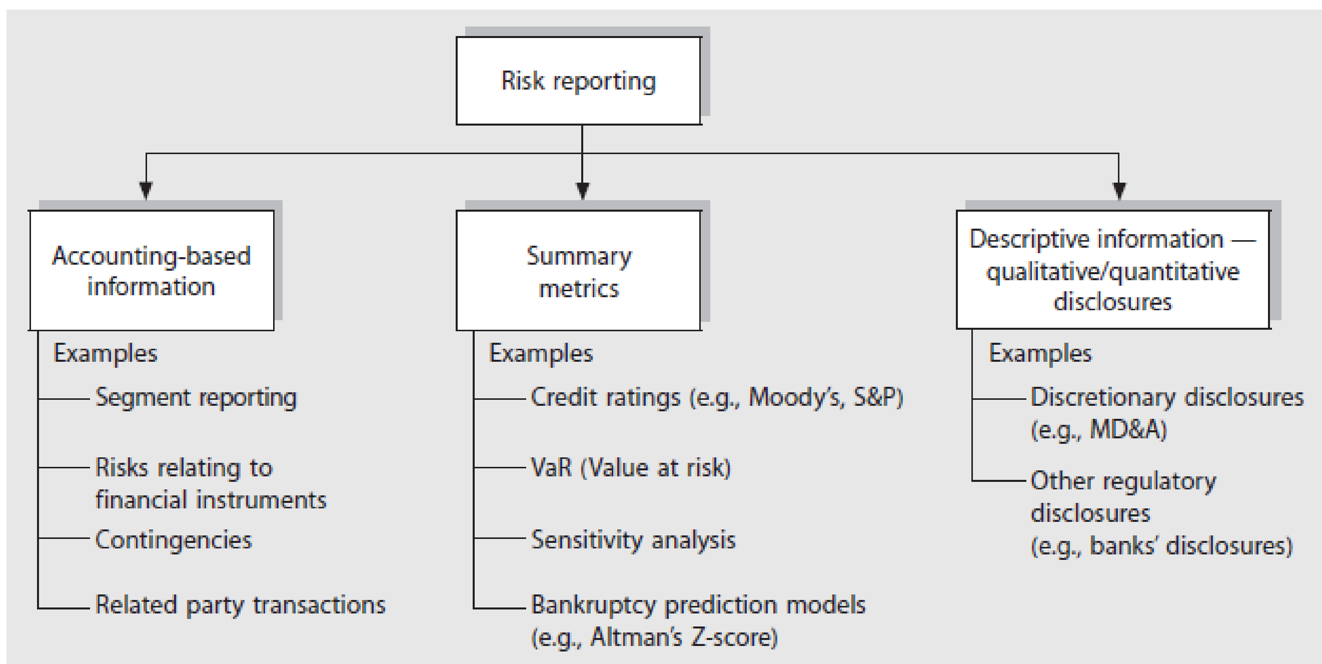
**FIGURE 1.2 Modes of risk reporting**

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## Accounting-based Measures of Risk

International Financial Reporting Standards (IFRS® Standards) and International Accounting Standards (IAS® Standards) that require information useful for risk assessment include the following:

1. IFRS 8 *Operating Segments*[10]
2. IAS 24 *Related Party Disclosures*
3. IAS 37 *Provisions, Contingent Liabilities, and Contingent Assets*
4. IFRS 7 *Financial Instruments: Disclosures*

### IFRS 8: Operating Segments