

# **Guide to Audit of Complex Financial Instruments**



**The Institute of Chartered Accountants of India**  
*(Set up by an Act of Parliament)*  
**New Delhi**

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# Foreword

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Learning, unlearning and relearning are the givens for a profession as dynamic as auditing. Over the years, the Profession has been innovating itself to respond to changing economic realities and expectations of the stakeholders. Complex financial instruments, which have been at the storm centre of the recent financial crisis, has been one such area where the auditing profession has had several lessons to learn.

I am happy to note that the Auditing & Assurance Standards Board is bringing out this Guide to Audit of Complex Financial Instruments for the benefit of the members. The Guide is a comprehensive and self contained reference document for the members as it contains guidance on several important related aspects such as fundamental concepts of complex financial instruments, associated risks and their identification, responding to such risks and a number of other issues which are peculiar to the operation of these instruments.

At this juncture, I wish to place my appreciation for CA Abhijit Bandyopadhyay, Chairman, Auditing and Assurance Standards Board for his proactive initiatives in identifying such emerging areas of concern and significance to the profession and bringing out guiding literature thereon for the benefit of the members.

I am sure that the members would find this Guide to be immensely useful.

October 11, 2011  
New Delhi

**CA. G. Ramaswamy**  
President, ICAI



# Preface

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*Technology* and *Innovation* have been the two most important driving factors behind the growth of the world capital markets. The markets today are flooded with a plethora of innovative financial products, which by their very nature are not only complex to understand but also refuse to be reined in by the conventional principles of recognition, measurement, presentation and disclosure. Thus, they pose a challenge not only for accountants but all the more for the auditors. The recent financial crisis is an ample evidence of this.

In the this context, with a view to guide the practitioners on understanding and handling the peculiar issues that may arise in the audit of transactions in complex financial instruments undertaken by the auditee, the Auditing and Assurance Standards Board has brought out this Guide to Audit of Complex Financial Instruments, based on the Exposure Draft of IAPS 1000.

The Guide is divided into five Chapters. **Chapter I, *Introduction***, deals with the definitions, scope, nature of financial instruments covered by this Guide, usability of the Guide. **Chapter II, *Basic Concepts of Complex Financial Instruments***, deals with aspects such as purpose of using complex financial instruments, risks associated with them, controls relating to complex financial instruments, presentation and disclosure about complex financial instruments, etc. **Chapter III, *Audit Considerations relating to Complex Financial Instruments***, provides comprehensive guidance on aspects ranging from planning, understanding such instruments, related fraud risk factors, assessing and responding to risk of material misstatements, use of experts, exercising professional skepticism, assertions related to complex financial instruments, tests to be applied, etc. **Chapter IV, *Valuation of Complex Financial Instruments*** deals with aspects such as understanding management's methodology for valuing complex financial instruments, valuation uncertainty, procedures for testing the valuation of complex financial instruments, etc. **Chapter V, *Presentation and Disclosure of Complex Financial Instruments***, deals with aspects such as audit of presentation and disclosure of such financial instruments, master netting

agreements, other audit considerations such as role of internal audit, written representations, etc. The Guide has two Appendices, dealing with disclosures relating to financial instruments prescribed under Accounting Standards and illustrative audit procedures and objectives achieved.

I am extremely grateful to CA. Harinderjit Singh, Gurgaon and CA. Ridhima Dubey, Gurgaon for squeezing time out of their professional and personal preoccupations to author this Guide.

At this juncture, I also wish to express my sincere thanks to CA. G Ramaswamy, President, ICAI as well as CA. Jaydeep N. Shah, Vice President, ICAI whose vision, guidance and support I have been privileged to receive in the activities of the Board.

Many thanks are also due to my Council colleagues at the Board, viz., CA. Rajkumar S Adukia, Vice Chairman, CA. Amarjit Chopra, CA. Naveen N.D. Gupta, CA. Sanjeev K. Maheshwari, CA. M. Devaraja Reddy, CA. Rajendra Kumar P., CA. J. Venkateswarlu, CA. Sumantra Guha, CA. Anuj Goyal, CA. Pankaj Tyagee, CA. Jayant P. Gokhale, CA. S. Santhanakrishnan, CA. Mahesh P. Sarda, CA. Vijay Kumar Garg, CA. V. Murali, CA. Nilesh S. Vikamsey and the Central Government nominees, Shri Prithvi Haldea and Smt. Usha Sankar and also to the co-opted members at the Board, viz., CA. David Jones, CA. Sanjay Vasudeva, CA. Raviprasad, CA. P.R. Vittel, CA. C.N. Srinivasan, CA. Ramana Kumar B., for their dedication and support to the work plan of the Board and bringing them to fruition. I also wish to place on record my thanks to the special invitees to the Board, viz., CA. Vinod Chandiok, Prof. A. Kanagaraj, CA. Amit Roy, Shri Sunil Kadam, CA. Raj Agrawal, CA. Bhavani Balasubramanian, CA. K. Rajasekhar, CA. N. Venkatram, CA. B. Padmaja, CA. L. Kamesh for their support to the Board.

I am confident that this Guide would be well received by members and other interested readers.

October 7, 2011  
Kolkata

**CA. Abhijit Bandyopadhyay**  
Chairman,  
Auditing & Assurance Standards Board

# Contents

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*Foreword*

*Preface*

**Chapter 1: Introduction..... 1-8**

Definitions..... 2

Scope ..... 3

Nature of Financial Instruments Addressed by this Guide ..... 4

Types of Entities to which this Guide May Be Relevant ..... 7

**Chapter 2: Basic Concepts of Complex Financial  
Instruments ..... 9-30**

Purpose of using Complex Financial Instruments ..... 9

Risks Associated with Complex Financial Instruments ..... 10

Table 1: Types of Risks to which Entities May Be Exposed  
through the Use of Complex Financial Instruments..... 11

Controls Relating to Complex Financial Instruments..... 13

Table 2: Internal Controls Relating to Complex Financial  
Instruments that May Exist within the Entity ..... 14

Presentation and Disclosure of Complex  
Financial Instruments ..... 26

Table 3: Categories of Disclosures ..... 27

**Chapter 3: Audit Considerations Relating to Complex  
Financial Instruments ..... 31-52**

Planning Considerations ..... 31

Professional Skepticism ..... 32

Understanding the Complex Financial Instruments ..... 34

Fraud Risk Factors Associated with Complex Financial  
Instruments..... 35

Use of Experts in the Audit of Complex Financial Instruments.... 35

Assessing and Responding to the Risks of  
Material Misstatement ..... 38

Overall Considerations Relating to Complex Financial Instruments.....	38
Factors in Determining Whether to Test Controls.....	39
Substantive Procedures.....	42
Dual-Purpose Tests .....	44
Timing of the Auditor's Procedures.....	44
Considerations for Specific Assertions Relating to Complex Financial Instruments .....	46
Completeness, Accuracy, and Existence of Complex Financial Instruments.....	46
Table 4: Controls over Completeness, Accuracy, and Existence .....	46
Procedures relating to Completeness, Accuracy, and Existence of Complex Financial Instruments.....	50
<b>Chapter 4: Valuation of Complex Financial Instruments..</b>	<b>53-85</b>
Table 5: Fair Value Hierarchy.....	54
Understanding Management's Methodology for Valuing its Complex Financial Instruments.....	55
Table 6: An Entity's Considerations when Using Models in a Valuation Methodology .....	56
Valuation Uncertainty .....	58
Observable and Unobservable Inputs .....	60
Table 7: Effects of Inactive Markets .....	61
Source of Inputs to a Valuation Methodology .....	63
Use of Management's Experts and Service Organisations .....	69
Consistency of Valuation Methodology across periods ...	72
Procedures relating to Understanding and Testing the Valuation of Complex Financial Instruments .....	73
Significant Risks .....	77
Evaluating Models used by the Entity.....	79
Evaluating whether the Assumptions and Inputs used by Management are reasonable.....	80

Considerations when a Management's Expert or Service Organisation is used by the Entity .....	83
Developing a Range .....	84
<b>Chapter 5: Presentation and Disclosure of Complex     Financial Instruments .....</b>	<b>86-96</b>
Procedures relating to the Presentation and Disclosure of Complex Financial Instruments .....	87
Master Netting Agreements .....	89
Other Relevant Audit Considerations .....	90
The Role of the Internal Audit Function .....	90
Written Representations .....	92
Communication with Those Charged with Governance and Others .....	94
Communications with Regulators and Others .....	96
<b>Appendices .....</b>	<b>97-129</b>
Appendix A: Illustrative Disclosures .....	97-118
Appendix B: Illustrative Guidance for Audit of Complex Financial Instruments .....	119-129



# CHAPTER 1

## Introduction

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1.1 The market has been fuelled with new financial instruments with complex terms. Usually, the terms of these financial instruments are so complex, that it becomes difficult to understand its likely impact on the financial statements. The recent financial crisis has highlighted the need to ensure appropriate recognition, measurement, presentation and disclosure of these complex financial instruments and thus the focus of the accounting standard setters worldwide on these financial instruments. In India, too, the Institute of Chartered Accountants of India (ICAI) has issued various announcements including issuing Accounting Standards related to financial instruments.

1.2 The Standard on Audit (SA) 540, 'Auditing Accounting Estimates, Including Fair Value Accounting Estimates and Related Disclosures', specifically deals with the audit of fair value measurements and disclosures. Among other matters, SA 540 addresses audit considerations relating to the measurement, presentation and disclosure of accounting estimates, including consideration of estimation uncertainty and indicators of possible management bias. However, considering the increasing use of complex financial instruments a need was felt for additional guidance on auditing such complex financial instruments. The Guide addresses needs of a broad group of auditors, rather than endeavouring to comprehensively address the issues faced by auditors in a highly specialised industry who may already have adequate guidance. The Guide can be used by the auditors

## ***Guide to Audit of Complex Financial Instruments***

irrespective of the applicable financial reporting framework and reflects the international practice.

**This Guide is developed in line with the Proposed International Auditing Practice Statement 1000, “Special Considerations in Auditing Complex Financial Instruments”.**

### **Definitions**

1.3 *Financial Instruments*: Paragraph 7.1 of AS 31, defines financial instruments as any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

1.4 A *financial asset* is any asset that is:

- (a) cash;
- (b) an equity instrument of another entity;
- (c) a contractual right:
  - (i) to receive cash or another financial asset from another entity; or
  - (ii) to exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity; or
- (d) a contract that will or may be settled in the entity’s own equity instruments and is:
  - (i) a non-derivative for which the entity is or may be obliged to receive a variable number of the entity’s own equity instruments; or
  - (ii) a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity’s own equity instruments. For this purpose the entity’s own equity instruments do not include

## **Introduction**

instruments that are themselves contracts for the future receipt or delivery of the entity's own equity instruments.[Refer paragraph 7.2 of AS 31]

- 1.5 A *financial liability* is any liability that is:
- (a) a contractual obligation:
    - (i) to deliver cash or another financial asset to another entity; or
    - (ii) to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity; or
  - (b) a contract that will or may be settled in the entity's own equity instruments and is
    - (i) a non-derivative for which the entity is or may be obliged to deliver a variable number of the entity's own equity instruments; or
    - (ii) a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. For this purpose the entity's own equity instruments do not include instruments that are themselves contracts for the future receipt or delivery of the entity's own equity instruments. [Refer paragraph 7.3 of AS 31]

## **Scope**

1.6 The purpose of this Guide is to provide a basic understanding and guidance to the auditor regarding special considerations when auditing complex financial instruments. Complex financial instruments may be used by financial and non-financial entities of all sizes for a variety of purposes. Some entities have large holdings and transaction volumes while other entities may only engage in a few complex financial instrument transactions. This Guide is relevant to all of these situations.

## ***Guide to Audit of Complex Financial Instruments***

1.7 Further, certain Standards on Audit (SAs) may assume added importance in the context of audit of complex financial instruments. These are:

- (a) SA 540<sup>1</sup> which deals with the auditor's responsibilities relating to auditing accounting estimates, including accounting estimates related to complex financial instruments measured at fair value; and
- (b) SA 315<sup>2</sup> and SA 330<sup>3</sup> which deal with identifying and assessing risks of material misstatement and responding to those risks.

1.8 The applicable financial reporting framework may require the entity to measure complex financial instruments at fair value or disclose fair value information for financial instruments carried at amortised cost. The guidance on valuation in this Guide is particularly relevant for complex financial instruments measured or disclosed at fair value, while the guidance on areas other than valuation applies equally to complex financial instruments whether measured at fair value or amortised cost. This Guide is also applicable to both financial assets and financial liabilities, as the auditing considerations for both are generally the same, except that measurement of credit risk for financial liabilities can be particularly challenging.

### **Nature of Financial Instruments Addressed by this Guide**

1.9 Different definitions of financial instruments may exist among financial reporting frameworks. In India, Accounting Standards (AS) have been specified under the Companies

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<sup>1</sup> SA 540, 'Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures'.

<sup>2</sup> SA 315, 'Identifying and Assessing the Risks of Material Misstatement Through Understanding the Entity and Its Environment'.

<sup>3</sup> SA 330, 'The Auditor's Responses to Assessed Risks'.

## ***Introduction***

(Accounting Standards) Rules, 2006 as prescribed under Section 211(3C) of the Companies Act, 1956 (the Act). Apart from the Act and the Rules thereunder, the Indian GAAPs also include accounting literature in the form of pronouncements of the ICAI<sup>4</sup>, together hereinafter referred to as the 'applicable financial reporting framework'. Accounting Standard (AS) 30, 'Financial Instrument: Measurement and Recognition' define a financial instrument as any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity<sup>5</sup>. Financial instruments may be cash, the equity of another entity, the right to receive or deliver cash or exchange financial assets or liabilities, contracts settled in an entity's own equity instruments, certain contracts on non-financial items, or certain contracts issued by insurers that do not meet the definition of an insurance contract. This definition encompasses a wide range of financial instruments from simple loans and deposits to complex derivatives, structured products, and some commodity contracts.

1.10 This Guide focuses on those financial instruments, both financial assets and financial liabilities, that are complex. It does not deal, for example, with financial instruments such as cash, simple loans, trade accounts receivable and trade accounts payable.

1.11. Also, this Guide does not deal with loan loss provisioning. Although that subject matter can relate to how a financial

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<sup>4</sup> At present, the following pronouncements of ICAI are being referred:

- Accounting Standard (AS) 30, 'Financial Instruments: Recognition and Measurement'.
- Accounting Standard (AS) 31, 'Financial Instruments: Presentation'.
- Accounting Standard (AS) 32, 'Financial Instruments: Disclosures'.
- Notified Accounting Standard (AS) 11, 'The Effects of Changes in Foreign Exchange Rates'.
- ICAI announcement regarding Accounting for Derivatives [March 29, 2008]

<sup>5</sup> Accounting Standard (AS) 32, 'Financial Instruments: Presentation', paragraph 11.

## ***Guide to Audit of Complex Financial Instruments***

institution deals with credit risk associated with complex financial instruments, a discussion of the many potential complexities of loan loss provisioning is beyond the scope of this Guide.

1.12 The complexity of a financial instrument often lies in the way in which future cash flows are determined. All financial instruments represent the right or obligation to pay or receive future cash flows. Examples of complexity can be:

- (a) A very high volume of individual cash flows, where a lack of homogeneity requires analysis of each one or a large number of grouped cash flows to evaluate, for example, credit risk (for example, Collateralized Debt Obligations (CDOs)).
- (b) Complex formulas for determining the cash flows.
- (c) Uncertainty or variability of future cash flows, such as option contracts or financial instruments with lengthy contractual terms.

1.13 The higher the variability of cash flows to changes in market conditions, the more complex and uncertain the fair value measurement of the financial instrument is likely to be. In addition, sometimes financial instruments that ordinarily are relatively easy to value become complex to value because of particular circumstances, for example, instruments for which the market has become inactive or which have lengthy contractual terms.

1.14 Development of new complex financial instruments is a continuous process in a capital market. As a result, it is not possible to provide an exhaustive list of all such instruments. For the purposes of this Guide, complex financial instruments include, but are not limited to:

- Derivatives (including forward contracts, swaps, caps, floors, swaptions, credit default options, credit default swaps, and other option contracts);
- Leveraged finance commitments; and

## ***Introduction***

- Structured products— Some of these products may include embedded derivatives and can combine a number of financial instruments to achieve a desired overall effect (for example, CDOs, Asset Backed Securities (ABSs), and structured debt).

1.15 Complex financial instruments are susceptible to estimation uncertainty, which is defined in SA 540 as, "the susceptibility of an accounting estimate and related disclosures to an inherent lack of precision in its measurement"<sup>6</sup>. Valuation uncertainty is an aspect of estimation uncertainty. The nature and reliability of information available to support the valuation of complex financial instruments varies widely, which thereby affects the degree of estimation uncertainty associated with their measurement. The degree of estimation uncertainty affects, in turn, the risks of material misstatement related to complex financial instruments, including their susceptibility to unintentional or intentional management bias. The importance of disclosures regarding the basis of measurement increases as the measurement uncertainty of the financial instruments increases. Many of the complex financial instruments referred to in paragraph 8 are required to be presented in the financial statements at fair value. Derivatives and structured products become more complex when they are a combination of individual complex financial instruments.

### **Types of Entities to which this Guide May Be Relevant**

1.16 Regardless of their size, all entities may be subject to risks of material misstatement when using complex financial instruments. For example, entities may not have accurately recorded all financial instrument transactions, or may not have valued these instruments properly in accordance with the applicable financial reporting framework.

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<sup>6</sup> SA 540, paragraph 7(c).

## ***Guide to Audit of Complex Financial Instruments***

1.17 The use of complex financial instruments varies by entity. For example, some entities may take positions in complex financial instruments to assume and benefit from risk. Other entities may use complex financial instruments to reduce risk by hedging or managing exposures. The guidance in this Guide is intended to be helpful in audits of entities with different levels of use of complex financial instruments ranging from:

- Entities with high levels of trading and use of complex financial instruments (for example, banks, insurance companies and non-financial sector entities with treasury departments); to
- Entities with relatively few transactions involving complex financial instruments (for example, an entity that wishes to hedge a relatively low number of foreign currency transactions or obtains a few instruments for investment purposes).

# CHAPTER 2

## Basic Concepts of Complex Financial Instruments

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### Purpose of Using Complex Financial Instruments

2.1 More complex financial instruments, such as those arising from derivatives contracts, generally exist for:

- Hedging purposes (i.e., to change an existing risk profile to which an entity is exposed). This includes:
  - The forward purchase or sale of currency to fix a future exchange rate;
  - Converting future interest rates to fixed or floating through the use of swaps; and
  - The purchase of option contracts to provide an entity with protection against a particular price movement, including contracts which may contain embedded derivatives; and
- Trading purposes (i.e., to enable an entity to take a risk position to benefit from long term investment returns or from short term market movements).

In addition, a complex financial instrument arising from a derivative contract may be a financial asset or a financial liability at different times and subject to different circumstances and can move from a financial asset to a financial liability very quickly. Such volatility can also dramatically affect an entity's credit risk exposure to its counterparties.

## ***Guide to Audit of Complex Financial Instruments***

### **Risks Associated with Complex Financial Instruments**

2.2 While the use of complex financial instruments has become more commonplace and the requirements to provide fair value and other information about them in the financial statements have also undergone a significant change in the recent years, management and those charged with governance may not:

- Fully understand the risks of using complex financial instruments;
- Have the expertise to value them appropriately in accordance with the applicable financial reporting framework; or
- Have sufficient controls in place over financial instrument activities.

2.3 The knowledge and experience of management and those charged with governance is an important element of the control environment at entities of all sizes. The use of complex financial instruments without relevant expertise (e.g., valuation and accounting expertise) within the entity may result in the entity unknowingly assuming a significant amount of risk (e.g., credit risk, market risk, and liquidity risk), and increase the risks of material misstatement in the financial statements. The inability of management to fully appreciate the risks inherent in a complex financial instrument can have a direct effect on their ability to manage these risks appropriately, and may ultimately threaten the viability of the entity.

2.4 The use of complex financial instruments can reduce exposures to certain business risks, for example changes in exchange rates, interest rates and commodity prices, or a combination of those risks. On the other hand, the inherent complexities also may result in increased business risk, in particular if the entity is inappropriately hedging risks and inadvertently creating additional risks by doing so. This may in

### ***Basic Concepts of Complex Financial Instruments***

turn increase risks of material misstatement and present new challenges to management and auditors. Table 1 lists the principal types of risk related to financial instrument activities to which entities may be exposed.

#### **Table 1: Types of Risks to which Entities May Be Exposed through the Use of Complex Financial Instruments**

The principal types of risks to which an entity may be exposed on account of the use of complex financial instruments are as follows. It should be noted that this list is not meant to be exhaustive and different terminology may be used to describe these risks or classify the components of individual risks.

- (a) ***Credit (or counterparty) Risk*** - The risk that one party to a financial instrument will cause a financial loss to another party by failing to discharge an obligation. Credit risk includes settlement risk and is often associated with default. Settlement risk is the related risk that one side of a transaction will be settled without consideration being received from the customer or counterparty.
- (b) ***Market risk*** -The risk that the fair value or future cash flow of a financial instrument will fluctuate because of changes in market prices, in an adverse way not anticipated by the entity when it entered into the transaction. Examples of market risk include currency risk, interest rate risk, commodity and equity price risk, and volatility risk.
- (c) ***Liquidity risk*** -The risk that an entity will be unable to fund increases in assets and meet obligations as they become due.
- (d) ***Operational risk*** - It relates to the specific processing required for financial instruments and includes:
  - (i) The risk that confirmation and reconciliation controls are inadequate resulting in incomplete or

## ***Guide to Audit of Complex Financial Instruments***

- inaccurate recording of financial instruments;
- (ii) The risks that there is inappropriate documentation of hedged transactions and insufficient monitoring of these transactions;
- (iii) The risk that transactions from a trade entry, operational processing, financial accounting or risk management perspective are split into individual transaction legs or cash flows, which do not reflect the economics of the overall trade, and which are therefore potentially incorrectly recorded, processed or risk managed;
- (iv) The risk that undue reliance is placed by staff on the accuracy of model valuations or processing, without adequate review, and transactions are therefore incorrectly valued or risk managed;
- (v) The risk of loss resulting from inadequate or failed internal processes, people, and systems, or from external events; and
- (vi) The risk that there is inadequate or non-timely maintenance of models used to measure financial instruments.

Operational risk also includes legal (enforceability) risk, which is the risk relating to losses resulting from a legal or regulatory action that invalidates or otherwise precludes performance by the end user or its counterparty under the terms of the contract or related netting arrangements. For example, legal risk could arise from insufficient or incorrect documentation for the contract, an inability to enforce a netting arrangement in bankruptcy, adverse changes in tax laws, or statutes that prohibit entities from investing in certain types of financial instruments.

## *Basic Concepts of Complex Financial Instruments*

### **Controls Relating to Complex Financial Instruments**

2.5 SA 315 establishes requirements for the auditor to understand the entity and its environment, including its internal control. Obtaining an understanding of the entity and its environment, including the entity's internal control, is a continuous, dynamic process of gathering, updating and analyzing information throughout the audit. The understanding obtained establishes a frame of reference within which the auditor plans the audit and exercises professional judgment throughout the audit. The volume of the transactions in the financial instrument at an entity typically determines the nature and extent of controls that may exist at an entity and an understanding of how they are monitored and controlled assists the auditor in determining the nature, timing and extent of audit procedures. **Table 2** describes internal controls that may exist in an entity that deals in a high volume of financial instrument transactions.

2.6 The key elements of process and internal control relating to an entity's complex financial instrument transactions include:

- Setting an approach to define the amount of risk exposure that the entity is willing to accept when engaging in financial instrument transactions (this may be referred to as its "risk appetite"), including policies (example, business rationale, minimisation of risk or maximisation of gain) for investing in complex financial instruments, and the control framework in which the financial instrument activities are conducted;
- Establishing processes for the authorisation of new types of financial instrument transactions which consider the accounting, regulatory, legal, market and operational risks that are associated with such instruments;

### ***Guide to Audit of Complex Financial Instruments***

- Processing financial instrument transactions, including confirmation and reconciliation of cash and asset holdings to external statements, and the payments process;
- Segregation of duties between those investing in the complex financial instruments and those responsible for valuing such instruments;
- Valuation processes, including the use of third-party expertise;
- Risk management;
- Monitoring of controls; and
- Oversight by those charged with governance, i.e., Audit Committee/Board of Directors.

### **Table 2: Internal Controls Relating to Complex Financial Instruments that May Exist within the Entity**

The extent of an entity's use of complex financial instruments and the degree of complexity of the instruments are important determinants of the level of sophistication necessary for the entity's internal control. For example, smaller entities may use less structured products and simple processes and procedures to achieve their objectives. It is the role of those charged with governance to determine an appropriate attitude towards the risks. It is management's role to monitor and manage the entity's exposures to those risks.

The following paragraph provides an overview and examples of internal controls that may exist in an entity that deals in a high volume of financial instrument transactions, whether for trading or investing purposes. The examples are not meant to be exhaustive and entities may establish different control environments and processes depending on their size, the industry in which they operate, and the extent of their financial instrument transactions.

Management and, where appropriate, those charged with governance are responsible for designing and implementing a

### ***Basic Concepts of Complex Financial Instruments***

system of internal control necessary to enable the preparation of financial statements in accordance with the applicable financial reporting framework with respect to complex financial instruments. An entity's internal control would be effective when management and those charged with governance have:

- (a) Established an appropriate control environment, including a commitment to competence, participation by those charged with governance, a clear organizational structure, assignment of authority and responsibility, and human resource policies and procedures. In particular, clear rules are needed on the extent to which those responsible for financial instrument activities are permitted to participate in the trading markets. Such rules must have regard to any legal or regulatory restrictions on using complex financial instruments. For example, certain public sector entities may not have the power to conduct business using derivative financial instruments;
- (b) Established a risk assessment process relative to the size of the entity and the complexity of its financial instruments (for example, in some entities a formal risk management function may exist);
- (c) Established information systems that provide those charged with governance with an understanding of the nature of the complex financial instrument activities and the associated risks;
- (d) Designed and implemented a system of internal control to:
  - Provide reasonable assurance that the entity's use of complex financial instruments is within its risk management policies; and
  - Ensure that the entity is in compliance with applicable laws and regulations; and
  - Monitor risk and financial control;
- (e) Considered the integrity of the entity's accounting and financial reporting systems to ensure the reliability of

## ***Guide to Audit of Complex Financial Instruments***

management's financial reporting of financial instrument activities.

### **The Entity's Control Environment**

#### ***Commitment to Competence***

The degree of complexity of some financial instrument activities may mean that only a few individuals within the entity fully understand those activities or have the expertise necessary to value the instruments on an ongoing basis. Large scale use of complex financial instruments, without relevant expertise within the entity, increases the risk of material misstatement.

#### ***Participation by Those Charged with Governance***

Those charged with governance oversee and concur with management's establishment of the entity's overall risk appetite and provide oversight over the entity's financial instrument activities. An entity's policies for the purchase, sale and holding of complex financial instruments are aligned with its attitude toward risk and the expertise of those involved in financial instrument activities. In addition, an entity may establish governance structures and control processes aimed at:

- (a) Communicating investment decisions and assessments of all material valuation uncertainty to those charged with governance; and
- (b) Evaluating the entity's overall risk appetite when engaging in financial instrument transactions.

#### ***Organizational Structure***

Financial instrument activities may be run on either a centralized or a decentralized basis. Such activities and related decision making depend heavily on the flow of accurate, reliable, and timely management information. The difficulty of collecting and aggregating such information increases with the number of locations and businesses in which an entity is involved. The risks of material misstatement associated with financial instrument activities may increase with greater decentralization of control activities. This may especially be true

## ***Basic Concepts of Complex Financial Instruments***

where an entity is based in different locations, some perhaps in other countries.

### ***Assignment of Authority and Responsibility***

#### *Investment and Valuation Policies*

Providing direction, through clearly stated policies approved by those charged with governance, for the purchase, sale, and holding of complex financial instruments, enables management to establish an effective approach to taking and managing the associated risks. These policies are most clear when they state the entity's objectives with regard to its risk management activities and the investment and hedging alternatives available to meet these objectives and reflect the:

- (a) Level of the entity's management expertise;
- (b) Sophistication of the entity's internal control and monitoring systems;
- (c) Entity's asset/liability structure;
- (d) Entity's capacity to maintain liquidity and absorb losses of capital;
- (e) Types of complex financial instruments that management believes will meet its objectives; and
- (f) Uses of complex financial instruments that management believes will meet its objectives, for example, whether derivatives may be used for speculative purposes or only for hedging purposes.

Management may design policies aligned with its valuation capabilities and may establish controls to ensure that these policies are adhered to by those employees responsible for the entity's valuation. These may include:

- (a) Processes for the design and validation of methodologies used to produce valuations, including how valuation uncertainty is addressed; and
- (b) Policies regarding maximizing the use of observable inputs and the types of information to be gathered to support valuations of complex financial instruments.

## ***Guide to Audit of Complex Financial Instruments***

In smaller entities, dealing in complex financial instruments may be rare and management's knowledge and experience limited. Nevertheless, establishing policies over complex financial instruments helps an entity to determine its risk appetite and consider whether investing in particular complex financial instruments achieves a stated objective.

### ***Human Resource Policies and Practices***

Entities may establish policies requiring key employees dealing with complex financial instruments to take mandatory time off from their duties. This type of internal control is used as a means of preventing and detecting fraud, in particular if those engaged in trading activities are creating false trades or inaccurately recording transactions.

### **The Entity's Risk Assessment Process**

An entity's risk assessment process exists to establish how management identifies business risks that derive from its use of complex financial instruments, including how management estimates the significance of the risks, assesses the likelihood of their occurrence and decides upon actions to manage them.

The entity's risk assessment process forms the basis for how management determines the risks to be managed. Risk assessment processes exist with the objective of ensuring that management:

- (a) Understands the risks inherent in a complex financial instrument before they enter into it, including the objective of entering into the transaction and its structure (e.g., the economics and business purpose of the entity's financial instrument activities);
- (b) Performs adequate due diligence commensurate with the risks associated with particular complex financial instruments;
- (c) Monitors their outstanding positions to understand how market conditions are affecting their exposures;
- (d) Has procedures in place to reduce or change risk exposure if necessary and for managing reputational

## ***Basic Concepts of Complex Financial Instruments***

risk; and

- (e) Subjects these processes to rigorous supervision and review.

Table 1 provides examples of risks related to complex financial instruments to which entities may be exposed.

The structure implemented to monitor and manage exposure to risks should:

- (a) Be appropriate and consistent with the entity's attitude toward risk as determined by those charged with governance;
- (b) Specify the approval levels for the authorization of different types of complex financial instruments and transactions that may be entered into and for what purposes. The permitted instruments and approval levels should reflect the expertise of those involved in financial instrument activities, demonstrating management's commitment to competence;
- (c) Set appropriate limits for the maximum allowable exposure to each type of risk (including approved counterparties). Levels of allowable exposure may vary depending on the type of risk, or counterparty;
- (d) Provide for the independent and timely monitoring of the financial risks and control activities;
- (e) Provide for the independent and timely reporting of exposures, risks and the results of financial instrument activities in managing risk; and
- (f) Evaluate management's track record for assessing the risks of particular complex financial instruments.

The types and levels of risks an entity faces are directly related to the types of complex financial instruments with which it deals, including the complexity of these instruments and the volume of complex financial instruments transacted.

### ***Risk Management Function***

Some entities, for example, large financial institutions with a high volume of financial instrument transactions, may be

## ***Guide to Audit of Complex Financial Instruments***

required by law or regulation, or may choose, to establish a formal risk management function. This function is independent of those responsible for undertaking and managing financial instrument transactions. The function is responsible for reporting on and monitoring financial instrument activities. Examples of key responsibilities in this area may include:

- (a) Implementing the risk management policy set by those charged with governance (including analyses of the risks to which an entity may be exposed);
- (b) Designing risk limit structures and ensuring these risk limits are implemented in practice;
- (c) Developing stress scenarios and subjecting open position portfolios to sensitivity analysis, including reviews of unusual movements in positions; and
- (d) Reviewing and analyzing new financial instrument products.

Complex financial instruments may have an associated risk that a loss might exceed the amount, if any, of the value of the complex financial instrument recognized on the balance sheet. For example, a sudden fall in the market price of a commodity may force an entity to realize losses to close a forward position in that commodity due to collateral or margin requirements. In some cases, the potential losses may be material enough to cast significant doubt on the entity's ability to continue as a going concern. The entity may perform sensitivity analyses or value-at-risk analyses to assess the future hypothetical effects on complex financial instruments subject to market risks. However, value-at-risk analyses may not fully consider all the risks that may affect entity.

The volume and sophistication of financial instrument activity and relevant regulatory requirements will influence the entity's consideration of whether to establish a formal risk management function and how the function may be structured. In entities that have not established a separate risk management function, for example, entities with a relatively few number of complex financial instruments or financial instruments that are less

## ***Basic Concepts of Complex Financial Instruments***

complex, reporting on and monitoring financial instrument activities may be a component of the accounting or finance function's responsibility or management's overall responsibility.

### ***The Entity's Information Systems***

The key objective of an entity's information systems is that they are capable of capturing and recording all the transactions accurately, settling them, valuing them, and producing information to enable the financial instruments to be risk managed and for controls to be monitored. Difficulties can arise in entities that engage in a high volume of complex financial instruments, in particular if there is a multiplicity of systems that are poorly integrated and have manual interfaces without adequate controls.

Certain complex financial instruments may require a large number of accounting entries. As the sophistication or level of the financial instrument activities increases, it is necessary for the sophistication of the information system to also increase. Specific issues which can arise in respect to complex financial instruments include:

- (a) Information systems, in particular for smaller entities, not having the capability or not being appropriately configured to process financial instrument transactions, especially when the entity does not have any prior experience in dealing with complex financial instruments. This may result in an increased number of manual transactions;
- (b) The potential diversity of systems required to process more complex transactions, and the need for regular reconciliations between them, in particular when the systems are not interfaced or may be subject to manual intervention;
- (c) The potential that more complex transactions, if they are only traded by a small number of individuals, may be valued or risk managed on spreadsheets rather than on main processing systems, and for the physical and logical password security around those spreadsheets to

## ***Guide to Audit of Complex Financial Instruments***

- be more easily compromised;
- (d) A lack of review of systems exception logs, external confirmations and broker quotes, where available, to validate the entries generated by the systems;
  - (e) Difficulties in controlling and evaluating the key inputs to systems for valuation of complex financial instruments, particularly where those systems are maintained by the group of traders known as the front office or a third-party service provider and/or the transactions in question are non-routine or thinly traded;
  - (f) Failure to evaluate the design and calibration of complex models used to process these transactions initially and on a periodic basis;
  - (g) The potential that management has not set up a model library, with controls around access, change and maintenance of individual models, in order to maintain a strong audit trail of the accredited versions of models and in order to prevent unauthorized access or amendments to those models;
  - (h) The disproportionate investment that may be required in risk management and control systems, where an entity only undertakes a limited number of financial instrument transactions, and the potential for misunderstanding of the output by management if they are not used to these types of transactions;
  - (i) The potential requirement for third-party systems provision, for example from a service organization, to record, process, account for or risk manage appropriately financial instrument transactions, and the need to reconcile appropriately and challenge the output from those providers; and
  - (j) Additional security and control considerations relevant to the use of an electronic network when an entity uses electronic commerce for financial instrument transactions.

Information systems relevant to financial reporting serve as an

## ***Basic Concepts of Complex Financial Instruments***

important source of information for the quantitative disclosures in the financial statements. However, entities may also develop and maintain non-financial systems used for internal reporting and to generate information included in qualitative disclosures, for example regarding risks and uncertainties or sensitivity analyses.

### **The Entity's Control Activities**

Control activities over financial instrument transactions are designed to prevent or detect problems that hinder an entity from achieving its objectives. These objectives may be either operational, financial reporting, or compliance in nature. Control activities over complex financial instruments are designed relative to the complexity and volume of transactions of complex financial instruments and will generally include an appropriate authorization process, adequate segregation of duties, and other policies and procedures designed to ensure that the entity's control objectives are met. This Guide focuses on control activities related to completeness, accuracy and existence, valuation, and presentation and disclosure.

### ***Authorization***

Authorization can affect the financial statement assertions both directly and indirectly. For example, even if a transaction is executed outside an entity's policies, it nonetheless may be recorded and accounted for accurately. However, unauthorized transactions could significantly increase risk to the entity, thereby significantly increasing the risk of material misstatement since they would be undertaken outside the system of internal control. To mitigate this risk, an entity will often establish a clear policy as to what transactions can be traded by whom and adherence to this policy will then be monitored by an entity's back office. Monitoring trading activities of individuals, for example by reviewing unusually high volumes or significant losses incurred, will assist management in ensuring compliance with the entity's policies, including the authorization of new types of transactions, and evaluating whether fraud has occurred.

The function of an entity's deal initiation records is to identify

## ***Guide to Audit of Complex Financial Instruments***

clearly the nature and purpose of individual transactions and the rights and obligations arising under each complex financial instrument contract, including the enforceability of the contracts. In addition to the basic financial information, such as a notional amount, complete and accurate records at a minimum typically include:

- (a) The identity of the dealer;
- (b) The identity of the person recording the transaction (if not the dealer), when the transaction was initiated (including the date and time of the transaction), and how it was recorded in the entity's information systems; and
- (c) The nature and purpose of the transaction, including whether or not it is intended to hedge an underlying commercial exposure.

### ***Segregation of Duties***

Segregation of duties and the assignment of personnel is an important control activity. Financial instrument activities may be categorized into a number of functions, including:

- (a) Executing the transaction (dealing). In entities with a high volume of financial instrument transactions, this may be done by the front office;
- (b) Initiating cash payments and accepting cash receipts (settlements);
- (c) Sending out trade confirmations and reconciling the differences between the entity's records and replies from counterparties, if any;
- (d) Recording of all transactions correctly in the accounting records;
- (e) Monitoring risk limits. In entities with a high volume of financial instrument transaction, this may be performed by the risk management function; and
- (f) Monitoring positions and valuing complex financial instruments.

Where an entity is too small to achieve proper segregation of

## ***Basic Concepts of Complex Financial Instruments***

duties, the role of management and those charged with governance in monitoring financial instrument activities is of particular importance.

### **Monitoring of Controls**

Entities' ongoing monitoring activities are designed to detect and correct any deficiencies in the effectiveness of internal controls over transactions for complex financial instruments and their valuation. It is important that there is adequate supervision and review of financial instrument activity within the entity. This includes:

- (a) All controls being subject to review, for example:
  - A detailed review of the application of particular controls. An example would be the review by a supervisor of bank or custodian reconciliations; or
  - The monitoring of operational statistics such as the number of reconciling items or the difference between internal pricing and external pricing sources;
- (b) The need for robust information technology (IT) controls and monitoring/review and validating their application; and
- (c) The need to ensure that information resulting from different processes and systems is adequately reconciled. For example, there is little benefit in a valuation process if the output from it is not reconciled properly into the general ledger.

In larger entities, sophisticated computer information systems generally keep track of financial instrument activities, and are designed to ensure that settlements occur when due. More complex computer systems may generate automatic postings to clearing accounts to monitor cash movements, and controls over processing are put in place with the objective of ensuring that financial instrument activities are correctly reflected in the entity's records. Computer systems may be designed to produce exception reports to alert management to situations

## ***Guide to Audit of Complex Financial Instruments***

where complex financial instruments have not been used within authorized limits or where transactions undertaken were not within the limits established for the chosen counterparties. However, even a sophisticated computer system may not ensure the completeness of financial instrument transactions. Accordingly, management often may put additional procedures in place to increase the likelihood that all transactions will be recorded, as discussed in Table 4.

### **Presentation and Disclosure of Complex Financial Instruments**

2.7 Management's responsibilities include the preparation of the financial statements in accordance with the applicable financial reporting framework.<sup>7</sup> Disclosures in the financial statements are important to enable users of the financial statements to make meaningful assessments of effects of the entity's financial instrument activities, including the risks and uncertainties associated with these complex financial instruments. Accordingly, disclosures are of equal importance to the amounts recorded in the financial statements relating to financial instrument activities. Disclosures are most effective when they:

- Faithfully represent the underlying transactions and events, and illustrate how amounts recognized in the balance sheet, income statement, or statement of changes in equity relate to other quantitative and qualitative disclosures;
- Provide comprehensive and meaningful information that appropriately describes the entity's risks and exposures from complex financial instruments and allow users to have an adequate understanding of the entity's financial instrument transactions (including reasonably possible alternative outcomes); and

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<sup>7</sup> See paragraphs 4 and A2 of SA 200, 'Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with Standards on Auditing'.

### ***Basic Concepts of Complex Financial Instruments***

- Allow for comparison over time and between entities.

2.8 The Financial reporting framework requires the disclosure of quantitative and qualitative information (including accounting policies) relating to complex financial instruments. The accounting requirements for fair value accounting estimates in financial statement presentations and disclosures are extensive and encompass more than just valuation of the financial instruments. In preparing financial statement disclosures, management complies with the requirements of the applicable financial reporting framework. For example, qualitative disclosures about financial instruments provide important contextual information about the characteristics of the financial instruments and their future cash flows that may help inform investors about significant risks.

#### **Table 3: Categories of Disclosures**

Disclosure requirements can typically be characterized in three main categories:

- (a) Quantitative disclosures that are derived from the amounts included in the financial statements. For example, categories of financial assets and liabilities;
- (b) Quantitative disclosures that require significant judgment. For example, sensitivity analysis for each type of market risk to which the entity is exposed; and
- (c) Qualitative disclosures. For example, those that describe the entity's objectives, policies and procedures for managing each type of risk arising from complex financial instruments and the methods used to measure the risks.

The applicable financial reporting framework may permit, or prescribe, disclosures related to accounting estimates, and some entities may disclose voluntarily additional information in the notes to the financial statements. These disclosures may include, for example:

### ***Guide to Audit of Complex Financial Instruments***

- A summary of significant accounting policies.
- Relevant assumptions used.
- The method of estimation used, including any applicable model.
- The basis for the selection of the method of estimation.
- The effect of any changes to the method of estimation from the prior period.
- The sources and implications of estimation uncertainty.

Disclosures that give information about the significance of complex financial instruments to an entity's financial position and performance may include:

- Disclosures about the carrying amounts of financial assets and liabilities;
- Disclosures about reclassifications of financial assets;
- Disclosures about the carrying amounts of financial assets that have been pledged as collateral, including the terms and conditions;
- Disclosures about the recognition of profits or losses at the initiation of the complex financial instrument transactions (referred to as –day 1 “profits or losses”);
- Disclosures about net gains or net losses on particular categories of financial assets and financial liabilities;
- Disclosures about movements in and out of level 3 of the fair value hierarchy; and
- Disclosures about non-linear complex financial instruments and the factors that affect their valuation.

Entities may also give quantitative disclosures such as:

- Summary data about the exposures at the reporting date; and
- Market risk information such as a sensitivity analysis for each type of market risk to which the entity is exposed at the reporting date, showing how profit or loss and equity would have been affected by changes in the

### ***Basic Concepts of Complex Financial Instruments***

relevant risk variable that were reasonably possible at that date.

The more sensitive the valuation is to movements in a particular variable, the more likely it is that disclosure will be necessary to indicate the uncertainties surrounding the valuation. The financial reporting frameworks may also require disclosure of sensitivity analysis, including the effects of changes in assumptions used in the entity's valuation methodology.

The financial reporting frameworks require disclosure of information that enables users of the financial statements to evaluate the nature and extent of the risks arising from complex financial instruments to which the entity is exposed at the reporting date. This disclosure may be contained in the notes to the financial statements, or in management's discussion and analysis within its annual report. The extent of disclosure depends on the extent of the entity's exposure to risks arising from complex financial instruments. This includes qualitative disclosures about:

- The exposures to risk and how they arise, including the possible effects on an entity's future liquidity and collateral requirements;
- The entity's objectives, policies and processes for managing the risk and the methods used to measure the risk; and
- Any changes in the above two bullet points from the previous period.

Other qualitative disclosures that may be required include:

- The judgments made in applying the entity's accounting policies that have the most significant effect on the amounts recognized in the financial statements;
- Information about the assumptions concerning the future; and
- Other major sources of estimation uncertainty at the balance sheet date that have a significant risk of causing

## ***Guide to Audit of Complex Financial Instruments***

a material adjustment in the carrying amount of assets and liabilities within the next financial year.

In addition, qualitative disclosures are often used to add value to quantitative disclosures in the financial statements by providing analysis and interpretation, for example, to provide more information about valuation techniques and inputs to fair value measurements.

As noted in Table 5, some financial reporting frameworks may establish a fair value hierarchy that reflects the significance of the inputs used in making the measurements. They may also require the entity to disclose whether changing one or more of the inputs to reasonably possible alternative assumptions would change fair value significantly and, if so, how the effect of a change in assumptions was calculated. There may also be a requirement to disclose the effect of correlation between unobservable inputs if such correlation is relevant when estimating the effect on the fair value measurement of using those different levels of inputs. While these disclosures may be quantitative in nature in that an amount is calculated, the selection of reasonably possible alternative assumptions is often a subjective process.

For example, the additional disclosures required for complex financial instruments with fair value measurements that are in level 3 of the hierarchy are aimed at informing users of financial statements about the effects of those fair value measurements that use the most subjective inputs. Because the inputs to these fair value measurements reflect the entity's own assumptions about assumptions that market participants would use, including assumptions about risks, it is critical that disclosures are comprehensive and meaningful.

*(See Appendix A for illustrative disclosure requirements)*

## CHAPTER 3

# Audit Considerations Relating to Complex Financial Instruments

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### Planning Considerations<sup>8</sup>

3.1 Certain factors may make auditing complex financial instruments particularly challenging. These include:

- It may be difficult for both management and the auditor to understand the nature of complex financial instruments and what they are used for, and the risks to which the entity is exposed.
- Markets can change quickly, placing pressure on management to manage their exposures effectively.
- Evidence supporting valuation may be difficult to obtain.
- Individual payments associated with certain complex financial instruments may be significant, which may increase the risk of misappropriation of assets.
- The amounts recorded in the financial statements relating to complex financial instruments may not be significant, but there may be significant risks and exposures associated with these complex financial instruments.
- A few employees may exert significant influence on the entity's financial instruments transactions, in particular where their compensation arrangements are tied to revenue from complex financial instruments, and there

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<sup>8</sup> SA 300, 'Planning an Audit of Financial Statements', deals with the auditor's responsibility to plan an audit of financial statements.

## ***Guide to Audit of Complex Financial Instruments***

may be possible undue reliance on these individuals by others within the entity.

These factors may cause risks and relevant facts to be obscured, which may affect the auditor's assessment of the risks of material misstatement, and latent risks can emerge rapidly, especially in adverse market conditions.

3.2 SA 540 requires the auditor to obtain an understanding of the requirements of the applicable financial reporting framework relevant to accounting estimates, including related disclosures.<sup>9</sup> The requirements of the applicable financial reporting framework regarding complex financial instruments may themselves be complex and require extensive disclosures. The financial reporting frameworks require consideration of areas such as:

- Hedge accounting;
- Accounting for day 1 profits and losses;
- Recognition and derecognition of financial instrument transactions;
- Own credit risk; and
- Risk transfer, in particular where the entity has been involved in the origination and structuring of the complex financial instruments.

### **Professional Skepticism**

3.3 Professional skepticism is important to the critical assessment of audit evidence. This includes questioning contradictory audit evidence and the reliability of documents and responses to inquiries and other information obtained from management and those charged with governance. It also includes

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<sup>9</sup> SA 540, paragraph 8(a).

### ***Audit Considerations Relating to Complex FIs***

consideration of the sufficiency and appropriateness of audit evidence obtained in the light of the circumstances.

3.4 Application of professional skepticism by the auditor increases in importance with the complexity of financial instruments, for example in regard to:

- Evaluating whether sufficient appropriate audit evidence has been obtained, which can be particularly challenging in inactive markets or when models are used.
- Evaluating management's judgments in applying the entity's applicable financial reporting framework, in particular management's choice of models, use of assumptions in valuation models, and addressing circumstances in which the auditor's judgments and management's judgments differ.
- Drawing conclusions based on the audit evidence obtained, for example assessing the reasonableness of valuations prepared by management's experts and evaluating whether disclosures in the financial statements achieve fair presentation.

3.5 Accordingly, the focus of the auditor in planning the audit is particularly on:

- Understanding the complex financial instruments in which the entity has invested or to which it is exposed, and their purpose and risks;
- Evaluating whether the effectiveness of internal control is appropriate in light of the entity's financial instrument transactions, including whether the lack of effective internal control increases the possibility of fraud;

### ***Guide to Audit of Complex Financial Instruments***

- Understanding the accounting and disclosure requirements; Understanding the information systems that fall within the scope of the audit; and
- Determining whether specialized skills and knowledge are needed in the audit.

## **Understanding the Complex Financial Instruments**

3.6 It is important to obtain an understanding of the instruments in which the entity has invested or to which it is exposed, including the characteristics of the instruments. The characteristics of complex financial instruments may obscure certain elements of risk and exposure. This understanding can help an auditor to identify whether important aspects of a transaction are missing or inaccurately recorded, whether a valuation appears appropriate and whether the risks inherent in them are fully understood and managed by the entity.

3.7 Examples of matters that the auditor may consider when obtaining an understanding of the entity's financial instruments include.

What financial instruments the entity is exposed to; what they are used for;

- Their exact terms and characteristics so that their implications can be fully understood and, in particular where transactions are linked, the overall impact of the financial instrument transactions; and how they fit into the entity's overall risk management strategy.
- Inquiries of the risk management function, if such a function has been established by the entity, and discussions with those charged with governance may enhance the auditor's understanding.

## *Audit Considerations Relating to Complex FIs*

### **Fraud Risk Factors Associated with Complex Financial Instruments<sup>10</sup>**

3.8 Incentives for fraudulent financial reporting by employees may exist where compensation schemes are dependent on returns made from the use of complex financial instruments. Understanding how an entity's compensation policies interact with its risk appetite and the incentives that this may create for its traders may be important in assessing the risk of fraud.

3.9 Difficult financial market conditions may give rise to increased incentives for management or employees to engage in fraudulent financial reporting: to protect personal bonuses, to hide management error, to avoid breaching borrowing limits or to avoid reporting losses. For example, at times of market instability, unexpected losses may arise through failure to protect the entity from extreme fluctuations in market prices, from unanticipated weakness in asset prices, through trading misjudgements, or for other reasons. In addition, financing difficulties create pressures on management concerned about the solvency of the business.

3.10 Misappropriation of assets and fraudulent financial reporting may often involve override of controls that otherwise may appear to be operating effectively. This can be controls over valuation assumptions and detailed process controls that allow losses and theft to be hidden.

### **Use of Experts in the Audit of Complex Financial Instruments<sup>11</sup>**

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<sup>10</sup> See SA 240, 'The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements', for requirements and guidance dealing with fraud risk factors.

<sup>11</sup> When such a person's expertise is in auditing and accounting, regardless of whether the person is from within or external to the firm, this person is

## ***Guide to Audit of Complex Financial Instruments***

3.11 Specialized skills or knowledge may be needed, for example, in the audit in the areas of: Understanding the operating characteristics and risk profile of the industry in which the entity operates.

- Understanding the structure of complex financial instruments used by the entity, and their characteristics, including their level of complexity.
- Risk analysis, in particular the risks inherent in a complex financial instrument. Using specialized skills and knowledge helps in checking whether all aspects of the complex financial instrument and related structures have been captured in the accounts, and evaluating whether adequate disclosure in accordance with the applicable financial reporting framework has been made where disclosure of risks is required.
- Valuation. When fair value is determined by a complex pricing model (“marked to model”); when markets are inactive and inputs are difficult to obtain; or when management has used an expert.
- Information technology. In entities with a high volume of complex financial instruments, the information technology may be highly complex, for example when significant information about those complex financial instruments is transmitted, processed, maintained or accessed

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considered to be part of the engagement team and is subject to the requirements of SA 220, ‘Quality Control for an Audit of Financial Statements’. When such a person’s expertise is in a field other than accounting or auditing, such person is considered to be an auditor’s expert, and the provisions of SA 620, ‘Using the Work of an Auditor’s Expert’, apply. SA 620 explains that distinguishing between specialized areas of accounting or auditing, and expertise in another field, will be a matter of professional judgment, but notes that the distinction may be made between expertise in methods of accounting for complex financial instruments (accounting and auditing expertise) and expertise in complex modelling for the purpose of valuing complex financial instruments (expertise in a field other than accounting or auditing).

### ***Audit Considerations Relating to Complex FIs***

electronically. In addition, it may include relevant services provided by a service organization.

- Accounting. The applicable financial reporting framework is complex, including circumstances where there are areas known to be subject to differing interpretation or practice is inconsistent or developing.

In addition, understanding the legal, regulatory, and tax implications resulting from the complex financial instruments, including whether the contracts are enforceable by the entity (for example, to review the underlying contracts), may require specialized skills and knowledge. Accordingly, more than one individual or organization with specialized skills may be involved, in order to assist in various stages of the audit.

3.12 The nature and use of particular types of complex financial instruments, the complexities associated with their valuation and disclosure, and market conditions may also lead to a need for the engagement team to consult<sup>12</sup> with other accounting and audit professionals, from within or outside the firm, with relevant technical accounting or auditing expertise and experience, taking into account factors such as:

- The capabilities and competence of the engagement team;
- The attributes of the complex financial instruments used by the entity;
- The identification of unusual circumstances or risks in the engagement, as well as the need for professional judgment, particularly with respect to materiality and significant risks; or
- Market conditions.

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<sup>12</sup> SA 220, paragraph 18(b), requires the engagement party to be satisfied that members of the engagement team have undertaken specific consultation during the course of the engagement, both within the engagement team and between the engagement team and others at the appropriate level within or outside the firm.

## **Assessing and Responding to the Risks of Material Misstatement**

### **Overall Considerations Relating to Complex Financial Instruments**

3.13 The complexity of the financial instrument, and the other factors referred to above, influence the auditor's approach to identifying and assessing the risks of material misstatement associated with complex financial instruments in accordance with SA 315 and to designing and implementing responses to address these risks in accordance with SA 330. In an audit of financial statements in accordance with SAs, risks of material misstatement are identified and assessed at the assertion level for classes of transactions, account balances and disclosures.<sup>13</sup> Doing so directly assists in determining the nature, timing, and extent of further audit procedures necessary to obtain sufficient appropriate audit evidence. This Guide focuses on the assertions<sup>14</sup> on which the entity is likely to focus its control objectives in order to reduce the risks of material misstatement related to complex financial instruments. Those assertions are:

- (a) Completeness, accuracy, and existence;
- (b) Valuation; and
- (c) Presentation and disclosure, including classification in the financial statements.

There are likely to be areas of significant risks of material misstatement related to these assertions.

3.14 The nature of risks can differ between entities with a large volume of complex financial instruments and those with only a few financial instrument transactions. For example:

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<sup>13</sup> SA 315, paragraph 24.

<sup>14</sup> SA 315, paragraph A111, lists assertions used by the auditor to consider the different types of potential misstatements.

### ***Audit Considerations Relating to Complex FIs***

- Typically an entity with large volumes of complex financial instruments will have a dealing room type environment in which there are specialist traders and segregation of duties between those traders and the back office (which refers to the operations function that data-checks trades that have been conducted, ensuring that they are not erroneous, and transacting the required transfers). In such environments, the traders will typically initiate contracts verbally over the phone or via an electronic trading platform. Capturing relevant transactions and accurately recording complex financial instruments in such an environment is significantly more challenging than for an entity with only a few complex financial instruments, whose existence and completeness can be confirmed with a bank confirmation to a few banks.
- On the other hand, entities with specialist traders and back offices will typically have considerably more access to the market, and therefore possess more valuation indicators and expertise than a smaller entity, whose main business is not trading complex financial instruments.

3.15 The auditor's assessment of the identified risks at the assertion level in accordance with SA 315 provides a basis for considering the appropriate audit approach for designing and performing further audit procedures in accordance with SA 330, including both substantive procedures and test of controls. The approach taken is influenced by the auditor's understanding of internal control relevant to the audit, including the strength of the control environment, the size and complexity of the entity's operations and whether the auditor's assessment of risks of material misstatement include an expectation that controls are operating effectively.

#### **Factors in Determining Whether to Test Controls**

3.16 The nature and extent of internal control that exists at an entity influences the auditor's determination of the nature, timing and extent of tests of controls and substantive procedures. An

## ***Guide to Audit of Complex Financial Instruments***

expectation that controls are operating effectively may be more common when dealing with a financial institution with well-established internal controls, and therefore controls testing may be an effective means of obtaining audit evidence. Tests of controls, however, will not be sufficient on their own as the auditor is required by SA 330 to design and perform substantive procedures for each material class of transactions, account balance and disclosure.<sup>15</sup> Conversely, when auditing an entity with just a small number of complex financial instruments or when controls are weak, a substantive testing approach may be more effective.

3.17 Entities with a large volume of trading and use of complex financial instruments may have a more sophisticated control environment and the auditor may be more likely to test controls in obtaining evidence about the completeness, accuracy, and existence of the transactions, having considered whether the controls described in Table 2 are in place at the entity.

3.18 In those entities with relatively few transactions involving complex financial instruments, for example, SMEs and non-financial institutions without treasury departments:

- Management and those charged with governance may have only a limited understanding of complex financial instruments and how they affect the business;
- The entity may only have a few different types of instruments with little or no interaction between them;
- There is unlikely to be a complex control environment (for example, the controls described in Table 2 may not be in place at the entity); and
- Management may engage third-party experts to value such instruments.

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<sup>15</sup> SA 330, paragraph 20.

### ***Audit Considerations Relating to Complex FIs***

3.19 When an entity has relatively few transactions involving complex financial instruments, it may be relatively easy for the auditor to obtain an understanding of the entity's objectives for using the financial instruments and the characteristics of the instruments. In such circumstances, much of the audit evidence is likely to be substantive in nature, the auditor may perform the majority of the audit work at year-end, and third-party confirmations are likely to provide evidence in relation to the completeness, accuracy, and existence of the transactions.

3.20 In reaching a decision on the nature, timing and extent of testing of controls, the auditor may consider factors such as the monitoring of controls and:

- Whether sufficient appropriate audit evidence can be obtained by performing substantive procedures alone. SA 330 requires the auditor to design and perform tests of controls if substantive procedures alone cannot provide sufficient appropriate audit evidence at the assertion level;<sup>16</sup>
- The strength of the control environment, including whether the control environment is appropriately designed to respond to the risks associated with an entity's volume of financial instrument transactions and whether there is a governance framework over the entity's financial instrument activities;
- The importance of particular controls to the overall control objectives and processes in place at the entity, including the sophistication of the information systems to support financial instrument transactions;
- Identified deficiencies in control procedures;
- The issues the control objectives are intended to address, for example, controls related to the exercise of judgments

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<sup>16</sup> SA 330, paragraph 8(b).

## ***Guide to Audit of Complex Financial Instruments***

compared with controls over supporting data. Substantive tests are more likely to be effective than relying on controls related to the exercise of judgments;

- The competency of those involved in the control activities, for example whether the entity has adequate capacity, including during periods of stress, and ability to establish and verify valuations for the complex financial instruments in which it is engaged;
- The frequency of performance of these control activities;
- The level of precision the controls are intended to achieve;
- The evidence of performance; and
- The nature, frequency and volume of financial instrument transactions.

### **Substantive Procedures**

3.21 Designing substantive tests includes consideration of:

- Significant risks relating to complex financial instruments that have been identified;
- Availability of evidence - For example, when the entity uses a service organization, evidence concerning the relevant financial statement assertions may not be available from the entity if another organization holds, or services or both holds and services the entity's complex financial instruments;<sup>17</sup>

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<sup>17</sup> See SA 402, 'Audit Considerations Relating to an Entity Using a Service Organisation', paragraph 15.

### ***Audit Considerations Relating to Complex FIs***

- Analytical procedures<sup>18</sup>—While analytical procedures undertaken by the auditor can be effective as risk assessment procedures to provide the auditor with information about an entity's business, they are usually less effective as substantive procedures because the complex interplay of the factors from which the values of these instruments are derived often masks any unusual trends that might arise.
- Non-routine transactions— Many financial transactions are negotiated contracts between an entity and its counterparty. To the extent that financial instrument transactions are not routine and outside an entity's normal activities, a substantive audit approach may be the most effective means of achieving the planned audit objectives. In instances where financial instrument transactions are not undertaken routinely, the auditor's responses to assessed risk, including the designing and performing audit procedures, have regard to the entity's possible lack of experience in this area; and
- Procedures performed in other audit areas— Procedures performed in other financial statement areas may provide evidence about the completeness of financial instrument transactions. These procedures may include tests of subsequent cash receipts and payments, and procedures to identify any unrecorded liabilities.

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<sup>18</sup> SA 315, paragraph 6(b), requires the auditor to apply analytical procedures as risk assessment procedures to assist in assessing the risks of material misstatement in order to provide a basis for designing and implementing responses to the assessed risks. SA 520, 'Analytical Procedures', paragraph 6, requires the auditor to use analytical procedures in forming an overall conclusion on the financial statements. Analytical procedures may also be applied at other stages of the audit.

## ***Guide to Audit of Complex Financial Instruments***

### **Dual-Purpose Tests**

3.22 The auditor may design a test of controls to be performed concurrently with a test of details. Although the purpose of a test of controls is different from the purpose of a test of details, both may be accomplished concurrently by performing a test of controls and a test of details on the same transaction, also known as a dual-purpose test. The auditor may often use dual-purpose tests for complex financial instruments since typically the auditor is testing management's process for valuation, and substantive tests related to completeness, accuracy, and existence are often similar to controls performed by the entity. In practice, it may be difficult to distinguish between a test of controls and a substantive test. For example, the auditor may design and evaluate the results of a test to examine the entity's written documentation for a complex financial instrument to determine whether it has been approved and to provide substantive audit evidence of the transaction. A dual-purpose test is designed and evaluated by considering each purpose of the test separately.

### **Timing of the Auditor's Procedures<sup>19</sup>**

3.23 After assessing the risks associated complex financial instruments, the engagement team determines the timing of planned tests of controls and substantive audit procedures. The timing of planned audit procedures varies depending on a number of factors, including the frequency of the control operation, the significance of the activity being controlled, and the related risk of material misstatement. For less complex financial instruments, it may be effective to select an interim date to perform tests of controls and substantive audit procedures with the objective of forming a conclusion on valuation as of the interim date. The interim date conclusion is revisited, and procedures performed, as

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<sup>19</sup> Paragraphs 12 and 22–23 of SA 330 establish requirements when the auditor performs procedures at an interim period and explains how such audit evidence can be used.

### ***Audit Considerations Relating to Complex FIs***

of year-end to determine whether such conclusion remains appropriate. For more complex financial instruments, it may be effective to perform tests of controls and substantive audit procedures relative to selected elements of management's valuation as of that date. In those circumstances, further procedures are performed for purposes of forming a conclusion on valuation as of year-end.<sup>20</sup>

3.24 More routine controls, such as IT controls and authorizations for new products, may be tested as of an interim date. For example, to test the operating effectiveness of controls over new product approval, the auditor may gather evidence of the appropriate level of management sign-off on a new complex financial instrument for an interim period, in particular whether a signed contract has been maintained, and whether the details of the complex financial instrument have been appropriately captured in a summary sheet.

3.25 Auditors may also test models used for valuation as of an interim date (for example, an option pricing model), for example by evaluating the theory of the model, testing its mathematical accuracy, and testing the inputs used in the model. Auditors, or auditor's experts engaged by the auditor, may also independently develop a model at interim to compare to the model used by management as of an interim date.

3.26 At year-end, the auditor's focus is likely to be on the areas of more significant judgment, in particular relating to valuation and presentation and disclosure. Substantive procedures are likely to be performed at year-end because:

- Valuations can change significantly in a short period of time, making it difficult to compare and reconcile interim balances with comparable information at the balance sheet date;

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<sup>20</sup> Paragraphs A32–A33 of SA 330 provide guidance on using audit evidence obtained during an interim period.

### ***Guide to Audit of Complex Financial Instruments***

- An entity may engage in an increased volume of financial instrument transactions substantially between an interim period and year-end; and
- Non-routine or significant transactions may take place late in the accounting period.

## **Considerations for Specific Assertions Relating to Complex Financial Instruments**

### **Completeness, Accuracy, and Existence of Complex Financial Instruments**

3.27 If transactions regarding complex financial instruments have not been recorded, their absence may be very difficult for auditors to detect. There are, however, controls that entities can implement to help reduce the risk of incomplete or inaccurate recording of transactions, and procedures auditors can perform to address this risk. Many of the auditor's procedures to test completeness and accuracy of transactions will also serve to verify the existence and occurrence of complex financial instrument transactions and establish proper cut-off. This is because financial instruments arise from legal contracts and, by verifying the accuracy of the recording of the transaction, the auditor can also verify its existence and occurrence at the same time and confirm that transactions are recorded in the proper period.

### **Table 4: Controls over Completeness, Accuracy, and Existence**

#### **Trade Confirmations and Clearing Houses**

Generally, for transactions undertaken by financial institutions, the terms of complex financial instruments are documented in confirmations exchanged between counterparties or legal agreements. Clearing houses serve to monitor the exchange of confirmations by matching trades and settling them. A central clearing house is associated with an exchange and entities that

### ***Audit Considerations Relating to Complex FIs***

clear through clearing houses typically have processes to manage the information delivered to the clearing house.

Not all transactions are settled through such an exchange. However, in many other markets there is an established practice of agreeing the terms of transactions before settlement begins. To be effective, this process needs to be run independently of those who trade the complex financial instruments to minimize the risk of fraud. In other markets, transactions are confirmed after settlement has begun and sometimes confirmation backlogs result in settlement beginning before all terms have been fully agreed. This presents additional risk because the transacting entities need to rely on alternative means of agreeing trades. These may include:

- Enforcing rigorous reconciliation controls between the records of those trading the complex financial instruments and those settling them (strong segregation of duties between the two are important), combined with strong supervisory controls over traders to ensure that they take the task of recording transactions seriously;
- Reviewing summary documentation from counterparties that highlights the key terms even if the full terms have not been agreed; and
- Thorough review of traders' profits and losses to ensure that they reconcile to what the back office has calculated.

#### **Reconciliations with Banks and Custodians**

Some components of complex financial instruments, such as bonds and shares, are held in independent depositories. In addition, most complex financial instruments result in payments of cash at some point and often these cash flows begin early in the contract's life. These cash payments and receipts will pass

## ***Guide to Audit of Complex Financial Instruments***

through an entity's bank account. Regular reconciliation of the entity's records to external banks and custodians enables the entity to ensure transactions are properly recorded. Appropriate segregation of duties between those transacting the trades and those reconciling them is important, as is a rigorous process for reviewing reconciliations and clearing reconciling items.

It should be noted that not all complex financial instruments result in a cash flow in the early stages of the contract's life or are capable of being recorded with an exchange or custodian. Where this is the case, reconciliation processes will not identify an omitted or inaccurately recorded trade and confirmation controls are more important. Even where such a cash flow is accurately recorded in the early stages of an instrument's life, this does not ensure that all characteristics or terms of the instrument (e.g., maturity, early termination option, etc.) have been recorded accurately.

In addition, cash movements may be quite small in the context of the overall size of the trade or the entity's own balance sheet and may therefore be difficult to identify. The value of reconciliations is enhanced when finance or other back office staff reviews entries in all general ledger accounts to ensure that they are valid and supportable. This process will help identify if the other side to cash entries relating to complex financial instruments has not been properly recorded. Reviewing suspense and clearing accounts is important regardless of the account balance, as there may be offsetting reconciling items in the account.

In entities with a high volume of financial instrument transactions, reconciliation and confirmation controls may be automated and, if so, adequate IT controls need to be in place to support them. In particular controls are needed to ensure that data is completely and accurately picked up from external sources (such as banks and custodians) and from the entity's

### ***Audit Considerations Relating to Complex FIs***

records and is not tampered with before or during reconciliation, and that the criteria on which entries are matched are sufficiently restrictive to prevent inaccurate clearance of reconciling items.

#### **Other Controls over Completeness, Accuracy, and Existence**

The complexity inherent in the financial instruments means that it will not always be obvious how they should be recorded in the entity's systems. In such cases, management may set up control processes to monitor policies that prescribe how particular types of transactions are measured, recorded and accounted for. These policies are typically established and reviewed in advance by suitably qualified personnel who are capable of understanding the full effects of the complex financial instruments being booked.

Some transactions may be cancelled or amended after initial execution. Application of appropriate controls relating to cancellation or amendment can mitigate the risks of material misstatement due to fraud or error. In addition, an entity may have a process in place to reconfirm trades that are cancelled or amended.

In financial institutions with a high volume of trading, a senior employee typically reviews daily profits and losses on individual traders' books to evaluate whether they are reasonable based on the employee's knowledge of the market. Doing so may enable management to determine that particular trades were not completely or accurately recorded, or may identify fraud by a particular trader. It is important that there are transaction authorization procedures that support the more senior review.

Controls may also be established that require traders to identify whether a complex financial instrument may have unique features, for example embedded derivatives. In such circumstances, there may be a separate function that evaluates

## ***Guide to Audit of Complex Financial Instruments***

complex financial instrument transactions at their initiation (which may be known as a product control group), working in connection with an accounting policy group to ensure the transaction is accurately recorded. While smaller entities may not have product control groups, an entity may have a process in place relating to the review of complex financial instrument contracts at the point of origination in order to ensure they are accounted for appropriately in accordance with the applicable financial reporting framework.

The above describes controls that may be in place in a trading room environment, while an entity that does not have this environment may not have all these controls but may confirm their transactions. Doing so may be relatively straightforward in that the entity may only transact with one or two counterparties.

### **Procedures relating to completeness, accuracy, and existence of complex financial instruments**

3.28 Procedures that may provide audit evidence to support the completeness, accuracy, and existence assertions include:

- Remaining alert during the audit, when inspecting records or documents, for arrangements or other information that may indicate the existence of complex financial instruments that management has not previously identified or disclosed to the auditor. Such records and documents may include, for example:
  - Minutes of meetings of those charged with governance.
  - Specific invoices and correspondence with the entity's professional advisors.

### ***Audit Considerations Relating to Complex FIs***

- External confirmation<sup>21</sup> of bank accounts, trades, and custodian statements. This can be done by direct confirmation with the counterparty (including the use of bank letters), where a reply is sent to the auditor directly. Alternatively this information may be obtained from the counterparty's systems through a data feed. Where this is done, controls to prevent tampering with the computer systems through which the information is transmitted may be considered by the auditor in evaluating the reliability of the evidence from the confirmation. External confirmations, however, do not provide adequate audit evidence with respect to the valuation assertion.
- Reconciliation of external data with the entity's own records. This may necessitate evaluating IT controls around and within automated reconciliation processes and to evaluate whether reconciling items are properly understood, followed up and dealt with.
- Reading individual contracts and reviewing support documentation of the entity's financial instrument transactions, including accounting records, thereby verifying existence and rights and obligations. For example, an auditor may read individual contracts associated with complex financial instruments and review supporting documentation, including the accounting entries made when the contract was initially recorded, and may also subsequently review accounting entries made for valuation purposes. Doing so allows the auditor to evaluate whether the complexities inherent in a transaction have been fully identified and reflected in the accounts.

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<sup>21</sup> SA 505, 'External Confirmations', deals with the auditor's use of external confirmation procedures to obtain audit evidence in accordance with the requirements of SA 330 and SA 500, 'Audit Evidence'.

***Guide to Audit of Complex Financial Instruments***

- Reviewing journal entries or the internal control over the recording of such entries, to determine if entries have been made by employees other than those authorized to do so.
- Testing controls, for example by re-performing controls described in Table 4.

# CHAPTER 4

## Valuation of Complex Financial Instruments

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4.1 Most complex financial instruments are classified to be measured at fair value for the purpose of balance sheet presentation, calculating profit or loss, and disclosure. This would include any embedded derivative feature that would be required to be recorded at fair value. Under most financial reporting frameworks, the objective of fair value measurement is to arrive at the price at which an orderly transaction would take place between market participants<sup>22</sup> at the measurement date; that is, it is not a forced liquidation or a distressed sale. In meeting this objective, all relevant available market information is taken into account.

4.2 Fair value measurements of financial assets and financial liabilities may arise both at the initial recording of transactions and later when there are changes in value. Changes in fair value measurements that occur over time may be treated in different ways under different financial reporting frameworks. For example, such changes made be recorded as profit or loss, or may be recorded in the statement of comprehensive income. The applicable financial reporting framework, may require the whole complex financial instrument or only a component of it (for example, an embedded derivative) to be measured at fair value.

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<sup>22</sup> As a result, fair value is market-based and reflects the assumptions that market participants would use in pricing the asset or liability, rather than entity-specific.

**Table 5: Fair Value Hierarchy**

Some financial reporting frameworks, establish a fair value hierarchy to develop increased consistency and comparability for disclosures within and between entities. The hierarchy classifies valuation methodology inputs into levels:

- Level 1 inputs— Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
- Level 2 inputs— Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices). If the financial asset or financial liability has a specified (contractual) term, a level 2 input must be observable for substantially the full term of the financial asset or financial liability. Level 2 inputs include the following:
  - Quoted prices for similar financial assets or financial liabilities in active markets.
  - Quoted prices for identical or similar financial assets or financial liabilities in markets that are not active.
  - Inputs other than quoted prices that are observable for the financial asset or financial liability (for example, interest rates and yield curves observable at commonly quoted intervals, volatilities, prepayment speeds, loss severities, and default rates).
  - Inputs that are derived principally from or corroborated by observable market data by correlation or other means (market-corroborated inputs).
- Level 3 inputs— Inputs for the financial asset or financial liability that are not based on observable market data (unobservable inputs). Unobservable inputs are used to measure fair value to the extent that relevant

## ***Valuation of Complex Financial Instruments***

observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date.

In practice, however, the distinction between the levels in the hierarchy may be a matter of judgment.

### **Understanding management’s methodology for valuing its complex financial instruments**

4.3 SA 540 requires the auditor to obtain an understanding of how management makes accounting estimates and the data on which accounting estimates are based.<sup>23</sup> Management’s responsibility for the preparation of the financial statements includes applying the requirements of the applicable financial reporting framework to the valuation of complex financial instruments. Management’s approach to valuation also takes into account the selection of an appropriate valuation methodology and the level of the evidence expected to be available. To meet the objective of a fair value measurement, an entity develops a valuation methodology to measure the fair value of complex financial instruments that considers all relevant market information that is available. A thorough understanding of the complex financial instrument being valued allows an entity to identify and evaluate the relevant market information available about identical or similar instruments that should be incorporated into the valuation methodology.

4.4 Such information to be considered includes, for example:

- Prices from recent transactions in the same or a similar instrument;
- Quotes from brokers or pricing services;
- Indices; and

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<sup>23</sup> SA 540, paragraph 8(c).

## ***Guide to Audit of Complex Financial Instruments***

- Other observable inputs to model-based valuation techniques.

4.5 An entity uses such information to measure the fair value of its complex financial instruments by assessing all available information and applying it as appropriate. The valuation methodology may be simple and may consist of the use of observable prices (level 1), or may be more complex, and involve the use of one or more models to calculate assumptions or inputs used in a valuation, or the output of the valuation. Models can be used for any financial instrument that involves inferring a price for the instrument from market data. Unless a complex financial instrument is traded on an exchange or other market, it is likely that a model will be used in its valuation. Models may also be used to calculate inputs to other models, such as prepayment speeds and discounted cash flows. Risks of material misstatement relating to valuation of complex financial instruments primarily relate to the risk that that an inappropriate model(s) was used, and the risk that the entity has not used the appropriate information to support its valuations, including assumptions and inputs to any models (for example, if level 1 information is available but not used).

### **Table 6: An Entity's Considerations when Using Models in a Valuation Methodology**

<p>Models are used to value financial instruments, including complex financial instruments, where the price cannot be directly observed in the market (that is, for levels 2 and 3 in the fair value hierarchy, which may range from relatively simple to extremely complex). There can be a number of reasons for this. For example, markets might quote only for certain standard transactions such as those with one, three and five year maturities. For example, an OTC transaction with an original maturity of five years will therefore only have a directly observable quote on three days during its life, because for the remainder of the time, its terms do not match one, three or five</p>
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## ***Valuation of Complex Financial Instruments***

years. In addition many transactions are not directly quoted in the market place but are constructed through combinations of more simple interest rate, foreign exchange rate and other products.

Depending on the circumstances, matters that the entity may address when establishing or validating a valuation model for a complex financial instrument, include whether:

- The model is validated prior to usage, with periodic reviews to ensure it is still suitable for its intended use. The entity's validation process may include evaluation of:
  - The model's theoretical soundness and mathematical integrity, including the appropriateness of model parameters and sensitivities.
  - The consistency and completeness of the model's inputs with market practices, and whether the appropriate inputs are available for use in the model.
  - The model's output, including sensitivities, as compared to actual transactions (internal or external) or other relevant benchmarks.
- Appropriate change control policies and procedures, and security controls over the model, exist.
- The model is periodically calibrated, reviewed and tested for validity by an independent function, particularly when inputs are subjective. Doing so is a means of ensuring that the model's output is a fair representation of the value that marketplace participants would ascribe to a complex financial instrument.
- The model maximizes the use of relevant observable inputs and minimizes the use of unobservable inputs.
- Adjustments are made to the output of the model, including in the case of fair value accounting estimates of complex financial instruments, whether such

## ***Guide to Audit of Complex Financial Instruments***

adjustments reflect the assumptions marketplace participants would use in similar circumstances.

- The model is adequately documented, including the model's intended applications and limitations and its key parameters, required inputs, and results of any validation analysis performed.

### **Valuation uncertainty**

4.6. Valuing complex financial instruments is not a precise science. For this reason, management's valuation methodology for a complex financial instrument typically addresses valuation uncertainty. As noted in paragraph 9, valuation uncertainty is an aspect of estimation uncertainty. Uncertainties over the reliability of market quotes, the validity of models and the accuracy of their calibration to actual market activity will exist, particularly for highly complex financial instruments that are not actively traded.

4.7 The financial reporting frameworks may require or permit the entity to adjust for valuation uncertainties, in order to adjust for what a willing buyer would require in the pricing to take account of the uncertainties of the outcome of the complex financial instrument. For example, if such an instrument was sold, a buyer would reduce their price to reflect these uncertainties and the risks that he was thereby assuming. Estimating the level of adjustment required for such factors involves a high level of judgment and will be specific to each entity and applicable financial reporting framework. Consideration of all the factors taken into account in the valuation process and the use of experience and judgment will assist the auditor in evaluating the amount of the adjustment for valuation uncertainty, if any. The auditor may need to engage individuals with specialized skills or knowledge to assist in doing this.

4.8 When using a model, an entity may periodically calibrate the model to observable market information to ensure that the model reflects current market conditions and to identify any

### ***Valuation of Complex Financial Instruments***

potential deficiencies in the model. As market conditions change, it may become necessary either to change the model(s) used or to make additional adjustments to model valuations.

4.9 For example, it may be necessary for the entity to adjust model derived prices for factors that the model cannot take into account in order to reflect assumptions that market participants would use, for example:

- Credit spreads. Some market prices are quoted for an assumed level of credit risk. Adjustments should be made for counterparties, which do not match this assumption.
- Bid/offer spreads. Some accounting frameworks require the bid/offer spread to be taken into account when valuing complex financial instruments. If the price quoted does not reflect this, appropriate adjustments will need to be made.
- Model deficiencies. For example, adjustments needed to calibrate the model to observable market information, and liquidity and credit adjustments that market participants would make. A value measured using a model that does not take into account all factors that market participants would consider in pricing the complex financial instrument does not represent an estimate of a current transaction price on the measurement date, and therefore may need to be adjusted separately to comply with the applicable financial reporting framework.

However, adjustments are not appropriate if they adjust the measurement and valuation of the complex financial instrument away from fair value as defined by the applicable financial reporting framework, for example for conservatism.

4.10 It is expected that management will document its valuation policies and methodology used for a particular complex financial instrument, including rationale for the model(s) used, the selection

## ***Guide to Audit of Complex Financial Instruments***

of assumptions in the valuation methodology, and the entity's consideration of whether adjustments for valuation uncertainty are necessary. This documentation provides evidence used by the auditor in determining the nature, timing, and extent of procedures on valuation.

### **Observable and Unobservable Inputs**

4.11 The nature and reliability of information available to support valuation of complex financial instruments varies depending on the observability of inputs to its measurement, which is influenced by the nature of the market (e.g., the level of market activity and whether it is through an exchange or over-the-counter (OTC)). Accordingly, there is a continuum of evidence used to support valuation, and it becomes more difficult for management to obtain information to support a valuation when management is dealing with level 3 inputs or when markets become inactive.

4.12 When observable inputs are not available, an entity uses unobservable inputs that reflect the assumption that market participants would use when pricing the financial asset or the financial liability, including assumptions about risk. Unobservable inputs are developed using the best information available in the circumstances. In developing unobservable inputs, an entity may begin with its own data, which is adjusted if reasonably available information indicates that (a) other market participants would use different data or (b) there is something particular to the entity that is not available to other market participants (for example, an entity-specific synergy), and the entity is able to quantify these adjustments.

4.13 When the market for a complex financial instrument is no longer active, an entity often measures fair value using a valuation methodology that involves a model. The use of a model within an entity's valuation technique aims to maximize the use of observable inputs and minimize the use of unobservable inputs in

## ***Valuation of Complex Financial Instruments***

order to estimate the price at which an orderly transaction would take place between market participants on the measurement date. Regardless of the valuation methodology used, an entity takes into account current market conditions and includes appropriate risk adjustments that market participants would make, such as for credit and liquidity.

### **Table 7: Effects of Inactive Markets**

Valuation is more complicated when the markets in which complex financial instruments or their component parts are traded are inactive or where no price is observable. There is no clear point at which an active market becomes inactive.

Characteristics of an inactive market include a significant decline in the volume and level of trading activity, available prices vary significantly over time or among market participants or the prices are not current. However, these factors alone do not necessarily mean that a market is no longer active. An active market is one in which transactions are taking place regularly on an arm's length basis. "Regularly" is a matter of judgment and depends on facts and circumstances of the market for the complex financial instrument being measured at fair value.

When markets are inactive, measuring complex financial instruments becomes more difficult because of the lack of observable trades and other market data. Prices quoted may be stale (that is, out of date) or may not represent prices at which market participants may trade.

Accordingly, valuations are based on level 2 and level 3 inputs. Under such circumstances it is generally desirable for entities to have:

A valuation policy that includes a process for determining whether level 1 inputs are available;

An understanding of how particular prices or inputs from external sources used as inputs to models were calculated in order to assess their reliability. For example, in an active market, a broker quote is likely to reflect actual transactions,

## ***Guide to Audit of Complex Financial Instruments***

but, as the market becomes less active, the broker may rely more on proprietary models to determine prices;

An understanding of how deteriorating business conditions in one or more entities similar to the counterparty may affect the counterparty's ability to meet its obligations (i.e., the risk of non-performance);

Policies for adjusting for valuation uncertainties. Such uncertainties can include lack of liquidity, uncertainties arising from model calibration and non-performance credit risks; and

The capability to calculate the range of realistic outcomes given the uncertainties involved, for example by performing a sensitivity analysis.

Where there is no pricing source based upon current observable market trading, the entity will be using level 3 inputs. It is therefore necessary for the entity to gather other price indicators to use in a model to value the complex financial instrument. Price indicators may include:

- Recent transactions, including transactions after the balance sheet date in the same instrument. Consideration is given to whether an adjustment needs to be made for changes in market conditions between the measurement date and the date the transaction was made, as these transactions are not necessarily indicative of the market conditions that existed at the balance sheet date. In addition it is possible that the transaction represents a forced transaction and is therefore not indicative of a price in an orderly trade. Indicators of a forced transaction may include:
  - A legal requirement to transact, for example a regulatory mandate.
  - A necessity to dispose of an asset immediately to create liquidity, resulting in insufficient time to market the asset to be sold.
  - The existence of a single potential buyer as a result of the legal or time restrictions imposed;

## ***Valuation of Complex Financial Instruments***

- Current or recent transactions in similar instruments. Adjustments will need to be made to such prices to reflect the difference between them and the instrument being priced and to take account of differences in liquidity between the two instruments; and
- Indices for similar instruments. As with transactions in similar instruments, adjustments will need to be made to reflect the difference between the instrument being priced and the index used. Particular difficulties may develop where there is severe curtailment or even cessation of trading in particular complex financial instruments. In these circumstances, complex financial instruments that have previously been valued using market prices may need to be valued on a mark to model basis, and changing the manner in which the complex financial instruments are valued may be a difficult process for management, in particular when management does not possess expertise in modelling.

### **Source of Inputs to a Valuation Methodology**

4.14 Inputs represent assumptions used by management to support valuations.<sup>24</sup> Inputs to a valuation methodology may be obtained or calculated by the entity in a number of ways:

- From external sources, for example, exchanges, indices, brokers, and pricing services;
- By adjustment to external sources to reflect assumptions that would be used by marketplace participants; and
- By using the outcome of one or more models as an input to another model.

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<sup>24</sup> Paragraph A32 of SA 540 notes that the term – ‘inputs’ may also be used to refer to the underlying data to which specific assumptions are applied.

## ***Guide to Audit of Complex Financial Instruments***

4.15 Assumptions are integral components in the valuation of complex financial instruments, as they are used as inputs to valuation models. Management may support assumptions with different types of information drawn from internal and external sources, the relevance and reliability of which will vary.

4.16 The best indicators of evidence of a complex financial instrument's fair value are found in contemporaneous transactions in an active market (i.e., level 1 inputs). In such cases, the valuation of a complex financial instrument may be relatively simple. Quoted market prices for complex financial instruments that are listed on exchanges or traded in liquid over-the-counter markets may be available from sources such as financial publications, the exchanges themselves, brokers or pricing services, for example prices for interest rate swaps that are based on the London Inter-bank Offered Rate (LIBOR). When using quoted prices, it is important that management understand the basis on which the quote is given to ensure that the price reflects current market conditions. Quoted prices obtained from publications or exchanges may provide sufficient evidence of value if:

- The prices are not out of date or "stale" (for example, if the quote is based on the last traded price and the trade occurred some time ago); and
- The quotes are prices at which dealers would actually trade in reasonable volume.

4.17 However, in many cases complex financial instruments are not actively traded, but components of their valuations are based on observable data (such as interest rate curves, or the assets underlying options), for example, an ABS whose cash flows are tracked by a pricing service. In such cases, management may take the available cash flow data and adjust for certain factors such as prepayment speed and default rates. This moves the valuation into levels 2 and 3, the assessment of which becomes more judgmental for both the entity and the auditor.

## ***Valuation of Complex Financial Instruments***

4.18 Exchange prices can be used as inputs to valuation models to derive estimates for fair value of complex financial instruments. Theoretical prices for customized products may be created by breaking down complex financial instruments into a series of listed options or futures, weighted by standard expiry dates. Many complex financial instruments are likely to be correlated to security and derivative contracts already listed and traded on exchanges. However, management may need to take into account basis differences, credit risk, and other factors in arriving at a valuation.

4.19 Pricing information may also be obtained from brokers or pricing services. Quotes obtained from brokers are not always binding offers to trade and hence may not represent a price at which a transaction would actually take place (referred to as “indicative prices”). Understanding how the broker or pricing services calculated a price enables management to determine whether such data is suitable for use in its valuation methodology, including as an input to a model. For example, brokers and pricing services may value complex financial instruments using proprietary models, and it is important that management understands both the model and assumptions used. Pricing services may also poll a number of market participants and brokers anonymously to obtain prices, which are then averaged in some way to produce a “consensus price.” Pricing services may combine a number of approaches to arrive at a price.

4.20 An entity may also use pricing data from consensus pricing services as inputs to their models. Consensus pricing services obtain pricing information about an instrument from several participating entities (subscribers). Each subscriber submits prices to the pricing service. The pricing service treats this information confidentially. The pricing service returns to each subscriber the consensus price, which is usually an arithmetical average of the

## ***Guide to Audit of Complex Financial Instruments***

data after a data cleansing routine has been employed.<sup>25</sup> For some markets, such as for exotic derivatives, consensus pricing services might constitute the best available data. However, many factors are considered when assessing the representational faithfulness of the consensus prices including, for example:

- Whether the prices submitted by the consensus subscribers reflect actual transactions or just indicative prices based on their own models.
- The number of sources from which prices have been obtained.
- The quality of the sources used by the consensus pricing service.

Due to the nature of a consensus pricing service, other sources of evidence in addition to information from pricing services may be needed to support management's valuation. In particular, this may be the case if the sources are providing indicative prices based on their own models and management is unable to obtain an understanding of how these sources calculated their prices.

4.21 If broker quotes or quotes obtained from pricing services are not based on current prices of actively traded instruments, it will be necessary for management to evaluate whether the quotes were derived in a manner that is consistent with the applicable financial reporting framework. The entity's understanding of the prices includes:

- How the prices were determined—for example, whether the prices were determined by a model, in order to assess

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<sup>25</sup> Some consensus pricing services may provide reports for users of its data to explain their controls over pricing data. Management may request, and the auditor may consider obtaining, such a report to develop an understanding of how the pricing data is prepared and evaluate whether the controls at the pricing service can be relied upon.

### ***Valuation of Complex Financial Instruments***

whether they are consistent with the fair value measurement objective;

- Whether the prices are indicative prices, indicative spread, or binding offers; and
- How frequently the prices are estimated by the broker or pricing service—in order to assess whether they reflect marked conditions at the measurement date.

Understanding the bases on which brokers and pricing services have determined their quotes in the context of the particular complex financial instruments held by the entity assists management in evaluating the relevance and reliability of this evidence to support its valuations.

4.22 If a price obtained by management comes from a counterparty (for example, the broker who sold the complex financial instrument to the entity) or another entity with a close relationship with the entity being audited, the price may not be reliable. In such cases, additional quotes are often obtained from counterparties or pricing services that do not have a close relationship to the entity. In these cases, the auditor may consider this in determining the nature, timing and extent of audit procedures to be performed.

4.23 It is possible that there will be disparities between price indicators from different providers. Understanding how the price indicators were derived, and investigating these disparities, assists management in corroborating the evidence used in developing its valuation of complex financial instruments in order to evaluate whether the valuation is reasonable. Simply taking the average of the quotes provided, without doing further research, may not be appropriate, because one price in the range may be the most representative of fair value and this may not be the average. To evaluate whether its valuations of complex financial instruments are reasonable, management may:

### ***Guide to Audit of Complex Financial Instruments***

- Consider whether actual transactions represent forced transactions rather than transactions between willing buyers and willing sellers. This may invalidate the price as a comparison;
- Analyze the expected future cash flows of the instrument. This could be performed as an indicator of the most relevant pricing data;
- Depending on the nature of what is unobservable, extrapolate from observed prices to unobserved ones (for example, there may be observed prices for maturities up to ten years but not longer, but the ten year price curve may be capable of being extrapolated beyond ten years as an indicator). Care is needed to ensure that extrapolation is not carried so far beyond the observable curve that its link to observable prices becomes too tenuous to be reliable;
- Compare prices within a portfolio of complex financial instruments to each other to make sure that they are consistent among similar complex financial instruments;
- Use more than one valuation model to corroborate the results from each one, having regard to the inputs and assumptions used in each; and
- Evaluate movements in the prices for related hedging instruments and collateral.

In coming to its judgment as to its valuation, an entity may also consider other factors that may be specific to the entity's circumstances.

4.24 Understanding the credit risk is an important aspect of valuing both financial assets and financial liabilities. This valuation reflects the credit quality and financial strength of both the issuer and any credit support providers. In the applicable financial reporting frameworks, the measurement of a financial liability assumes that it is transferred to a market participant on the measurement date; it is not assumed to be settled with the

### ***Valuation of Complex Financial Instruments***

counterparty or otherwise extinguished. Where there is not an observable market price for a financial liability, its value is typically measured using the same method as a counterparty would use to measure the value of the corresponding asset. Considerations in valuing complex financial liabilities are the same as valuing complex financial assets, with the exception of own credit risk, which may need particular attention.

4.25 In relation to the fair value of financial liabilities, changes in the entity's credit risk that may affect its value are known as the entity's own credit risk. This is the amount of change in fair value that is not attributable to changes in market conditions, and can often be difficult to measure. The fair value of a financial liability also reflects the non-performance risk associated with the liability. The role of credit risk in valuing financial liabilities increases in importance subsequent to initial recognition of a financial instrument, because deterioration in an entity's own credit quality (leading to a lower fair value for its liabilities) may result in the entity reporting a gain in profit or loss. The requirements of the applicable financial reporting framework, including how own credit risk is calculated is an important assumption for the auditor to evaluate in testing the valuation of a financial liability.

### **Use of Management's Experts and Service Organizations**

4.26 The preparation of an entity's financial statements, including the valuation of complex financial instruments and the preparation of financial statement disclosures relating to these instruments, may require expertise that management does not possess. Entities may not be able to develop appropriate valuation methodologies, including models used in valuation, and may rely on third-party valuation experts to arrive at a valuation or to prepare disclosures for the financial statements. This may particularly be the case in smaller entities or in entities that do not engage in a high volume of financial instruments transactions (for

## ***Guide to Audit of Complex Financial Instruments***

example, non-financial institutions with treasury departments). In such cases, management often engages third-party experts to provide assistance with valuation of its complex financial instruments.

4.27 Where such expertise is in a field other than accounting or auditing, such as valuation, individuals or organizations possessing such expertise who are used by the entity to assist it in preparing the financial statements are referred to as management's experts. Management's experts may be employed by the entity (management's internal experts, for example, quantitative staff) or engaged by the entity (management's external experts, for example, third-party valuation specialists). The use of one or more management's experts may be fairly common, regardless of the size of the entity.

4.28 The use of a management's expert does not relieve management or those charged with governance of their responsibilities for the preparation of the financial statements. In measuring the entity's complex financial instruments, management may support its valuation with information from internal and external sources, the relevance and reliability of which will vary. Management's experts supplement, but do not replace, management's own process for valuation. Assumptions may be made or identified by a management's expert to assist management in valuing its complex financial instruments. Such assumptions, when used by management, become management's assumptions.

4.29 Understanding the methodology used by management's experts to develop assumptions, therefore, enables management to meet its responsibilities for ensuring the complex financial instruments recorded in the financial statements are properly valued and presented and providing written representations to the auditor about whether they believe significant assumptions used valuing the complex financial instruments are reasonable.

### ***Valuation of Complex Financial Instruments***

4.30 Brokers and pricing services often have expertise in the application of models to estimate the fair value of complex financial instruments for which there is no observable market and may offer such services to entities in addition to providing pricing data. For example, an entity may engage a broker or pricing services to value an entity's complex financial instrument portfolio, typically by using proprietary models. In such cases, the broker or pricing service would likely be considered a management's expert. Entities that use pricing services on a contractual basis to provide routine pricing data use in an entity's models may not necessarily be considered to be a management's expert. Regardless of whether such individuals or organizations are considered management's experts, management's understanding includes the process described in paragraph 4.21.

4.31 Entities may also use service organizations (for example asset managers) to initiate the purchase or sale of complex financial instruments or maintain records of transactions for the entity. Some entities may be dependent on these service organizations to provide the basis of reporting for the complex financial instruments held. However, if management does not have an understanding about the controls in place at a service organization, the auditor may not be able to obtain sufficient appropriate audit evidence to rely on controls at that service organization. *[See SA 402, which establishes requirements for the auditor to obtain sufficient appropriate audit evidence when an entity uses the services of one or more service organizations.]*

4.32 The use of service organizations may strengthen controls over complex financial instruments. For example, a service organization's personnel may have more experience with complex financial instruments than the entity's management or may have more robust internal control over financial reporting. The use of the service organization also may allow for greater segregation of duties. On the other hand, the use of a service organization may

## ***Guide to Audit of Complex Financial Instruments***

increase risk because it may have a different control environment that is not in line with the entity's accounting policies or process transactions at some distance from the entity.

### **Consistency of Valuation Methodology Across Periods**

4.33 Consistency is generally a desirable quality in financial information, but may be inappropriate if circumstances change. As markets become inactive, the change in circumstances may lead to a move from valuation by market price to valuation by model, or may result in a change from one particular model to another. Reacting to changes in valuation techniques may be difficult if management does not have policies in place to consider the ramifications of changing market conditions, prior to their occurrence. Management may also not possess the expertise necessary to develop a model on an urgent basis, or select the valuation technique that may be appropriate in the circumstances. Even where models have been consistently used, there is a need for management to examine the continuing appropriateness of the models and assumptions used for determining valuation of complex financial instruments. Further, models may have been calibrated in times where reasonable market information was available, but may not provide reasonable valuations in times of unanticipated stress.

4.34 The susceptibility to management bias increases with the subjectivity of the valuation. For example, management may tend to ignore observable marketplace assumptions or inputs and instead use their own internally-developed model if the model yields more favourable results. Even without fraudulent intent, there may be a natural temptation to bias judgments towards the most favourable end of what may be a wide spectrum, rather than the point in the spectrum that might be considered to be most consistent with the applicable financial reporting framework. Changing the valuation methodology from period to period without a clear and appropriate reason for doing so may also be an

### ***Valuation of Complex Financial Instruments***

indicator of management bias. Although some form of management bias is inherent in subjective decisions relating to the valuation of complex financial instruments, when there is intention to mislead, management bias is fraudulent in nature.

### **Procedures relating to understanding and testing the valuation of complex financial instruments**

4.35 Table 5 discusses the establishment of a fair value hierarchy by some financial reporting frameworks. The objective of a fair value measurement is the same regardless of the level of the hierarchy. As the inputs become less observable, the degree of estimation uncertainty increases and affects the auditor's assessment of the risks of material misstatements. As estimation uncertainty increases, the availability of evidence to support a particular valuation decreases, requiring more judgment by both management and the auditor and may represent a significant risk, as it may be challenging for the auditor to substantiate the valuations of complex financial instruments with unobservable inputs.

4.36 In accordance with SA 540<sup>26</sup>, the auditor considers the entity's valuation policies and methodology and supporting documentation for inputs and assumptions used in the valuation methodology. The applicable financial reporting framework may prescribe the valuation methodology for complex financial instruments, for example, a particular model to be used. In many cases, however, the applicable financial reporting framework does not prescribe the valuation methodology. When this is the case, matters that may be relevant to the auditor's understanding of management's methodology used to value complex financial instruments include, for example:

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<sup>26</sup> SA 540, paragraph 8(c).

### ***Guide to Audit of Complex Financial Instruments***

- Whether management has a formal valuation policy and, if so, whether the valuation methodology used for a complex financial instrument is appropriately documented in accordance with that policy;
- How management considered the nature of the complex financial instrument to be valued when selecting a particular methodology;
- Whether there is a greater risk of material misstatement because management has internally developed a model to be used to value complex financial instruments or is departing from a method commonly used to value the particular complex financial instrument;
- Whether those involved in developing and applying the valuation methodology have the appropriate skills and expertise to do so, including whether a management's expert may have been used; and
- Whether there are indicators of management bias in selecting the methodology to be used.

4.37 In testing how management values the complex financial instrument and in responding to the assessed risks of material misstatement in accordance with SA 540<sup>27</sup>, the auditor undertakes one or more of the following options, taking account of the nature of the accounting estimates:

- a) Determine whether events occurring up to the date of the auditor's report provide audit evidence regarding the accounting estimate.
- b) Test how management made the accounting estimate and the data on which it is based (including models used by the entity in its valuations).

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<sup>27</sup> SA 540, paragraphs 12–14.

### ***Valuation of Complex Financial Instruments***

- c) Test the operating effectiveness of the controls over how management made the accounting estimate, together with appropriate substantive procedures.
- d) Develop a point estimate or a range to evaluate management's point estimate.

This section of the Guide deals primarily with the auditor's procedures to test how management made the accounting estimate and the data on which it is based and to develop a point estimate or range to evaluate management's point estimate.<sup>28</sup> While subsequent events may provide some evidence about the valuation of complex financial instruments, other factors may need to be taken into account to address any changes in market conditions subsequent to the balance sheet date.

4.38 Audit procedures to test how management values its complex financial instruments may include:

- Reviewing and assessing the judgments made by management, for example by reviewing accounting position papers prepared by management;
- Considering whether there are any other relevant price indicators or factors to take into account, including requesting additional information that management may have collected but did not take into account in its valuation methodology;
- Obtaining third-party evidence of price indicators, for example by obtaining a broker quote;
- Assessing the mathematical accuracy of the methodology employed; and
- Testing data to source materials, including documentation to support inputs, after considering the reliability, completeness and accuracy of the source materials.

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<sup>28</sup> SA 540, paragraphs 13(b) and 13(d).

## ***Guide to Audit of Complex Financial Instruments***

The auditor may consider using persons with specialized skills and knowledge to perform these audit procedures, in particular when management has used an expert to value the complex financial instrument. If such expertise is not available within the auditor's firm, the auditor may need to engage an external (auditor's) expert.

4.39 When the auditor determines that testing how management made the accounting estimate is an appropriate response to the assessed risk of material misstatement in accordance with SA 540<sup>29</sup>, the auditor tests the models and assumptions and inputs, regardless of whether management develops the estimates themselves, uses third-party information, or utilizes a management's expert.

4.40 When markets become inactive or dislocated, management's valuations may be more judgmental and less verifiable and, as result, may be less reliable. In such circumstances, the auditor may test the model by a combination of testing controls operated by the entity, evaluating the design and operation of the model, testing the assumptions and inputs used in the model, and comparing its output to a point estimate or range developed by the auditor or to other third-party models.<sup>30</sup>

4.41 In addition, the auditor's industry knowledge, knowledge of market trends and understanding of other entities' valuations (having regard to confidentiality) and other relevant price indicators informs the auditor's testing of the valuations and the consideration of whether the valuations overall appear reasonable. If the valuations appear to be consistently overly

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<sup>29</sup> SA 540, paragraph 13(b).

<sup>30</sup> SA 540, paragraph 13(d) describes requirements when the auditor develops a point estimate or range to evaluate the entity's point estimate. Models developed by third parties and used by the auditor may be considered the work of an auditor's expert and subject to the requirements of SA 620.

## ***Valuation of Complex Financial Instruments***

aggressive or conservative, this may be an indicator of possible management bias.

4.42 Obtaining prices from multiple sources may be useful to see the range of prices. A wide range of prices indicates higher estimation uncertainty and may suggest that the complex financial instrument is sensitive to small changes in inputs and assumptions. A narrow range may indicate lower estimation uncertainty and may suggest less sensitivity to small changes in inputs and assumptions. Simply obtaining prices from multiple sources does not substitute for gaining an understanding of and testing inputs and assumptions that underlie the price used by the entity to value its position. In addition, what appear to be multiple sources of pricing information may be utilizing the same prices and therefore not really represents multiple prices that are independently determined.

4.43 If management and the auditor have utilized the same pricing service or broker to obtain a price, utilizing an alternative source of pricing information may be useful in addition to the auditor independently gaining an understanding of and testing the inputs and assumptions used by the broker or pricing service.

### **Significant risks**

4.44 The auditor's risk assessment process may lead the auditor to identify one or more significant risks relating to the valuation of complex financial instruments, when any of the following circumstances exist:

- High estimation uncertainty related to the valuation of complex financial instruments (for example, those with unobservable inputs).<sup>31</sup>

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<sup>31</sup> Where the auditor determines that the high estimation uncertainty related to the valuation of complex financial instruments gives rise to a significant risk, SA 540 requires the auditor to perform substantive procedures and evaluate the adequacy of the disclosure of their estimation uncertainty. See SA 540, paragraphs 11, 15 and 20.

### ***Guide to Audit of Complex Financial Instruments***

- Lack of sufficient evidence to support management's valuation of its complex financial instruments.
- Lack of management understanding of its complex financial instruments or expertise necessary to value such instruments properly, including the ability to determine whether valuation adjustments to valuations from models are needed.
- Lack of management understanding of complex requirements in the applicable financial reporting framework relating to measurement and disclosure of complex financial instruments, and inability of management to make the judgments required to properly apply those requirements.
- The significance of valuation adjustments made to model outputs when the applicable financial reporting framework requires or permits such adjustments.

4.45 For accounting estimates that give rise to significant risks, in addition to other substantive procedures performed to meet the requirements of SA 330, SA 540<sup>32</sup> requires the auditor to evaluate the following:

- a) How management has considered alternative assumptions or outcomes, and why it has rejected them, or how management has otherwise addressed estimation uncertainty in making the accounting estimate.
- b) Whether the significant assumptions used by management are reasonable. Auditing the valuation of a complex financial instrument requires the auditor to use professional judgment, due to the estimation uncertainty associated with many complex financial instruments.

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<sup>32</sup> SA 540, paragraph 15(a)-(b).

## ***Valuation of Complex Financial Instruments***

### **Evaluating Models used by the Entity**

4.46 When evaluating whether the models used by an entity are appropriate in the circumstances, and whether controls over models are in place and operating effectively (see Table 6), the factors considered by the auditor may include:

- The theoretical models being used. For example, there are a number of option pricing models and it is important that the uncertainty inherent in the assumptions underlying each one are understood and taken into account in the valuations;
- Whether the models are commonly used by other market participants and have been previously demonstrated to provide a reliable estimate of prices obtained from market transactions;
- Whether the models operate as intended and there are no flaws in their design, particularly under extreme conditions, and whether they have been independently validated;
- Whether the models take account of the risks inherent in the financial instrument being valued, including counterparty creditworthiness, and own credit risk in the case of models used to measure financial liabilities;
- Who developed the models and whether their design could have been unduly influenced by traders or others who may not be objective;
- How the models are calibrated to the market, including how sensitive the models are to changes in variables and whether this reflects market behaviour;
- Whether market variables and assumptions are used consistently and whether new conditions justify a change in the models, market variables or assumptions used;

### ***Guide to Audit of Complex Financial Instruments***

- Whether sensitivity analyses indicates that valuations would change significantly with only small or moderate changes in assumptions; and
- The competence and objectivity of those responsible for the development and application of the models, including management's relative experience with particular models that may be newly developed.

The auditor (or auditor's expert) may also independently develop one or more models to compare its output with that of the models used by management.

### **Evaluating Whether the Assumptions and Inputs used by Management are Reasonable**

4.47 An assumption used in a valuation methodology may be deemed to be significant if a reasonably possible variation in the assumption would materially affect the measurement of the complex financial instrument.<sup>33</sup> Management may have considered alternative assumptions or outcomes by performing a sensitivity analysis. The extent of subjectivity associated with assumptions influences the degree of estimation uncertainty and may lead the auditor to conclude there is a significant risk, for example in the case of level 3 inputs (see paragraphs 91–92).

4.48 Audit procedures to test the assumptions used by management, including those used as inputs to valuation models, are based on information available to the auditor at the time of the audit and may include evaluating:

- Whether management has the intent and ability to carry out certain courses of actions that affect its assumptions (if taking these intentions or plans into account is permitted by the applicable financial reporting framework);

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<sup>33</sup> See SA 540, paragraph A107.

### ***Valuation of Complex Financial Instruments***

- Whether and, if so, how management has incorporated market-specific inputs into the development of assumptions, as it is generally preferable to seek to maximize market-specific inputs and minimize entity-specific inputs;
- Whether the assumptions are consistent with observable market conditions, and the characteristics of the financial asset or financial liability;
- Whether the sources of market-participant assumptions are relevant and reliable, and how management has selected the assumptions to use when a number of different marketplace assumptions exist;
- Whether the inputs to the models are complete and appropriate for the model, including whether sources of the inputs have changed during the period; and
- Whether sensitivity analyses indicate that valuations would change significantly with only small or moderate changes in assumptions.

4.49 In some cases, one particular assumption may be adjusted to account for the uncertainties in the valuation, rather than adjusting each assumption. In many cases, this is the discount rate used in the present value calculation, which is adjusted to reflect what willing buyers in the marketplace would pay. In such cases, an auditor's procedures may focus on the discount rate, by looking at an observable trade on a similar security to compare the discount rates used or developing an independent model to calculate the discount rate and compare with that used by management.

4.50 Where valuation of complex financial instruments is based on unobservable inputs, matters that the auditor may consider include, for example, how management supports the following:

- The identification and characteristics of marketplace participants relevant to the complex financial instrument.

### ***Guide to Audit of Complex Financial Instruments***

- How models are calibrated on day 1 to determine the unobservable inputs.
- Modifications it has made to its own assumptions to reflect its view of assumptions marketplace participants would use.
- Whether it has incorporated the best input information available in the circumstances.
- Where applicable, how its assumptions take account of comparable transactions, financial assets or financial liabilities.
- Sensitivity analysis of models when unobservable inputs are used and whether adjustments have been made to address valuation uncertainty.

4.51 Where there is a lack of observable external evidence, it is particularly important that those charged with governance have been appropriately engaged to understand the subjectivity of management's valuations and the evidence that has been obtained to support these valuations. In such cases, it may be necessary for the auditor to evaluate whether there has been a thorough review and consideration of the issues, including any documentation, at all appropriate management levels within the entity, including with those charged with governance.

4.52 Finally, it is likely that in testing the inputs used in an entity's valuation methodology, for example, where such inputs are classified in the fair value hierarchy, the auditor will also be obtaining evidence to support the disclosures required by the applicable financial reporting framework. For example, the auditor's substantive procedures to evaluate whether the inputs used in an entity's valuation methodology (that is, level 1, level 2 and level 3 inputs) are appropriate and testing of an entity's sensitivity analysis will be relevant to the auditor's evaluation of whether the disclosures achieve fair presentation.

## ***Valuation of Complex Financial Instruments***

### **Considerations When a Management's Expert or Service Organization is used by the Entity**

4.53 The use of a management's expert or service organization may have implications for the auditor, including the auditor's decision whether to involve persons with specialized skills or knowledge and the auditor's procedures to evaluate the sufficiency and appropriateness of evidence to support the complex financial instruments measured or disclosed in the financial statements.

4.54 For example, management of the entity may not have access to details of the model(s) used, and the key assumptions, used by brokers and pricing services to value complex financial instruments. The auditor may not be able to obtain sufficient appropriate audit evidence in order to conclude about the reasonableness of the valuation of the complex financial instruments if management is unable to understand:

- The assumptions and inputs used by the management's expert in valuing the complex financial instruments in order to evaluate whether these assumptions are appropriate; or
- The objectives of the valuation model in order to ensure it uses the measurement criteria of the applicable financial reporting framework.

4.55 SA 500 establishes requirements for the auditor when information to be used as audit evidence has been prepared using the work of a management's expert.<sup>34</sup> The extent of the auditor's procedures in relation to a management's expert and that expert's work depend on the significance of the expert's work for the auditor's purposes. Evaluating the appropriateness of management's expert's work assists the auditor in assessing whether the prices or valuations supplied by a management's expert provide sufficient appropriate audit evidence to support the

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<sup>34</sup> SA 500, paragraph 8.

## ***Guide to Audit of Complex Financial Instruments***

valuations. Examples of procedures the auditor may perform include:

- Evaluating the competence, capabilities and objectivity of the third-party bank or other financial institution, for example: their relationship with the entity; their reputation and standing in the market; their experience with the particular types of instruments; and their understanding of the relevant financial reporting framework applicable to the valuations; and
- Evaluating the appropriateness of the valuations and sensitivities developed by management's expert, including assessing the appropriateness of the model(s) used and the key market variables and assumptions used in the model(s).

### **Developing a Range**

4.56 An auditor may develop a model and adjust the inputs and assumptions used in the model to develop a range for use in evaluating the reasonableness of management's estimate of value. In accordance with SA 540<sup>35</sup>, if the auditor uses assumptions, inputs, or a methodology that differs from management's, the auditor shall obtain an understanding of management's assumptions, inputs, and methodology sufficient to establish that the auditor's range takes into account relevant variables and to evaluate any significant differences from management's valuation.

4.57 If the auditor concludes that sufficient evidence cannot be obtained from the above procedures, for example where the third party uses internally developed models and software and does not allow access to information on the models, the auditor may not be able to obtain sufficient appropriate audit evidence about the valuation if the auditor is unable to perform other procedures to

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<sup>35</sup> SA 540, paragraph 13(d).

### **Valuation of Complex Financial Instruments**

respond to the risks of material misstatement as explained in paragraph 13 of SA 540, for example by developing a point estimate or a range to evaluate management's point estimate. SA 705<sup>36</sup> describes the implications of the auditor's inability to obtain sufficient appropriate audit evidence.

SA 705 establishes three types of modified opinions, namely, a qualified opinion, an adverse opinion, and a disclaimer of opinion. The decision regarding which type of modified opinion is appropriate depends upon:

- (a) The nature of the matter giving rise to the modification, that is, whether the financial statements are materially misstated or, in the case of an inability to obtain sufficient appropriate audit evidence, may be materially misstated; and
- (b) The auditor's judgment about the pervasiveness of the effects or possible effects of the matter on the financial statements.

<b>Nature of Matter Giving Rise to the Modification</b>	<b>Auditor's Judgment about the Pervasiveness of the Effects or Possible Effects on the Financial Statements</b>	
	<i>Material but Not Pervasive</i>	<i>Material and Pervasive</i>
Financial statements are materially misstated	Qualified opinion	Adverse opinion
Inability to obtain sufficient appropriate audit evidence	Qualified opinion	Disclaimer of opinion

<sup>36</sup> SA 705, 'Modifications to the Opinion in the Independent Auditor's Report'.

## CHAPTER 5

# Presentation and Disclosure of Complex Financial Instruments

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5.1 Management's responsibilities include the preparation of the financial statements in accordance with the applicable financial reporting framework.<sup>37</sup> Disclosures in the financial statements are intended to enable users of the financial statements to make meaningful assessments of the effects of the entity's financial instrument activities, including the risks and uncertainties associated with these complex financial instruments. Accordingly, disclosures are of equal importance to the amounts recorded in the financial statements relating to financial instrument activities. Disclosures are most effective when they:

- Faithfully represent the underlying transactions and events, and illustrate how amounts recognized in the balance sheet, income statement, or statement of changes in equity relate to other quantitative and qualitative disclosures;
- Provide comprehensive and meaningful information that fully describes the entity's risks and exposures from complex financial instruments and allow users to have an adequate understanding of the entity's financial instrument transactions (including reasonably possible alternative outcomes); and
- Allow for comparison over time and between entities.

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<sup>37</sup> See paragraphs 4 and A2 of SA 200.

### ***Presentation and Disclosure of Complex FIs***

5.2 In representing that the financial statements are in accordance with the applicable financial reporting framework, management implicitly or explicitly makes assertions regarding the recognition, measurement, presentation and disclosure of the various elements of financial statements and related disclosures. Assertions about presentation and disclosure encompass:

- a) Occurrence and rights and obligations—disclosed events, transactions, and other matters have occurred and pertain to the entity.
- b) Completeness—all disclosures that should have been included in the financial statements have been included.
- c) Classification and understandability—financial information is appropriately presented and described, and disclosures are clearly expressed.
- d) Accuracy and valuation—financial and other information are disclosed fairly and at appropriate amounts.

The auditor's procedures around auditing disclosures are designed in consideration of these assertions.

### **Procedures Relating to the Presentation and Disclosure of Complex Financial Instruments**

5.3 Areas of particular importance in respect to complex financial instruments are:

- The financial risks and exposures inherent in complex financial instruments cannot always be effectively captured in a balance sheet and profit and loss account. Financial reporting frameworks generally require additional disclosures regarding estimates and related risks and uncertainties to supplement and explain assets, liabilities, income, and expenses. The auditor's focus may need to be on the disclosures relating to risks and sensitivity analysis. Information obtained during the auditor's risk assessment procedures and testing of control activities

## ***Guide to Audit of Complex Financial Instruments***

may provide evidence in order for the auditor to conclude about whether the disclosures in the financial statements are in accordance with the requirements of the applicable financial reporting framework, for example about:

- The entity's objectives and strategies for using complex financial instruments, including the entity's stated accounting policies;
  - The entity's control framework for managing its risks associated with complex financial instruments; and
  - The risks and uncertainties associated with the complex financial instruments.
- The information required to do this may come from systems outside traditional financial reporting systems, such as risk data. For example, information included in disclosures relating to the hierarchy of inputs to valuation, ranging from level 1 to level 3 may be derived from information systems that are not otherwise used to generate information for inclusion in the financial statements. In order to test the adequacy of disclosures, the auditor may test the operating effectiveness of the controls over the process by which management identifies the need for disclosures in the financial statements and the processes from which they derive the information used in disclosures.
  - In relation to complex financial instruments having significant risk<sup>38</sup>, even where the disclosures are in accordance with the applicable financial reporting framework, for example the auditor may conclude that the

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<sup>38</sup> SA 540, paragraph 20, requires the auditor to perform further procedures on disclosures relating to accounting estimates that give rise to significant risks to evaluate the adequacy of the disclosure of their estimation uncertainty in the financial statements in the context of the applicable financial reporting framework.

### ***Presentation and Disclosure of Complex FIs***

disclosure of estimation uncertainty is inadequate in light of the circumstances and facts involved and, accordingly, the financial statements may not achieve fair presentation. SA 705 provides guidance on the implications for the auditor's opinion when the auditor believes that management's disclosures in the financial statements are inadequate or misleading.

- Auditors may also consider whether the disclosures are complete and understandable, for example, all relevant information may be included in the financial statements (or accompanying reports) but it may be insufficiently drawn together to enable users of the financial statements to obtain an understanding of the position or there may not be enough qualitative disclosure to give context to the amounts recorded in the financial statements. For example, even when an entity has included sensitivity analysis disclosures, the disclosure may not fully describe the risks and uncertainties that may arise because of changes in valuation, for example, possible effects on debt covenants, collateral requirements, and the entity's liquidity. The auditor may wish to bring concerns in this area to the attention of those charged with governance and the audit committee.

### **Master Netting Agreements**

5.4 An entity that undertakes a number of financial instrument transactions with a single counterparty may enter into a master netting arrangement with that counterparty. Such an agreement provides for a single net settlement of all complex financial instruments covered by the agreement in the event of default of any one contract. These arrangements are commonly used by financial institutions to provide protection against loss in the event of bankruptcy or other circumstances that result in a counterparty being unable to meet its obligations. Financial reporting frameworks may establish requirements relating to such

## ***Guide to Audit of Complex Financial Instruments***

agreements which permit or prohibit netting for purposes of balance sheet presentation.

5.5 Assessing whether the classification of financial statement presentation is appropriate includes considering whether master netting agreements are in effect and relevant assets and liabilities that are subject to such netting contracts are identified completely. In addition, a possible fraud risk factor may exist (for example, netting may be made with a fraudulent intent) if the total assets or liabilities are used to determine the incentive compensation for management's or corporate tax payments or other key amounts. Consideration of day 1 accounting and the effects on presentation, for example on short-term and long-term classification, in substantive testing of complex financial instruments is relevant to the auditor's evaluation of the disclosures.

## **Other Relevant Audit Considerations**

### **The Role of the Internal Audit Function**

5.6 In many large entities, the internal audit function may perform work that enables senior management and those charged with governance to review and evaluate the entity's controls relating to the use of complex financial instruments. SA 315 requires the auditor to make inquiries of appropriate individuals within the internal audit function, if the function exists, as part of the auditor's risk assessment procedures.<sup>39</sup> Inquiries with the appropriate individuals within the internal audit function may provide information to assist the external auditor in obtaining an understanding of the entity and its environment, including its use of complex financial instruments, and therefore in assessing the

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<sup>39</sup> SA 315, paragraph 6(a). In addition, paragraph 22a of SA 315 requires the auditor to obtain an understanding of the nature of the internal audit function's responsibilities, how the function fits in the entity's organizational structure, and the activities performed, or to be performed.

## ***Presentation and Disclosure of Complex FIs***

risks of material misstatement. The knowledge and skills required of an internal audit function to understand and perform procedures to provide assurance to management or those charged with governance on the entity's use of complex financial instruments are generally quite different from those needed for other parts of the business. The extent to which the internal audit function has the knowledge and skill to cover, and has in fact covered, the entity's financial instrument activities, as well as the competence and objectivity of the internal audit function, is a relevant consideration in the external auditor's determination of whether the internal audit function is likely to be relevant to the overall audit strategy and audit plan.

5.7 Areas where the work of the internal audit function may be particularly relevant are:<sup>40</sup>

- Developing a general overview of the extent of use of complex financial instruments;
- Evaluating the appropriateness of policies and procedures and management's compliance with them;
- Evaluating the operating effectiveness of financial instrument control activities;
- Evaluating systems relevant to financial instrument activities for instance reviewing of effectiveness of information system established to capture and record all the transactions accurately, for settling them, for valuing them, and for producing information to enable the financial instruments to be risk managed and for controls to be monitored.;

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<sup>40</sup> Work performed by functions such as the independent risk management function, model review functions, and product control, also be relevant to the auditor in these areas.

## ***Guide to Audit of Complex Financial Instruments***

- Assessing whether new risks relating to complex financial instruments are being identified, assessed and managed; and
- Conducting regular evaluations to:
  - Provide management with assurance that financial instrument activities are being properly controlled; and
  - Ensure that new risks and the use of complex financial instruments to manage these risks are being identified, assessed and managed.
- Evaluation of fraud risk factors by established risk management strategies.

5.8 If the nature of the internal audit function's responsibilities and assurance activities are related to the entity's financial reporting the auditor may also be able to use the work of the internal audit function to modify the nature or timing, or reduce the extent, of audit procedures to be performed in relation to complex financial instruments.<sup>41</sup> However, SA 610 (Revised) notes that, for a particular account balance, class of transaction or disclosure, the higher an assessed risk of material misstatement at the assertion level (in particular for significant risks), the more judgment is often involved in planning and performing the audit procedures and evaluating the results thereof. In such circumstances, it is less likely that the external auditor can make substantial use of the work of the internal audit function in obtaining sufficient appropriate audit evidence.

### **Written Representations**

5.9 SA 540 requires the auditor to obtain written representations from management and, where appropriate, those

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<sup>41</sup> Paragraphs 8–10 of SA 610 (Revised), 'Using the Work of Internal Auditors', establish requirements and provide guidance to the auditor in determining whether and to what extent to use the work of the internal audit function.

### ***Presentation and Disclosure of Complex FIs***

charged with governance whether they believe significant assumptions used making accounting estimates are reasonable.<sup>42</sup> Depending on the volume and degree of complexity of financial instrument activities, written representations to support other evidence obtained about complex financial instruments may also include:

- Management's objectives with respect to complex financial instruments, for example, whether they are used for hedging, asset/liability management or investment purposes;
- Representations about the appropriateness of presentation of the financial statements, for example the recording of financial instrument transactions as sales or financing transactions;
- Representations about the financial statement disclosures concerning complex financial instruments, for example that:
  - The records reflect all financial instrument transactions; and
  - All embedded derivative instruments have been identified;
- Whether all transactions have been conducted at arm's length and at market value;
- The terms of transactions;
- Whether there are any side agreements associated with any complex financial instruments;
- Whether the entity has entered into any written options;

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<sup>42</sup> SA 540, paragraph 22. Paragraph 3 of SA 580, 'Written Representations', states that written representations from management do not provide sufficient appropriate audit evidence on their own about any of the matters with which they deal. If the auditor is otherwise unable to obtain sufficient appropriate audit evidence, this may constitute a limitation on the scope of the audit may have implications for the auditor's report.

### ***Guide to Audit of Complex Financial Instruments***

- Management's intent and ability to carry out certain actions;<sup>43</sup>
- If applicable, the appropriateness of the basis used by management to overcome the presumption relating to the use of fair values; and
- Whether subsequent events require adjustment to the valuations and disclosures included in the financial statements.

### **Communication with Those Charged with Governance and Others**

5.10 Because of the uncertainties associated with the valuation of complex financial instruments, the potential effects on the financial statements of any significant risks are likely to be of governance interest. The auditor may communicate the nature of significant assumptions used in fair value measurements, the degree of subjectivity involved in the development of the assumptions, and the relative materiality of the items being measured at fair value to the financial statements as a whole. In addition, the need for appropriate controls over commitments to enter into complex financial instrument contracts and over the subsequent measurement processes are matters that may give rise to the need for communication with those charged with governance.

5.11 SA 260<sup>44</sup> deals with the auditor's responsibility to communicate with those charged with governance in an audit of financial statements. With respect to complex financial instruments, matters to be communicated to those charged with governance may include:

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<sup>43</sup> Paragraph A80 of SA 540 provides examples of procedures that may be appropriate in the circumstances.

<sup>44</sup> SA 260, 'Communication with Those Charged with Governance'.

### ***Presentation and Disclosure of Complex FIs***

- A lack of management understanding of the nature or extent of the financial instrument activities or the risks associated with such activities;
- Significant deficiencies in the design or operation of the systems of internal control or risk management relating to the entity's financial instrument activities that the auditor has identified during the audit;
- Significant difficulties encountered when obtaining sufficient appropriate audit evidence relating to valuations performed by management or a management's expert, for example, where management is unable to obtain an understanding of the valuation methodologies, including the assumptions and inputs, used by the management's experts and such information is not made available to the auditor by management's expert;
- Significant differences in judgments between the auditor and management or a management's expert regarding valuations;
- The potential effects on the entity's financial statements of material risks and exposures required to be disclosed in the financial statements, including the valuation uncertainty associated with complex financial instruments;
- The auditor's views about the appropriateness of the selection of accounting policies and presentation of financial instrument transactions in the financial statements;
- The auditor's views about the qualitative aspects of the entity's accounting practices and financial reporting for complex financial instruments; or
- A lack of comprehensive and clearly stated policies for the purchase, sale and holding of complex financial instruments, including operational controls, procedures for designating complex financial instruments as hedges, and monitoring exposures.

## ***Guide to Audit of Complex Financial Instruments***

5.12 The appropriate timing for communications will vary with the circumstances of the engagement; however, it may be appropriate to communicate significant difficulties encountered during the audit as soon as practicable if those charged with governance are able to assist the auditor to overcome the difficulty, or if it is likely to lead to a modified opinion.

### **Communications with Regulators and Others**

5.13 In some cases, auditors may be required,<sup>45</sup> or may consider it appropriate, to communicate directly with regulators or prudential supervisors, in addition to those charged with governance, regarding matters relating to complex financial instruments. Such communication may be most useful in the early stages of the audit. For example, where, banking regulators seek to cooperate with auditors to share information about the operation and application of controls over financial instrument activities, challenges in valuing complex financial instruments in inactive markets, and compliance with regulations. This coordination may be helpful to the auditor in identifying risks of material misstatement.

Further, illustrative guidance for audit of financial instruments is given in the Appendix B.

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<sup>45</sup> SA 265, 'Communicating Deficiencies in Internal Control to Those Charged with Governance and Management', establishes requirements and provides guidance on communicating deficiencies in internal control to management, and communicating significant deficiencies in internal control to those charged with governance. It explains that deficiencies in internal control may be identified during the auditor's risk assessment procedures in accordance with SA 315 or at any other stage of the audit.

## Appendix A: Illustrative Disclosures

	<b><i>General Disclosures</i></b>
<b>AS 32 para 6</b> <b>Appendix B1-B3</b>	When AS 32 requires disclosures by class of financial instrument, group the financial instruments into classes that are appropriate to the nature of the information disclosed. Take into account the characteristics of those financial instruments. Provide sufficient information to permit reconciliation to the line items presented in the balance sheet.
<b>AS 32 para 7</b>	Disclose information that enables users of the financial statements to evaluate the significance of financial instruments for financial position and performance.
	2. Categories of financial assets and financial liabilities
<b>AS 32 para 8</b>	<p>Disclose either on the face of the balance sheet or in the notes the carrying amounts of each of the following categories, as defined in AS 30:</p> <ul style="list-style-type: none"> <li>(a) financial assets at fair value through profit or loss, showing separately: <ul style="list-style-type: none"> <li>(i) those designated as such upon initial recognition; and</li> <li>(ii) those classified as held for trading in accordance with AS 30;</li> </ul> </li> <li>(b) held-to-maturity investments;</li> <li>(c) loans and receivables;</li> <li>(d) available-for-sale financial assets;</li> <li>(e) financial liabilities at fair value through profit or loss, showing separately: <ul style="list-style-type: none"> <li>(i) those designated as such upon</li> </ul> </li> </ul>

**Guide to Audit of Complex Financial Instruments**

	<p>initial recognition; and</p> <p>(ii) those classified as held for trading in accordance with AS 30; and</p> <p>(f) financial liabilities measured at amortised cost.</p>
	3. Financial assets or financial liabilities at fair value through profit or loss
<b>AS 32 para 9</b>	<p>1. If a loan or receivable (or group of loans or receivables) is designated as at fair value through profit or loss, disclose:</p> <p>(a) the maximum exposure to credit risk (see AS 32 p36(a)) of the loan or receivable (or group of loans or receivables) at the reporting date;</p> <p>(b) the amount by which any related credit derivatives or similar instruments mitigate that maximum exposure to credit risk;</p> <p>(c) the amount of change, during the period and cumulatively, in the fair value of the loan or receivable (or group of loans or receivables) that is attributable to changes in the credit risk of the financial asset determined either:</p> <p>(i) as the amount of change in its fair value that is not attributable to changes in market conditions that give rise to market risk; or</p> <p>(ii) using an alternative method that the entity believes more faithfully represents the amount of change in its fair value that is attributable to changes in the credit risk of</p>

**Appendix A : Illustrative Disclosures**

	<p>the asset. Changes in market conditions that give rise to market risk include changes in an observed (benchmark) interest rate, commodity price, foreign exchange rate or index of prices or rates; and</p> <p>(d) the amount of the change in the fair value of any related credit derivatives or similar instruments that has occurred during the period and cumulatively since the loan or receivable was designated.</p>
<p><b>AS 32 para 10 Appendix B4</b></p>	<p>2. If the entity has designated a financial liability as at fair value through profit or loss in accordance with AS 30 para 8.2, disclose:</p> <p>(a) the amount of change, during the period and cumulatively, in the fair value of the financial liability that is attributable to changes in the credit risk of that liability determined either:</p> <p>(i) as the amount of change in its fair value that is not attributable to changes in market conditions that give rise to market risk (see AS 32 Appendix B4); or</p> <p>(ii) using an alternative method that the entity believes more faithfully represents the amount of change in its fair value that is attributable to changes in the credit risk of the liability. Changes in market conditions that give rise to market risk include changes in a benchmark interest rate, the</p>

**Guide to Audit of Complex Financial Instruments**

	<p>price of another entity's financial instrument, a commodity price, a foreign exchange rate or an index of prices or rates. For contracts that include a unit-linking feature, changes in market conditions include changes in the performance of the related internal or external investment fund; and</p> <p>(b) the difference between the financial liability's carrying amount and the amount the entity would be contractually required to pay at maturity to the holder of the obligation.</p>
<b>AS 32 para 11 Appendix B4</b>	<p>3. Disclose:</p> <p>(a) the methods used to comply with the requirements in AS 32 para 9(c) and AS 32 para 10(a); and</p> <p>(b) if the entity believes that the disclosure it has given to comply with the requirements in AS 32 para 9(c) and AS 32 7 para 10(a) does not faithfully represent the change in the fair value of the financial asset or financial liability attributable to changes in its credit risk, the reasons for reaching this conclusion and the factors it believes are relevant.</p>
	<p>4. Reclassification</p>
<b>AS 32 para 12</b>	<p>1. If the entity has reclassified a financial asset (in accordance with paragraphs AS 30 paras 51-54) as one measured:</p> <p>(a) at cost or amortised cost, rather than at fair value; or</p>

**Appendix A : Illustrative Disclosures**

	(b) at fair value, rather than at cost or amortised cost, disclose the amount reclassified into and out of each category and the reason for that reclassification (see para 56-60 of AS 30)
	5. Derecognition
<b>AS 32 para 13</b>	<p>If financial assets have been transferred in such a way that part or all of the financial assets do not qualify for derecognition (see AS 30 paras 15-37), disclose for each class of such financial assets:</p> <p>(a) the nature of the assets;</p> <p>(b) the nature of the risks and rewards of ownership to which the entity remains exposed;</p> <p>(c) when the entity continues to recognise all of the assets, the carrying amounts of the assets and of the associated liabilities; and</p> <p>(d) when the entity continues to recognise the assets to the extent of its continuing involvement, the total carrying amount of the original assets, the amount of the assets that the entity continues to recognise, and the carrying amount of the associated liabilities.</p>
	6. Collateral
<b>AS 32 para 14</b>	<p>1. Disclose:</p> <p>(a) the carrying amount of financial assets that the entity has pledged as collateral for liabilities or contingent liabilities, including amounts that have been reclassified in accordance with AS 30</p>

**Guide to Audit of Complex Financial Instruments**

	<p>paras 56-60 of AS 30; and</p> <p>(b) the terms and conditions relating to its pledge.</p>
<b>AS32 para 15</b>	<p>2. When the entity holds collateral (of financial or non-financial assets) and is permitted to sell or repledge the collateral in the absence of default by the owner of the collateral, disclose:</p> <p>(a) the fair value of the collateral held;</p> <p>(b) the fair value of any such collateral sold or repledged, and whether the entity has an obligation to return it; and</p> <p>(c) the terms and conditions associated with its use of the collateral.</p>
	<p>7. Allowance account for credit losses</p>
<b>AS 32 para 16 Appendix B1- B3, B5(d)</b>	<p>When financial assets are impaired by credit losses and the entity records the impairment in a separate account (for example, an allowance account used to record individual impairments or a similar account used to record a collective impairment of assets) rather than directly reducing the carrying amount of the asset, disclose a reconciliation of changes in that account during the period for each class of financial assets.</p>
	<p>8. Compound financial instruments with multiple embedded derivatives</p>
<b>AS 32 para 17</b>	<p>If the entity has issued an instrument that contains both a liability and an equity component (AS 30 para 58) and the instrument has multiple embedded derivatives whose values are interdependent (such as a callable convertible debt instrument), disclose the</p>

**Appendix A : Illustrative Disclosures**

	existence of those features.
	9. Defaults and breaches
<b>AS 32 para 18</b>	<p>1. For <i>loans payable</i> recognised at the reporting date, disclose:</p> <p>(a) details of any defaults during the period of principal, interest, sinking fund or redemption terms of those loans payable;</p> <p>(b) the carrying amount of the loans payable in default at the reporting date; and</p> <p>(c) whether the default was remedied, or the terms of the loans payable were renegotiated, before the financial statements were authorised for issue.</p>
<b>AS 32 para 19</b>	<p>2. If during the period there were breaches of loan agreement terms other than those described in AS 32 para 18, disclose the same information as required by AS 32 para 18 if those breaches permitted the lender to demand accelerated repayment (unless the breaches were remedied, or the terms of the loan were renegotiated, on or before the reporting date).</p>
	10. Items of income, expense, gains or losses
<b>AS 32 para 20 Appendix B1- B3, B5(d)</b>	<p>Disclose the following items of income, expense, gains or losses either on the face of the financial statements or in the notes:</p> <p>(a) net gains or net losses on:</p> <p style="padding-left: 20px;">(i) financial assets or financial liabilities at fair value through profit or loss, showing separately those on financial assets or financial liabilities designated as</p>

**Guide to Audit of Complex Financial Instruments**

	<p>such upon initial recognition, and those on financial assets or financial liabilities that are classified as held for trading in accordance with AS 30;</p> <p>(ii) available-for-sale financial assets, showing separately the amount of gain or loss recognised directly in equity during the period and the amount removed from equity and recognised in profit or loss for the period;</p> <p>(iii) held-to-maturity investments;</p> <p>(iv) loans and receivables; and</p> <p>(v) financial liabilities measured at amortised cost;</p> <p>(b) total interest income and total interest expense (calculated using the effective interest method) for financial assets or financial liabilities that are not at fair value through profit or loss;</p> <p>(c) fee income and expense (other than amounts included in determining the effective interest rate) arising from:</p> <p>(i) financial assets or financial liabilities that are not at fair value through profit or loss; and</p> <p>(ii) trust and other fiduciary activities that result in the holding or investing of assets on behalf of individuals, trusts, retirement benefit plans and other institutions;</p> <p>(d) interest income on impaired financial</p>
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**Appendix A : Illustrative Disclosures**

	<p>assets accrued in accordance with AS 30, Para A113; and</p> <p>(e) the amount of any impairment loss for each class of financial asset.</p>
	11. Other disclosures
<b>AS 32 para 21</b>	<p>(a) Accounting policies</p> <p>Disclose in the summary of significant accounting policies the measurement basis (or bases) used in preparing the financial statements and the other accounting policies used that are relevant to an understanding of the financial statements.</p>
<b>AS 32 Appendix B5</b>	<p>Disclosure required by AS 32 para 21 may include:</p> <p>(a) for financial assets or financial liabilities designated as at fair value through profit or loss:</p> <p>(i) the nature of the financial assets or financial liabilities the entity has designated as at fair value through profit or loss;</p> <p>(ii) the criteria for designating such financial assets or financial liabilities on initial recognition; and</p> <p>(iii) how the entity has satisfied the conditions in AS 30 para 8, 11 or 12 for such designation. For instruments designated in accordance with AS 30 para 9(b)(i) of the definition of a financial asset or financial liability at fair value through profit or loss, include a narrative description of</p>

**Guide to Audit of Complex Financial Instruments**

<p><b>AS 32 para 10</b></p>	<p>the circumstances underlying the measurement or recognition inconsistency that would otherwise arise.</p> <p>For instruments designated in accordance with AS 30 para 9(b)(ii) of the definition of a financial asset or financial liability at fair value through profit or loss, include a narrative description of how designation at fair value through profit or loss is consistent with the entity's documented risk management or investment strategy;</p> <p>(b) the criteria for designating financial assets as available for sale;</p> <p>(c) whether regular way purchases and sales of financial assets are accounted for at trade date or at settlement date;</p> <p>(d) when an allowance account is used to reduce the carrying amount of financial assets impaired by credit losses:</p> <p>(i) the criteria for determining when the carrying amount of impaired financial assets is reduced directly (or, in the case of a reversal of a write-down, increased directly) and when the allowance account is used; and</p> <p>(ii) the criteria for writing off amounts charged to the allowance account against the carrying amount of impaired financial assets (see AS 32 para 16);</p> <p>(e) how net gains or net losses on each category of financial instrument are determined (see AS 32 para 20(a)), for</p>
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**Appendix A : Illustrative Disclosures**

	<p>example, whether the net gains or net losses on items at fair value through profit or loss include interest or dividend income;</p> <p>(f) the criteria the entity uses to determine that there is objective evidence that an impairment loss has occurred (see AS 32 para 20(e)); and</p> <p>(g) when the terms of financial assets that would otherwise be past due or impaired have been renegotiated, the accounting policy for financial assets that are the subject of renegotiated terms (see AS 32 para 36(d)).</p> <p>Disclose, in the summary of significant accounting policies or other notes, the judgements, apart from those involving estimations, that management has made in the process of applying the entity's accounting policies and that have the most significant effect on the amounts recognised in the financial statements.</p>
	(b) Hedge accounting
<b>As 32 para 22</b>	<p>1. Disclose the following separately for each type of hedge described in AS 30 (ie, fair value hedges, cash flow hedges and hedges of net investments in foreign operations):</p> <p>(a) a description of each type of hedge;</p> <p>(b) a description of the financial instruments designated as hedging instruments and their fair values at the reporting date; and</p> <p>(c) the nature of the risks being hedged</p>

**Guide to Audit of Complex Financial Instruments**

<b>AS 32 para 23</b>	<p>2. For cash flow hedges, disclose:</p> <ul style="list-style-type: none"><li>(a) the periods when the cash flows are expected to occur and when they are expected to affect profit or loss;</li><li>(b) a description of any forecast transaction for which hedge accounting had previously been used, but which is no longer expected to occur;</li><li>(c) the amount that was recognised in equity during the period;</li><li>(d) the amount that was removed from equity and included in profit or loss for the period, showing the amount included in each line item in the income statement; and</li><li>(e) the amount that was removed from equity during the period and included in the initial cost or other carrying amount of a non-financial asset or non-financial liability whose acquisition or incurrence was a hedged highly probable forecast transaction.</li></ul>
<b>AS 32 para 24</b>	<p>Disclose separately:</p> <ul style="list-style-type: none"><li>(a) in fair value hedges, gains or losses:<ul style="list-style-type: none"><li>(i) on the hedging instrument; and</li><li>(ii) on the hedged item attributable to the hedged risk;</li></ul></li><li>(b) the ineffectiveness recognised in profit or loss that arises from cash flow hedges; and</li><li>(c) the ineffectiveness recognised in profit or loss that arises from hedges of net investments in foreign operations.</li></ul>

**Appendix A : Illustrative Disclosures**

	<p>3. Disclose separately:</p> <p>(a) in fair value hedges, gains or losses:</p> <p style="padding-left: 20px;">(i) on the hedging instrument; and</p> <p style="padding-left: 20px;">(ii) on the hedge item attributable to the hedged risk;</p> <p>(b) the ineffectiveness recognised in profit or loss that arises from cash flow hedges; and</p> <p>(c) the ineffectiveness recognised in profit or loss that arises from hedges of net investments in foreign operations.</p>
<p><b>AS 32 para 25</b> <b>Appendix B1-B2, B5(d)</b></p>	<p>(c) Fair value</p> <p>1. Except as set out in AS 32 para 29, for each class of financial assets and financial liabilities (see As 32 para 6), disclose the fair value of that class of assets and liabilities in a way that permits it to be compared with its carrying amount.</p>
<p><b>AS 32 para 26</b> <b>Appendix B1-B2, B5(d)</b></p>	<p>In disclosing fair values, group financial assets and financial liabilities into classes, but offset them only to the extent that their carrying amounts are offset in the statement of financial position.</p>
<p><b>AS 32 para 27</b></p>	<p>2. Disclose for each class of financial instrument</p> <p>(i) the methods and, when a valuation technique is used, the assumptions applied in determining fair values of each class of financial assets or financial liabilities. For example, if applicable, an entity discloses information about the assumptions relating to prepayment rates, rates of estimated credit losses,</p>

**Guide to Audit of Complex Financial Instruments**

	<p>and interest rates or discount rates.</p> <p>(ii) whether fair values are determined, in whole or in part, directly by reference to published price quotations in an active market or are estimated using a valuation technique (see paragraphs A90 –A99 of AS 30).</p> <p>(c) whether the fair values recognised or disclosed in the financial statements are determined in whole or in part using a valuation technique based on assumptions that are not supported by prices from observable current market transactions in the same instrument</p> <p>(d) if (c) applies, the total amount of the change in fair value estimated using such a valuation technique that was recognised in profit or loss during the period.</p>
<p><b>AS 32 para 28</b></p>	<p>5. If the market for a financial instrument is not active, its fair value is established using a valuation technique (see AS 30 A93-99). The best evidence of fair value at initial recognition is the transaction price (ie, the fair value of the consideration given or received), unless conditions described in AS 30 A95 are met. There could be a difference between the fair value at initial recognition and the amount that would be determined at that date using the valuation technique. If such a difference exists, disclose, by class of financial instrument:</p> <p>(a) the accounting policy for recognising that difference in profit or loss to reflect a change in factors (including time) that market participants would consider in setting a price (see AS 30 A96); and</p>

**Appendix A : Illustrative Disclosures**

	<p>(b) the aggregate difference yet to be recognised in profit or loss at the beginning and end of the period and a reconciliation of changes in the balance of this difference.</p>
<p><b>As 32 para 29</b></p>	<p>6. Disclosures of fair value are not required:</p> <p>(a) when the carrying amount is a reasonable approximation of fair value (for example, for financial instruments such as short-term trade receivables and payables);</p> <p>(b) for an investment in equity instruments that do not have a quoted market price in an active market, or derivatives linked to such equity instruments, that is measured at cost in accordance with AS 30 because its fair value cannot be measured reliably; or</p> <p>(c) for a contract containing a discretionary participation feature (as described in Insurance Contracts) if the fair value of that feature cannot be measured reliably.</p>
<p><b>As 32 para 30</b></p>	<p>7. In the cases described in AS 32 para 29(b) and (c), disclose information to help users of the financial statements make their own judgements about the extent of possible differences between the carrying amount of those financial assets or financial liabilities and their fair value, including:</p> <p>(a) the fact that fair value information has not been disclosed for these instruments because their fair value cannot be</p>

**Guide to Audit of Complex Financial Instruments**

	<p>measured reliably;</p> <p>(b) a description of the financial instruments, their carrying amount, and an explanation of why fair value cannot be measured reliably;</p> <p>(c) information about the market for the instruments;</p> <p>(d) information about whether and how the entity intends to dispose of the financial instruments; and</p> <p>(e) if financial instruments whose fair value previously could not be reliably measured are derecognised, that fact, their carrying amount at the time of derecognition, and the amount of gain or loss recognised.</p>
	12. Nature and extent of risks arising from financial instruments
<b>AS 32 para 31</b>	Disclose information that enables users of the financial statements to evaluate the nature and extent of risks arising from financial instruments to which the entity is exposed at the reporting date.
<b>AS 32 Appendix B6</b>	<p>The disclosures required by AS 32 paras 31-42 should either be given in the financial statements or incorporated by cross-reference from the financial statements to some other statement, such as a management commentary or risk report, that is available to users of the financial statements on the same terms as the financial statements and at the same time.</p> <p>Without the information incorporated by cross-reference, the financial statements are incomplete.</p>

**Appendix A : Illustrative Disclosures**

<b>AS 32 para 32</b>	The disclosures required by AS 32 paragraphs 33-42 focus on the risks that arise from financial instruments and how they have been managed. These risks typically include, but are not limited to, credit risk, liquidity risk and market risk.
	13. Qualitative disclosures
<b>AS 32 para 33</b>	For each type of risk arising from financial instruments, disclose: <ul style="list-style-type: none"> <li>(a) the exposures to risk and how they arise;</li> <li>(b) objectives, policies and processes for managing the risk and the methods used to measure the risk; and</li> <li>(c) any changes in (a) or (b) from the previous period.</li> </ul>
	14. Quantitative disclosures
<b>AS 32 para 34 Appendix B7, B10A</b>	1. For each type of risk arising from financial instruments, disclose: <ul style="list-style-type: none"> <li>(a) summary quantitative data about exposure to that risk at the reporting date. This disclosure should be based on the information provided internally to key management personnel of the entity (as defined in AS 18 Related Party Disclosures), for example the entity's board of directors or chief executive officer;</li> <li>(b) the disclosures required by AS 32 paragraphs 36-42, to the extent not provided in (a), unless the risk is not material (see AS 1 for a discussion of materiality); and</li> <li>(c) concentrations of risk if not apparent from (a) and (b).</li> </ul>

**Guide to Audit of Complex Financial Instruments**

<p><b>AS 32</b> <b>Appendix B8</b></p>	<p>AS 32 para 34(c) requires disclosures about concentrations of risk. Concentrations of risk arise from financial instruments that have similar characteristics and are affected similarly by changes in economic or other conditions. The identification of concentrations of risk requires judgement, taking into account the circumstances of the entity. Include in the disclosure of concentrations of risk:</p> <ul style="list-style-type: none"> <li>(a) a description of how management determines concentrations;</li> <li>(b) a description of the shared characteristic that identifies each concentration (for example, counterparty, geographical area, currency or market); and</li> <li>(c) the amount of the risk exposure associated with all financial instruments sharing that characteristic.</li> </ul>
<p><b>AS 32 para 35</b></p>	<p>2. If the quantitative data disclosed as at the reporting date is unrepresentative of the entity's exposure to risk during the period, provide further information that is representative.</p>
<p><b>AS 32 para 36</b> <b>Appendix B9-10</b></p>	<p>Credit risk</p> <p>Disclose by class of financial instrument:</p> <ul style="list-style-type: none"> <li>(a) the amount that best represents the entity's maximum exposure to credit risk at the reporting date without taking account of any collateral held or other credit enhancements (for example, netting agreements that do not qualify for offset in accordance with AS 31);</li> <li>(b) in respect of the amount disclosed in (a), a description of collateral held as</li> </ul>

**Appendix A : Illustrative Disclosures**

	<p>security and other credit enhancements;</p> <p>(c) information about the credit quality of financial assets that are neither past due nor impaired; and</p> <p>(d) the carrying amount of financial assets that would otherwise be past due or impaired whose terms have been renegotiated.</p>
<b>AS 32 para 37</b>	<p><i>Financial assets that are either past due or impaired</i></p> <p>Disclose by class of financial asset:</p> <p>(a) an analysis of the age of financial assets that are past due as at the reporting date but not impaired;</p> <p>(b) an analysis of financial assets that are individually determined to be impaired as at the reporting date, including the factors the entity considered in determining that they are impaired; and</p> <p>(c) for the amounts disclosed in (a) and (b), a description of collateral held by the entity as security and other credit enhancements and, unless impracticable, an estimate of their fair value.</p>
<b>AS 32 para 38</b>	<p><i>Collateral and other credit enhancements obtained</i></p> <p>1. When an entity obtains financial or non-financial assets during the period by taking possession of collateral it holds as security or calling on other credit enhancements (for example, guarantees), and such assets meet the recognition criteria in other standards,</p>

**Guide to Audit of Complex Financial Instruments**

	<p>disclose:</p> <p>(a) the nature and carrying amount of the assets obtained; and</p> <p>(b) when the assets are not readily convertible into cash, the policies for disposing of such assets or for using them in its operations.</p>
<b>AS 32 para 39</b>	<p>Liquidity risk</p> <p>Disclose:</p> <p>(a) a maturity analysis for non-derivative financial liabilities (including issued financial guarantee contracts) that shows the remaining contractual maturities;</p> <p>(b) a maturity analysis for derivative financial liabilities. The maturity analysis should include the remaining contractual maturities are essential for an understanding of the timing of the cash flows; and</p> <p>(c) a description of how the liquidity risk inherent in (a) and (b).</p>
<b>AS 32 Appendix B11</b>	<p>In preparing the contractual maturity analysis for financial liabilities required by AS 32 para 39(a) and (b), use judgement to determine an appropriate number of time bands. For example, an entity might determine that the following time bands are appropriate:</p> <p>(a) no later than one month;</p> <p>(b) later than one month and no later than three months;</p> <p>(c) later than three months and no later than one year; and</p> <p>(d) later than one year and no later than five years.</p>

**Appendix A : Illustrative Disclosures**

<p><b>AS 32 para 40</b> <b>Appendix B17-</b> <b>B19 and B21-</b> <b>B28</b></p>	<p>(c) Market risk</p> <p>Sensitivity analysis</p> <p>Unless an entity complies with AS 32 para 41, disclose:</p> <p>(a) a sensitivity analysis for each type of market risk to which the entity is exposed at the end of the reporting period, showing how profit or loss and equity would have been affected by changes in the relevant risk variable that were reasonably possible at that date;</p> <p>(b) the methods and assumptions used in preparing the sensitivity analysis; and</p> <p>(c) changes from the previous period in the methods and assumptions used, and the reasons for such changes.</p>
<p><b>AS 32 para 41</b> <b>Appendix B20</b></p>	<p>If the entity prepares a sensitivity analysis, such as value at risk, that reflects interdependencies between risk variables (for example, interest rates and exchange rates) and uses it to manage financial risks, it may use that sensitivity analysis in place of the analysis specified in AS 32 para 40. Also disclose:</p> <p>(a) an explanation of the method used in preparing such a sensitivity analysis, and of the main parameters and assumptions underlying the data provided; and</p> <p>(b) an explanation of the objective of the method used and of limitations that may result in the information not fully reflecting the fair value of the assets and liabilities involved.</p>

***Guide to Audit of Complex Financial Instruments***

<b>AS 32 para 42</b>	<p><i>Other market risk disclosures</i></p> <p>When the sensitivity analyses disclosed in accordance with AS 32 para 40 or AS 32 para 41 are unrepresentative of a risk inherent in a financial instrument (for example, because the year-end exposure does not reflect the exposure during the year), disclose that fact and the reason the sensitivity analyses are unrepresentative.</p>
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**Appendix B**  
**Illustrative Guidance for Audit of Complex**  
**Financial Instruments**

<b>Audit Step</b>	<b>Audit Objectives</b>	<b>Guidance</b>
Understand derivatives (AS 30, 31 )	Accuracy, Presentation and Disclosure	<p>a) Identify each of the client's derivatives and obtain an understanding through discussions with management and/or examination of supporting documentation as to the nature of the instrument, client's obligation, counterparts, associated risks, and other relevant matters pertaining to each instrument.</p> <p>b) Ascertain whether the accounting policies adopted by the entity for derivatives are in conformity with generally accepted accounting principles. Consider whether any hedges meet the applicable criteria for hedge accounting.</p>
Obtain analysis of derivative activity and reconcile to the general ledger (AS 30, 31 )	Completeness, Accuracy	a) Obtain a detailed analysis of derivatives at the beginning of the period, new derivatives, matured or terminated derivatives, and derivatives at the end

**Guide to Audit of Complex Financial Instruments**

		<p>of the period, including:</p> <ul style="list-style-type: none"><li>i) specific description of type of financial instrument;</li><li>ii) basis of accounting (i.e., speculative vs. hedge);</li><li>iii) nature of contract (i.e., commodity, foreign currency, or other financial instrument) or assets/liabilities hedged;</li><li>iv) contract amount or notional principal amount, period of contract, rate (i.e., interest, exchange, commodity, or stock) at contracted or agreed date, and where applicable at future settlement date, and contract settlement provisions (e.g., net cash settlement); and</li><li>v) discount accretion and premium amortization, where applicable.</li></ul> <p>b) Test the mathematical accuracy of the analysis</p>
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**Appendix B: Illustrative Guidance for Audit of Complex FIs**

		<p>and trace the beginning and ending balances to the general ledger for balance sheet items and to other accounting records (e.g., trade journals) for off-balance sheet items, as appropriate and previous year's working papers.</p> <p>c) To an extent based on materiality and inherent risk, ascertain that the completeness objective is obtained for derivatives by considering knowledge of the client's business and industry, review of board minutes and other committees, fluctuations in interest income/expense and other income/expense account balances and evidence obtained in other tests (e.g. confirmation of amounts with third parties).</p>
Update roll-forward information for current derivatives	Existence/ Occurrence, Rights and Obligations	Update roll-forward information for all current derivative agreements, including modifications and interpretations thereof.
Examine contracts for	Accuracy, Existence/	Examine, to an extent based on materiality and inherent

**Guide to Audit of Complex Financial Instruments**

<p>derivatives (AS 30 )</p>	<p>Occurrence, Rights and Obligations</p>	<p>risk, contracts and other supporting documentation that identifies the nature of the contract, the rights and obligations of the parties to the contract, the rate, the contract amount, etc. and compare the information to the detailed analysis and determine whether the analysis accurately reflects the substance of the contracts. Determine that the transactions have been authorized by an appropriate individual.</p> <p>Carefully consider the need to involve a specialist in the aforementioned review.</p>
<p>Recalculate realized and unrealized gains and losses (AS 11, 30)</p>	<p>Accuracy</p>	<p>By recalculation or the application of analytical procedures, test, to an extent based on materiality and inherent risk, the calculation of realized and unrealized gains and losses. Ensure realized and unrealized gains and losses have been recorded in compliance with GAAP.</p>
<p>Recalculate discount accretion or premium</p>	<p>Accuracy</p>	<p>Also refer Accounting Standard (AS) 30, Financial Instruments: Recognition and Measurement and Accounting</p>

**Appendix B: Illustrative Guidance for Audit of Complex FIs**

<p>amortization (AS 30 )</p>		<p>Standard (AS) 31, Financial Instruments: Presentation issued by the Institute of Chartered Accountants of India.</p> <p>Engagement teams should involve specialists/ experts from the planning through completion stages and also consult the national technical team wherever necessary.</p>
<p>Test ending accrued interest receivable/ payable balances (AS 30)</p>	<p>Accuracy</p>	<p>By recalculation or the application of analytical procedures, test, to an extent based on materiality and inherent risk, the calculation of accrued interest receivable/payable balances at the end of period. Consider comparing subsequent remittances credited to interest receivable account that supports the balance, as necessary.</p>
<p>Confirm derivatives</p>	<p>Accuracy, Existence/ Occurrence</p>	<p>Confirm, to an extent based on materiality and inherent risk, the nature of the contract (i.e. commodity, foreign currency, or other financial instrument), amount, rate, market value, premium or discount and significant terms of derivatives, including, where applicable, accrued</p>

**Guide to Audit of Complex Financial Instruments**

		<p>interest payable/receivable for the period, by direct correspondence with the counterparty.</p> <p>a) When performing confirmation procedures, we should maintain control over the process of</p> <ul style="list-style-type: none"><li>i) selecting those to whom a request will be sent</li><li>ii) the preparation and sending of confirmation requests, and</li><li>iii) the responses to those requests.</li></ul> <p>b) Second requests and, where warranted, third requests should be mailed when responses to positive confirmation requests have not been received within a reasonable time.</p> <p>c) When management requests us not to confirm balances, consider whether there are valid grounds for such a request. Before accepting a refusal as justified,</p>
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**Appendix B: Illustrative Guidance for Audit of Complex FIs**

		<p>examine any available evidence to support management's explanations. In such cases, alternative procedures should be applied to the accounts receivable not subjected to confirmation.</p> <p>If we do not accept the validity of management's request and are prevented from carrying out the confirmations, there has been a limitation on the scope of our work and we should consider the possible impact on our audit report.</p> <p>d) For confirmations returned</p> <ul style="list-style-type: none"> <li>i) review for evidence of compliance with terms. Investigate reported discrepancies by inquiring of the client and examining supporting documentation.</li> <li>ii) summarise coverage</li> <li>iii) retain the self addressed envelope with the receipt stamp along with the confirmation</li> </ul>
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**Guide to Audit of Complex Financial Instruments**

		<p>e) Perform alternative audit procedures where no response is received to a positive external confirmation request. The alternative audit procedures should be such as to provide audit evidence about the assertions that the confirmation request was intended to provide.</p> <p>f) Conclude as to whether the results of the external confirmation process, together with the results from any other audit procedures performed, provide sufficient appropriate audit evidence regarding the assertion being audited.</p> <p>g) If we form a conclusion that the confirmation process and alternative audit procedures have not provided sufficient appropriate audit evidence regarding an assertion, we should perform additional audit procedures to obtain sufficient appropriate audit evidence and link our audit work on</p>
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**Appendix B: Illustrative Guidance for Audit of Complex FIs**

		confirmations to that additional audit evidence.
Test fair value of derivatives (AS 30, 31 )	Valuation	<p>a) Test, to an extent based on materiality and inherent risk, the market value of derivatives by comparing the market value to other sources. Other sources include:</p> <ul style="list-style-type: none"> <li>i) market quotations listed on national exchanges or over-the-counter markets from sources such as financial publications or the exchanges;</li> <li>ii) for certain other investments, market quotations from broker-dealers who are market makers in those investments; and</li> <li>iii) if market quotations are not available, estimates of fair value from third-party sources based on proprietary models or from the entity based on internally developed or acquired models.</li> </ul>

**Guide to Audit of Complex Financial Instruments**

		<p>Consider obtaining market value estimates from more than one pricing source.</p> <p>b) Ensure the derivatives have been marked to market in compliance with GAAP, where applicable.</p> <p>c) Consider the need for use of specialists to determine the market value of certain investments.</p>
Evaluate credit-worthiness of counterparties (AS 30 )	Valuation	Evaluate the creditworthiness of counter parties by making special inquiries, reviewing correspondence, and obtaining confirmations, as necessary.
Identify collateral pledged (AS 30)	Valuation, Presentation and Disclosure	Identify assets pledged as collateral by reviewing contract agreements, confirmation replies, and minutes of directors' meetings; and by inquiry of management.
Verify correctness of information for disclosure items (AS 11, 30, 31)	Presentation and Disclosure	Determine whether appropriate information has been obtained for required disclosure for derivatives and off-balance sheet risk in the financial statements. Verify disclosure includes market and credit risk.

**Appendix B: Illustrative Guidance for Audit of Complex FIs**

		Verify the accuracy of the information by comparing to the information we have audited or audit the information if not previously audited (tailor audit program to add the additional procedures performed).
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