IAS 32, IAS 39, IFRS 4 and IFRS 7

(Part 4)

October 2008

Nelson Lam 林智遠
MBA MSc BBA ACA ACIS CFA CPA(Aust.)
CPA(US) FCCA FCPA(Practising) MSCA

© 2006-08 Nelson

Main Coverage

IAS 32

- Presentation
  - Liabilities and Equity
  - Compound Financial Instruments
  - Offsetting

IFRS 7

- Disclosure requirements

IFRS 4

- Limited improvements
- Disclosure requirements

IAS 39

- Classification of financial instruments
- Recognition and derecognition of financial instruments
- Measurement of financial instruments
- Derivatives and embedded derivatives
- Hedging and hedge accounting

© 2006-08 Nelson

Today's Agenda

Presentation (IAS 32)	• Presentation of financial instruments, incl. to separate financial liabilities from equity
Disclosure (IFRS 7)	• Disclosure of the significance and nature of risks arising from financial instruments

© 2006-08 Nelson

Presentation and Disclosure

- The requirements for presenting information about financial instruments are set out in IAS 32 *Financial Instruments: Presentation*
  - which aims at establishing principles for presenting financial instruments as liabilities or equity and for offsetting financial assets and financial liabilities.
- The requirements for disclosing information about financial instruments are set out in IFRS 7 *Financial Instruments: Disclosures*
  - which aims at enabling the users to evaluate
    1. the significant of financial instruments for an entity's financial position and performance and
    2. the nature and extent of risks arising from financial instruments to which an entity is exposed. IFRS 7 also has a similar scope of application as that of IAS 32.

© 2006-08 Nelson

Today’s Agenda

Presentation (IAS 32)

- Presentation of financial instruments, incl. to separate financial liabilities from equity

IAS 32 – Presentation

Presentation from the perspective of the issuer on

- **Liability and equity**
- **Compound financial instruments**
- **Treasury shares**
- **Interests, dividends, losses and gains**
- **Offsetting**

- The issuer of a financial instrument shall classify the instrument, or its component parts, on initial recognition as
  - a financial liability,
  - a financial asset or
  - an equity instrument

  in accordance with
  - the substance of the contractual arrangement and
  - the definitions of a financial liability, a financial asset and an equity instrument. *(assess the substance)*

IAS 32 – Presentation

Case

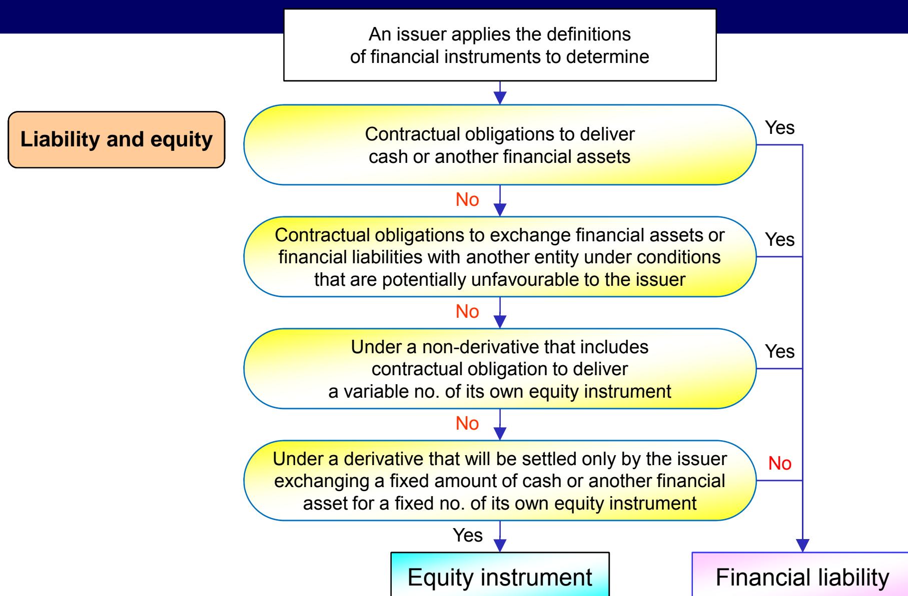
Annual report of 2005 sets out that it has probably had the following shares:

- Preference shares carry a mandatory coupon
- Preference shares are redeemable on a specific date or at the option of the shareholder
- Preference shares are redeemable at the option of the shareholder

How do you classify and present the above items?

IAS 32 – Presentation

Liability and equity



IAS 32 – Presentation

Presentation from the perspective of the issuer on

Liability and equity

Contractual Obligation to Deliver Cash/Financial Asset

- In differentiating a financial liability from an equity instrument, a critical feature is the existence of a contractual obligation of an issuer either
  1. to deliver cash or another financial asset to the holder or
  2. to exchange financial assets or financial liabilities with the holder under conditions that are potentially unfavourable to the issuer. For equity instrument, an issuer has no such contractual obligation.
- If an entity does not have an unconditional right to avoid delivering cash or another financial asset to settle a contractual obligation,
  - the obligation meets the definition of a financial liability.

© 2006-08 Nelson

IAS 32 – Presentation

Example

Presentation from the perspective of the issuer on

Liability and equity

- Are the following financial liabilities or equity instruments?

- A contract to deliver as many of the entity's own equity instruments as are equal in value to $10,000.
  - Financial liability
- A contract to deliver as many of the entity's own equity instruments as are equal in value to the value of 100 ounces of gold.
  - Financial liability

- Such a contract is a financial liability of the entity even though the entity must or can settle it by delivering its own equity instruments.
- It is not an equity instrument because the entity uses a variable number of its own equity instruments as a means to settle the contract.

© 2006-08 Nelson

IAS 32 – Presentation

Presentation from the perspective of the issuer on

Liability and equity

Settlement in an Entity's Own Equity Instruments

- A contract is not an equity instrument solely because it may result in the receipt or delivery of the entity's own equity instruments.
  - An entity may have a contractual right or obligation to receive (or deliver) a number of its own shares (or other equity instruments) that varies so that the fair value of the entity's own equity instruments to be received (or delivered) equals the amount of the contractual right (or obligation).
  - A contract that will be settled by the entity delivering or receiving a fixed number of its own equity instruments in exchange for a variable amount of cash or another financial asset is also a financial asset or financial liability.

© 2006-08 Nelson

IAS 32 – Presentation

Presentation from the perspective of the issuer on

Liability and equity

Contingent Settlement Provisions

- Require the entity to deliver cash or another financial asset in the event of the occurrence or non-occurrence of uncertain future events (or on the outcome of uncertain circumstances) that are beyond the control of both the issuer and the holder of the instrument.
- Even there is contingent settlement provision in an instrument, the issuer still does not have the unconditional right to avoid delivering cash or another financial asset.
- Therefore, it is a financial liability of the issuer unless:
  1. the part of the contingent settlement provision that could require settlement in cash or another financial asset is not genuine; or
  2. the issuer can be required to settle the obligation in cash or another financial asset only in the event of liquidation of the issuer.

© 2006-08 Nelson

IAS 32 – Presentation

Presentation from the perspective of the issuer on

Liability and equity

Settlement Options

- When a derivative financial instrument gives one party a choice over how it is settled (e.g. the issuer or the holder can choose settlement net in cash or by exchanging shares for cash),
  - it is a financial asset or a financial liability
    - unless all of the settlement alternatives would result in it being an equity instrument.

© 2006-08 Nelson

IAS 32 – Presentation

Presentation from the perspective of the issuer on

Compound financial instruments

Compound financial instrument is an instrument containing both a liability and an equity component

- IAS 32
  - applies only to issuers of non-derivative compound financial instruments and
  - does not deal with compound financial instruments from the perspective of holders.
- IAS 39
  - deals with the separation of embedded derivatives from the perspective of holders of compound financial instruments that contain debt and equity features.

© 2006-08 Nelson

IAS 32 – Presentation

Presentation from the perspective of the issuer on

Compound financial instruments

Evaluation and Initial Classification

- The issuer of a non-derivative financial instrument shall evaluate the terms of the financial instruments
  - to determine whether it contains both a liability and an equity component.
- Such components shall be classified separately as financial liabilities, financial assets or equity instrument in accordance with
  - the substance of the contractual arrangement and
  - the definitions of a financial liability, financial asset and an equity instrument.
- An entity recognises separately the components of a financial instrument that
  a) creates a financial liability of the entity, and
  b) grants an option to the holder of the instrument to convert it into an equity instrument of the entity.

© 2006-08 Nelson

IAS 32 – Presentation

Example

Presentation from the perspective of the issuer on

Compound financial instruments

- For example, a convertible bond allows the bondholder to convert it into a fixed no. of ordinary shares of the entity
  - is a compound financial instrument.
- From the perspective of the entity, such an instrument comprises two components:
  1) a financial liability – a contractual arrangement to deliver cash or another financial asset), and
  2) an equity instrument – a call option granting the holder the right, for a specified period of time, to convert it into a fixed no. of ordinary shares of the entity.
- The economic effect of issuing such an instrument is substantially the same as issuing a debt instrument with detachable share purchase warrants.
- In all cases, the entity presents the liability and equity components separately on its balance sheet.

© 2006-08 Nelson

IAS 32 – Presentation

Example

Presentation from the perspective of the issuer on

Compound financial instruments

For example, an entity issues a 5% 5-year convertible bond
- It can be analysed as

5% Convertible Bond

= 5% 5-year Bond + an Option (to convert shares)

5% 5-year Bond → Liability

an Option (to convert shares) → **Equity**

- To find out the equity component:

5% Convertible Bond – 5% 5-Yr Bond = Option

5% Convertible Bond ← Cash received

5% 5-Yr Bond ← Use DCF method (liability component)

Option ← **Residual**

- **To classify as Equity**

© 2006-08 Nelson

IAS 32 – Presentation

Example

Presentation from the perspective of the issuer on

Compound financial instruments

- An entity issues 2,000 convertible bonds at the start of year 1.
- The bonds have a 3-year term, and are issued at par with a face value of $1,000 per bond, giving total proceeds of $2,000,000.
- Interest is payable annually in arrears at a nominal annual interest rate of 6%.
- Each bond is convertible at any time up to maturity into 250 ordinary shares.
- When the bonds are issued, the prevailing market interest rate for similar debt without conversion options is 9%.
- Discuss and calculate in accordance with IAS 32.

© 2006-08 Nelson

IAS 32 – Presentation

Example

Presentation from the perspective of the issuer on

Compound financial instruments

- The liability component is measured first, and the difference between the proceeds of the bond issue and the fair value of the liability is assigned to the equity component.
- The present value of the liability component is calculated using a discount rate of 9%, the market interest rate for similar bonds having no conversion rights.

Present value of the principal $2,000,000 payable at the end of three years	$ 1,544,367
Present value of the interest $120,000 payable annually in arrears for three years	303,755
Total liability component	$ 1,848,122
Equity component (by deduction)	151,878
Proceeds of the bond issue	$ 2,000,000

© 2006-08 Nelson

IAS 32 – Presentation

Presentation from the perspective of the issuer on

Treasury shares

- Treasury shares (an entity's own equity instruments reacquired by itself or its subsidiaries)
  - Those instruments shall be deducted from equity
  - Cannot be classified as an asset
  - No gain or loss shall be recognised in profit or loss on the purchase, sale, issue or cancellation of an entity's own equity instruments.
  - Such treasury shares may be acquired and held by the entity or by other members of the consolidated group.
  - Consideration paid or received shall be recognised directly in equity.
- The amount of treasury shares held is disclosed separately either on the face of the balance sheet or in the notes.

© 2006-08 Nelson

IAS 32 – Presentation

Presentation from the perspective of the issuer on

Interests, dividends, losses and gains

- Interest, dividends, losses and gains relating to a financial instrument or a component that is a financial liability
  - shall be recognised as income or expense in profit or loss.
- Distributions to holders of an equity instrument
  - shall be debited by the entity directly to equity, net of any related income tax benefit.
- Transaction costs of an equity transaction, other than costs of issuing an equity instrument that are directly attributable to the acquisition of a business,
  - shall be accounted for as a deduction from equity, net of any related income tax benefit.

© 2006-08 Nelson

IAS 32 – Presentation

Case

Annual report of 2005 sets out that:

- Preference shares, which
  - carry a mandatory coupon,
  - or are redeemable on a specific date
  - or at the option of the shareholder,

  are classified as financial liabilities and are presented in other borrowed funds.
- The dividends on these preference shares
  - are recognised in the income statement as interest expense on an amortised cost basis using the effective interest method.

© 2006-08 Nelson

IAS 32 – Presentation

Presentation from the perspective of the issuer on

Offsetting

- Financial asset and a financial liability are offset and the net amount presented in the balance sheet when, and only when, an entity:
  1. currently has a legally enforceable right to set off the recognised amounts; and
  2. intends either
     - to settle on a net basis, or
     - to realise the asset and settle the liability simultaneously.
- In accounting for a transfer of a financial asset that does not qualify for derecognition,
  – the entity is not allowed to offset the transferred asset and the associated liability

© 2006-08 Nelson

Today's Agenda

Disclosure (IFRS 7)

- Disclosure of the significance and nature of risks arising from financial instruments

© 2006-08 Nelson

IFRS 7 – Introduction

- The objective of IFRS 7 is to require entities to provide disclosures in their financial statements that enable users to evaluate:
  1) the significance of financial instruments for the entity's
     - financial position and
     - financial performance; and
  2) the nature and extent of risks arising from financial instruments to which the entity is exposed
     - during the period and
     - at the reporting date, and

     how the entity manages those risks.

Significance
- Balance sheet
- Income statement
- Other disclosures

Nature and Extent
- Qualitative disclosures
- Quantitative disclosures

© 2006-08 Nelson

IFRS 7 – Introduction

- When IFRS 7 requires disclosures by class of financial instrument, an entity shall group financial instruments into classes
  - that are appropriate to the nature of the information disclosed and
  - that take into account the characteristics of those financial instruments.
- An entity shall provide sufficient information
  - to permit reconciliation to the line items presented in the balance sheet.

Significance

Nature and Extent

The classes described above are determined by the entity and are, thus, distinct from the categories of financial instruments specified in IAS 39 (which determine how financial instruments are measured and where changes in fair value are recognised).

© 2006-08 Nelson

IFRS 7 – Introduction

- An entity decides, in the light of its circumstances,
  - how much detail it provides to satisfy the requirements of IFRS 7,
  - how much emphasis it places on different aspects of the requirements and
  - how it aggregates information to display the overall picture without combining information with different characteristics.
- It is necessary to strike a balance between
  - overburdening financial statements with excessive detail that may not assist users of financial statements and
  - obscuring important information as a result of too much aggregation.

Significance

Nature and Extent

© 2006-08 Nelson

1. Significance of Financial Instruments

- An entity shall disclose information that enables users of its financial statements to evaluate
  - the significance of financial instruments for its financial position and performance.

Significance

Balance Sheet

Income Statement and Equity

Other Disclosures

© 2006-08 Nelson

1. Significance of Financial Instruments

Balance Sheet

The carrying amounts of each of the following categories, as defined in IAS 39, shall be disclosed either on the face of the balance sheet or in the notes:

a) financial assets at fair value through P/L, showing separately
   i) those designated as such upon initial recognition and
   ii) those classified as held for trading in accordance with IAS 39;
b) held-to-maturity investments;
c) loans and receivables;
d) available-for-sale financial assets;
e) financial liabilities at fair value through P/L, showing separately
   i) those designated as such upon initial recognition and
   ii) those classified as held for trading in accordance with IAS 39; and
f) financial liabilities measured at amortized cost.

© 2006-08 Nelson

1. Significance of Financial Instruments

Activity

Entity A with HK$ as its functional currency has the following financial instruments at y.e.

Investments in CD and bonds	
5% HK$ Certificate of deposits	$ 300,000
Equity-linked deposits in UK	520,000
LIBOR GBP bonds listed in UK	200,000
Investments in equity securities	
Strategic investments listed in HK	250,000
Trading securities listed in US	123,000
Unlisted in UK	25,000
Trade and other receivables	
Due from local customers in HK$	2,564,560
Due from overseas customers in US$	435,612
Due from overseas customers in Euro	784,231
Bank deposits	
Fixed deposits at UK banks	200,000
Fixed deposits at HK$	1,240,500
Cash at bank	
Saving deposits in HK$	231,230
Trade and other payables	(4,045,670)
Foreign forward contracts	(250,000)
Bank loans	(1,489,000)

© 2006-08 Nelson *Sourced from Intermediate Financial Reporting (2008) by Nelson Lam and Peter Lau*

1. Significance of Financial Instruments

Case

	Financial assets at fair value through profit or loss – held for trading RMB'000	Loans and receivables RMB'000	Available-for-sale financial assets RMB'000	Total RMB'000
Financial assets included in other assets (note 18)	–	80,000	–	80,000
Interests in associates (notes 22)	–	10,000	–	10,000
Interests in jointly-controlled entities (note 23)	–	19,128	–	19,128
Available-for-sale investments	–	–	462,178	462,178
Financial assets included in prepayments, deposits and other receivables	–	321,664	–	321,664
Trade receivables	–	293,870	–	293,870
Bills receivables	–	52,346	–	52,346
Equity investments at fair value through profit or loss	102,439	–	–	102,439
Derivative financial instruments	4,440	–	–	4,440
Pledged deposits	–	52,088	–	52,088
Cash and cash equivalents	–	2,184,510	–	2,184,510
	106,879	3,013,606	462,178	3,582,663

1. Significance of Financial Instruments

Income Statement and Equity

An entity shall disclose the following items either on the face of the financial statements or in the notes:

a) net gains or net losses on:
   i) financial assets or financial liabilities at fair value through P/L, showing separately
      - those on financial assets or financial liabilities designated as such upon initial recognition, and
      - those on financial assets or financial liabilities that are classified as held for trading in accordance with IAS 39;
   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;
   iii) held-to-maturity investments;
   iv) loans and receivables; and
   v) financial liabilities measured at amortized cost

1. Significance of Financial Instruments

Income Statement and Equity

An entity shall disclose the following items either on the face of the financial statements or in the notes:

b) total interest income and total interest expense for financial assets or financial liabilities that are not at fair value through P/L;
c) fee income and expense (other than amounts included in determining the effective interest rate) arising from:
   i) financial assets or financial liabilities that are not at fair value through profit or loss; and
   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;
d) interest income on impaired financial assets accrued in accordance with IAS 39.AG93, and
e) the amount of any impairment loss for each class of financial asset.

© 2006-08 Nelson

1. Significance of Financial Instruments

Other Disclosures

- Disclosure requirements on accounting policies, hedge accounting and fair value are similar to IAS 32.
- IFRS 7 additionally requires:
  a) in fair value hedges, gains or losses:
     i) on the hedging instrument; and
     ii) on the hedged item attributable to the hedged risk.
  b) the ineffectiveness recognised in profit or loss that arises from cash flow hedges; and
  c) the ineffectiveness recognised in profit or loss that arises from hedges of net investments in foreign operations.

© 2006-08 Nelson

2. Nature and Extent of Risks

Significance

↓

Nature and Extent

2. Nature and Extent of Risks

- An entity shall disclose information that enables users of its financial statements to evaluate
  - the nature and extent of risks arising from financial instruments to which the entity is exposed at the reporting date.
- The disclosures required focus on the risks that arise from financial instruments and how they have been managed.
- These risks typically include, but are not limited to
  - Market Risk
  - Credit Risk
  - Liquidity Risk

Nature and Extent

- Qualitative Disclosures
- Quantitative Disclosures

2. Nature and Extent of Risks

- The disclosures required 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.
- It implies that the disclosures requirements are required
  - not only on credit risk, liquidity risk and market risk
  - but also on other risks that may be identified by the entity for its financial instruments.

Qualitative Disclosures

Quantitative Disclosures

© 2006-08 Nelson

2. Nature and Extent of Risks

- The disclosures in respect of the nature and extent of risks arising from financial instruments can be either
  1. given in the financial statements or
  2. incorporated by cross-reference from the financial statements to some other statement, that is available to users of the financial statements
     - on the same terms as the financial statements and
     - at the same time.

     Without the information incorporated by cross-reference, the financial statements are incomplete. (IFRS 7.BC46)

e.g. risk report, or management commentary

Qualitative Disclosures

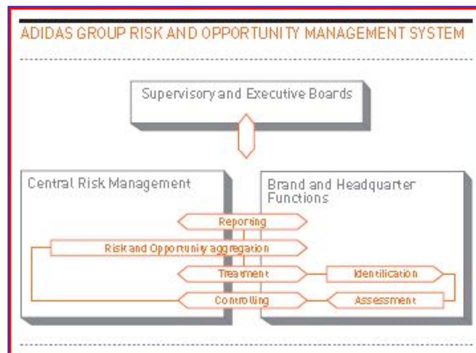
Quantitative Disclosures

© 2006-08 Nelson

2. Nature and Extent of Risks

Example

- Adidas's 13-page
  - "Risk and Opportunity Report"
- HSBC's 97-page
  - "The Management of Risk" incorporated in the Report of Directors



e.g. risk report, or management commentary

Qualitative Disclosures

Quantitative Disclosures

2. Nature and Extent of Risks

Qualitative Disclosures

- For each type of risk arising from financial instruments, an entity shall disclose:
  a) The exposures to risk and how they arise;
  b) Its objectives, policies and processes for managing the risk and the methods used to measure the risk
  c) Any changes in (a) or (b) from the previous period.

2. Nature and Extent of Risks

Example

- The type of qualitative information an entity might disclose includes, but is not limited to, a narrative description of:
  1. The entity's exposures to risk and how they arose.

     Information about risk exposures might describe exposures both gross and net of risk transfer and other risk-mitigating transactions.
  2. The entity's policies and processes for accepting, measuring, monitoring and controlling risk, which might include:
     i. The structure and organisation of the entity's risk management functions, including a discussion of independence and accountability;
     ii. The scope and nature of the entity's risk reporting or measurement systems;
     iii. The entity's policies for hedging or mitigating risk, including its policies and procedures for taking collateral; and
     iv. The entity's processes for monitoring the continuing effectiveness of such hedges or mitigating devices.
  3. The entity's policies and procedures for avoiding excessive concentrations of risk.

© 2006-08 Nelson

2. Nature and Extent of Risks

Case

Jardine Matheson Limited (2007):

- The Group's credit risk is primarily attributable to deposits with banks, credit exposures to customers and derivative financial instruments with a positive fair value. The Group has credit policies in place and the exposures to these credit risks are monitored on an ongoing basis.
- The Group manages its deposits with banks and financial institutions and transactions involving derivative financial instruments by monitoring credit ratings and limiting the aggregate risk to any individual counterparty. The utilization of credit limits is regularly monitored ……

Exposures to credit risk

How to manage credit risk

© 2006-08 Nelson

2. Nature and Extent of Risks

Quantitative Disclosures

- For each type of risk arising from financial instruments, an entity shall disclose:
  a. Summary quantitative data about its exposure to that risk at the reporting date.
     - The level of detail of such disclosure is based on the information provided internally to key management personnel of the entity (as defined in IAS 24 *Related Party Disclosures*), for example the entity's board of directors or chief executive officer.
  b. the disclosures required in quantitative disclosures, to the extent not provided in (a), unless the risk is not material (see IAS 1.29-31).
  c. concentrations of risk if not apparent from (a) and (b)

© 2006-08 Nelson

2. Nature and Extent of Risks

Quantitative Disclosures

- When an entity (or its key management personnel) uses several methods to manage a risk exposure,
  – the entity is required to disclose information using the method or methods that provide the most relevant and reliable information. (Refers to IAS 8 for relevant and reliable information)

© 2006-08 Nelson

2. Nature and Extent of Risks

Case

Jardine Matheson Limited (2007):

- The Group is exposed to equity securities price risk because of listed and unlisted equity investments which are available for sale and held by the Group at fair value.
- Gains and losses arising from changes in the fair value of available-for-sale investments are dealt with in reserves.
- The performance of the Group's listed and unlisted available-for-sale investments are monitored regularly, together with an assessment of their relevance to the Group's long term strategic plans.
- Details of the Group's available-for-sale investments are contained in note 16.

Exposures to price risk

How to manage price risk

Summary quantitative data

© 2006-08 Nelson

2. Nature and Extent of Risks

Quantitative Disclosures

- If the quantitative data disclosed as at the reporting date are unrepresentative of an entity's exposure to risk during the period,
  - an entity shall provide further information that is representative.

© 2006-08 Nelson

2. Nature and Extent of Risks

Example

- Can an entity avoid disclosure of nature and extent of risk by
  - Unwinding a position of large exposure in a particular currency, or
  - Disposal of its large portfolio in equity instruments ?

> - If the quantitative data disclosed as at the reporting date are unrepresentative of an entity's exposure to risk during the period, an entity is still required to provide further information that is representative.
> - When an entity typically has a large exposure to a particular currency or an equity investments, but at year-end unwinds the position,
>   - the entity might disclose a graph that shows the exposure at various times during the period, or disclose the highest, lowest and average exposures during the period. (IFRS 7.IG20)

2. Nature and Extent – Credit Risk

Quantitative Disclosures

Credit risk

- An entity shall disclose by class of financial instrument:
  a) the amount that best represents its maximum exposure to credit risk at the reporting date without taking account of any collateral held or other credit enhancements (e.g. netting agreements that do not qualify for offset in accordance with IAS 32);
  b) in respect of the amount disclosed in (a), a description of collateral held as security and other credit enhancements;
  c) information about the credit quality of financial assets that are neither past due nor impaired; and
  d) the carrying amount of financial assets that would otherwise be past due or impaired whose terms have been renegotiated.

2. Nature and Extent – Past Due

Quantitative Disclosures

Financial assets that are either past due or impaired

- An entity shall disclose by class of financial asset:
  a) an analysis of the age of financial assets that are past due as at the reporting date but not impaired;
  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
  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.

© 2006-08 Nelson

2. Nature and Extent – Past Due

Example

- Based on IFRS 7, an entity uses its judgement to determine the number of time bands, for example:
  1. not more than three months;
  2. more than three month and not more than six months;
  3. more than six months and not more than one year; and
  4. more than one year.

© 2006-08 Nelson

2. Nature and Extent – Past Due

Case

Early adopted HKFRS 7 in 2005 and its annual report 2006 states that (extract only):

(iv) Financial assets that were past due but not impaired

As at 31 December, the age analysis of the trade receivables of the Group that were past due but not determined to be impaired according to the period past due was as follows:

	Group	
	2006 $'000	2005 $'000
Up to 6 months	186,359	141,277
Over 6 months to 1 year	–	–
Over 1 year to 3 years *	–	8,521
Over 3 years *	8,651	142
Total	195,010	149,940

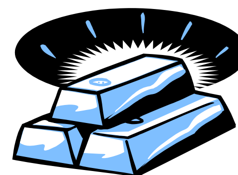
* No provision for impairment losses has been made against trade receivables amounting to $8,510,000 (2005: $8,521,000) as the balances can be recovered from the Clearing House Funds.

2. Nature and Extent – Collateral

Quantitative Disclosures

Collateral and other credit enhancements obtained

- 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 (eg guarantees), and such assets meet the recognition criteria in other Standards, an entity shall disclose:
  a) the nature and carrying amount of the assets obtained; and
  b) when the assets are not readily convertible into cash, its policies for disposing of such assets or for using them in its operations.



2. Nature and Extent – Liquidity Risk

Quantitative Disclosures

Liquidity risk

- Before IFRS 7, contractual maturity analysis together with effective interest rate analysis was required by IAS 32 for interest rate risk disclosure.
- IFRS 7 now requires, for liquidity risk disclosure, an entity to disclose:
  - a) a maturity analysis for financial liabilities that shows the remaining contractual maturities; and
  - b) a description of how it manages the liquidity risk inherent in (a).

© 2006-08 Nelson

2. Nature and Extent – Liquidity Risk

Example

Contractual Maturity Analysis

- In preparing the contractual maturity analysis for financial liabilities required by IFRS 7.39(a), an entity uses its judgement to determine an appropriate number of time bands.
- For example, an entity might determine that the following time bands are appropriate:
  - a) not later than one month;
  - b) later than one month and not later than three months;
  - c) later than three months and not later than one year; and
  - d) later than one year and not later than five years.

© 2006-08 Nelson

2. Nature and Extent – Liquidity Risk

Case

Early adopted HKFRS 7 in 2005 and its annual report 2006 states that (extract only):

– The financial liabilities of the Group and HKEx as at 31 Dec. 2006 are analysed into relevant maturity buckets based on their contractual maturity dates in the table below:

	Group					
	2006					
	Up to 1 month $'000	>1 month to 3 months $'000	>3 months to 1 year $'000	>1 year to 5 years $'000	Not determinable $'000	Total $'000
Current liabilities						
Margin deposits from Clearing Participants on derivatives contracts	21,666,474	-	-	-	-	21,666,474
Accounts payable, accruals and other liabilities	11,042,527	45,937	234	363	18,139	11,107,200
Participants' admission fees received	700	50	600	-	350	1,700
	32,709,701	45,987	834	363	18,489	32,775,374

2. Nature and Extent – Market Risk

Quantitative Disclosures

Market risk

- IFRS 7 requires the disclosures of sensitivity analysis.
- The disclosures of sensitivity analysis can be achieved by 2 approaches:
  1. **Simple sensitivity analysis:**
     - sensitivity analysis for each type of market risk
  2. **Interdependency sensitivity analysis:**
     - Sensitivity analysis that reflects interdependencies between risks variables

2. Nature and Extent – Market Risk

Quantitative Disclosures

Market risk

- is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices
- comprises three types of risk:
  - currency risk,
  - interest rate risk and
  - other price risk.

© 2006-08 Nelson

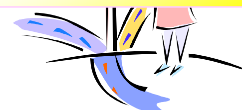
2. Nature and Extent – Sensitivity

Quantitative Disclosures

Market risk – **Simple sensitivity analysis**

- An entity shall disclose:
  a) 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 relevant risk variable that were reasonably possible at that date;
  b) the methods and assumptions used in preparing the sensitivity analysis; and
  c) changes from the previous period in the methods and assumptions used, and the reasons for such changes.

Assuming that a **reasonably possible change** in the relevant risk variable had occurred at the balance sheet date and had been applied to the risk exposures in existence at that date.



© 2006-08 Nelson

2. Nature and Extent – Sensitivity

In order to disclose the simple sensitivity analysis, an entity should:

1. Decide how much detail it provides, how much emphasis it places and how it aggregates information to display
2. Identify each type of market risk to which the entity is exposed and the relevant risk variable at the reporting date
3. Judge the reasonably possible changes in the relevant risk variables at the reporting date
4. Calculate and show how profit or loss and equity would be affected at the reporting date

2. Nature and Extent – Sensitivity

In order to disclose the simple sensitivity analysis, an entity should:

1. Decide how much detail it provides, how much emphasis it places and how it aggregates information to display

2. Nature and Extent – Sensitivity

Quantitative Disclosures

Market risk – **Simple sensitivity analysis**

- For each type of market risk, an entity decides:
  - how it aggregates information to display the overall picture without combining information with different characteristics about exposures to risks from significantly different economic environments.
- For example, an entity that trades financial instruments might disclose
  - Sensitivity analysis for each type of market risk separately for
    - financial instruments held for trading and
    - those not held for trading.
- If an entity has exposure to only one type of market risk in only one economic environment,
  - it would not show disaggregated information.

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

In order to disclose the simple sensitivity analysis, an entity should:

1. Decide how much detail it provides, how much emphasis it places and how it aggregates information to display

2. Identify each type of market risk to which the entity is exposed and the relevant risk variable at the reporting date

© 2006-08 Nelson *Sourced from Intermediate Financial Reporting (2008) by Nelson Lam and Peter Lau*

2. Nature and Extent – Sensitivity

Market Risk

Interest Rate Risk

- **Interest rate risk** arises
  - on interest-bearing financial instruments recognised in the balance sheet (e.g. loans and receivables and debt instruments issued) and
  - on some financial instruments not recognised in the balance sheet (e.g. some loan commitments).

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Market Risk

Currency Risk

- **Currency risk (or foreign exchange risk)** arises on financial instruments that are denominated in a foreign currency, i.e. in a currency other than the functional currency in which they are measured.
  - For the purpose of IFRS 7, currency risk does not arise from financial instruments that are non-monetary items or from financial instruments denominated in the functional currency.
  - A sensitivity analysis is disclosed for each currency to which an entity has significant exposure.

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Market Risk

Other Price Risk

- **Other price risk** arises on financial instruments because of changes in, for example:
  - commodity prices or
  - equity prices.
- To comply with IFRS 7, an entity might disclose the effect of a decrease in a specified variable, including:
  - stock market index,
  - commodity price, or
  - other risk variable.
- For example,
  - if an entity gives residual value guarantees that are financial instruments, the entity discloses an increase or decrease in the value of the assets to which the guarantee applies.

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Example

Market Risk

Other Price Risk

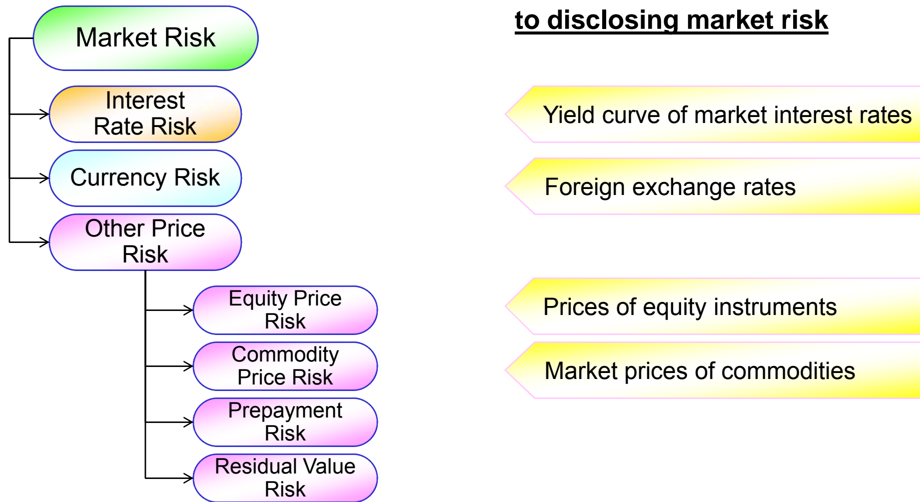
- Examples of financial instruments that give rise to equity price risk are
  a) a holding of equities in another entity and
  b) an investment in a trust that in turn holds investments in equity instruments.
- Other examples include
  - forward contracts and options to buy or sell specified quantities of an equity instrument and swaps that are indexed to equity prices.
    - The fair values of such financial instruments are affected by changes in the market price of the underlying equity instruments.

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Example

Risk variables that are relevant <u>to disclosing market risk</u>



© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Example

Example of financial assets <u>and liabilities</u>	**Risk variables that are relevant <u>to disclosing market risk</u>**
• Investment in bonds, bank deposits, interest-bearing borrowings, bank loans	Yield curve of market interest rates
• Trade receivables and payables in foreign currency, foreign loans	Foreign exchange rates
• Investments in equity securities and equity funds, equity-linked investments	Prices of equity instruments
• Investments in commodity funds and commodity-linked investments	Market prices of commodities

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Activity

Entity A with HK$ as its functional currency has the following financial instruments at y.e.

Investments in CD and bonds	
5% HK$ Certificate of deposits	$ 300,000
Equity-linked deposits in UK	520,000
LIBOR GBP bonds listed in UK	200,000
Investments in equity securities	
Strategic investments listed in HK	250,000
Trading securities listed in US	123,000
Unlisted in UK	25,000
Trade and other receivables	
Due from local customers in HK$	2,564,560
Due from overseas customers in US$	435,612
Due from overseas customers in Euro	784,231
Bank deposits	
Fixed deposits at UK banks	200,000
Fixed deposits at HK$	1,240,500
Cash at bank	
Saving deposits in HK$	231,230
Trade and other payables	(4,045,670)
Foreign forward contracts	(250,000)
Bank loans	(1,489,000)

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

In order to disclose the simple sensitivity analysis, an entity should:

1. Decide how much detail it provides, how much emphasis it places and how it aggregates information to display
2. Identify each type of market risk to which the entity is exposed and the relevant risk variable at the reporting date
3. Judge the reasonably possible changes in the relevant risk variables at the reporting date

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Quantitative Disclosures

Market risk – Simple sensitivity analysis

- In determining what a reasonably possible change in the relevant risk variable is, an entity should consider:
  a. the economic environments in which it operates.
  b. the time frame over which it is making the assessment.

- A reasonably possible change should not include remote or "worst case" scenarios or "stress tests".
- Moreover, if the rate of change in the underlying risk variable is stable, the entity need not alter the chosen reasonably possible change in the risk variable.

- The sensitivity analysis shall show the effects of changes that are considered to be reasonably possible over the period until the entity will next present these disclosures, which is usually its next annual reporting period.

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Case

How can it be reasonably possible change?

Observed assessments by certain companies:

Entity name	Currency	Interest rate	Other price
BASF	10% (drop only)	1%	10%
BP plc	VaR	VaR	10%
CLP Holdings Ltd.	1%	0.5%	15% (2006: 5%)
DBS Group	10%	0.25%	10%
Deutsche Telecom	10%	1%	N/M
France Telecom	10%	1%	N/M
Jardine Matheson Ltd.	10%	1%	25% (AFS)
Recruit	7 – 12%	N/M	N/M
Zijin Mining	10%	1%	N/M

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

In order to disclose the simple sensitivity analysis, an entity should:

1. Decide how much detail it provides, how much emphasis it places and how it aggregates information to display
2. Identify each type of market risk to which the entity is exposed and the relevant risk variable at the reporting date
3. Judge the reasonably possible changes in the relevant risk variables at the reporting date
4. Calculate and show how profit or loss and equity would be affected at the reporting date

2. Nature and Extent – Sensitivity

- IFRS 7 requires the sensitivity analysis to show the effect on profit or loss and equity of reasonably possible changes in the relevant risk variable. For this purpose:
  1. Entities are not required to determine what the profit or loss for the period would have been if relevant risk variables had been different.
     - Instead, entities disclose the effect on profit or loss and equity at the balance sheet date assuming that a reasonably possible change in the relevant risk variable had occurred at the balance sheet date and had been applied to the risk exposures in existence at that date.
  2. Entities are not required to disclose the effect on profit or loss and equity for each change within a range of reasonably possible changes of the relevant risk variable.
     - Disclosure of the effects of the changes at the limits (i.e. the upper and lower limits) of the reasonably possible range would be sufficient.

2. Nature and Extent – Sensitivity

Example

Market Risk

- IFRS 7 requires separate disclosure on
  - the sensitivity of profit or loss
    (that arises, for example, from instruments classified as at fair value through profit or loss and impairments of available-for-sale financial assets) is disclosed separately from
  - the sensitivity of equity
    (that arises, for example, from instruments classified as available for sale).
- Financial instruments that an entity classifies as equity instruments are not remeasured.
  - Neither profit or loss nor equity will be affected by the equity price risk of those instruments.
  - Accordingly, no sensitivity analysis is required.

2. Nature and Extent – Sensitivity

Example

Example of financial assets and liabilities	**Risk variables that are relevant to disclosing market risk**
• Investment in bonds, bank deposits, interest-bearing borrowings, bank loans	Yield curve of market interest rates

- For interest rate risk, the sensitivity analysis might show separately the effect of a change in market interest rates on:
  a) interest income and expense;
  b) other line items of profit or loss (such as trading gains and losses); and
  c) when applicable, equity.
- An entity might disclose a sensitivity analysis for interest rate risk for each currency in which the entity has material exposures to interest rate risk.

2. Nature and Extent – Sensitivity

Example

Interest rate risk

- At 31 Dec. 20X2, if interest rates at that date had been 10 basis points lower with all other variables held constant,
  - post-tax profit for the year would have been $1.7 million (20X1: $2.4 million) higher, arising mainly as a result of lower interest expense on variable borrowings, and
  - other components of equity would have been $2.8 million (20X1: $3.2 million) higher, arising mainly as a result of an increase in the fair value of fixed rate financial assets classified as available for sale.
- If interest rates had been 10 basis points higher, with all other variables held constant,
  - post-tax profit would have been $1.5 million (20X1: $2.1 million) lower, arising mainly as a result of higher interest expense on variable borrowings, and
  - other components of equity would have been $3.0 million (20X1: $3.4 million) lower, arising mainly as a result of a decrease in the fair value of fixed rate financial assets classified as available for sale.

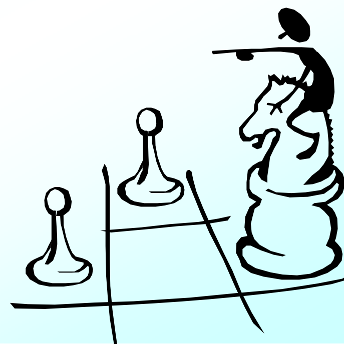
© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Example

Interest rate risk

- Profit is more sensitive to interest rate decreases than increases because of borrowings with capped interest rates.
- The sensitivity is lower in 20X2 than in 20X1 because of a reduction in outstanding borrowings that has occurred as the entity's debt has matured (see note X).



© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Quantitative Disclosures

Market risk – Interdependency Sensitivity Analysis

- An entity can alternatively prepare and disclose a sensitivity analysis, such as Value-at-Risk (VaR), that reflects interdependencies between risk variables (e.g. interest rates and exchange rates) so long as it uses such sensitivity analysis to manage financial risks.
- The entity shall also disclose:
  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
  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.

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Quantitative Disclosures

Market risk – Interdependency Sensitivity Analysis

- An entity might comply the VaR methodology by disclosing
  - the type of VaR model used (eg whether the model relies on Monte Carlo simulations),
  - an explanation about how the model works and
  - the main assumptions (eg the holding period and confidence level).
- Entities might also disclose
  - the historical observation period and weightings applied to observations within that period,
  - an explanation of how options are dealt with in the calculations, and
  - which volatilities and correlations (or, alternatively, Monte Carlo probability distribution simulations) are used.

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Case

Royal Dutch Shell plc for 2007

- Shell uses risk management systems for recording and valuing instruments.
- There is regular review of mandated trading limits by senior management, daily monitoring of market risk exposure using value-at-risk (VAR) techniques (see below), daily monitoring of trading positions against limits and marking-to-market of trading exposures with a department independent of traders reviewing the market values applied to trading exposures.
- Shell's exposure to substantial trading losses is therefore considered limited.
- Shell utilises VAR techniques based on variance/covariance or Monte Carlo simulation models and make a statistical assessment of the market risk arising from possible future changes in market values over a 24-hour period and within a 95% confidence level.
- The calculation of the range of potential changes in fair value takes into account positions, the history of price movements and the correlation of these price movements.
- Each of the models is regularly back tested against actual fair value movements to ensure model integrity is maintained.

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Case

Royal Dutch Shell plc for 2007

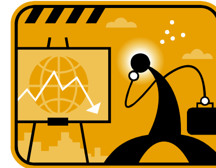
VALUE-AT-RISK				2007				2006
(pre-tax) $ million	High	Low	Average	Year end	High	Low	Average	Year end
Oil Products and Chemicals	23	5	13	19	21	6	13	11
Gas & Power	20	6	11	7	16	4	9	9

© 2006-08 Nelson

2. Nature and Extent – Sensitivity

Quantitative Disclosures

- Common approaches in estimating **Value at Risk (VaR)**
  - Variance-covariance approach
    - Same theoretical basis as portfolio theory and more straightforward
    - Weaknesses: not good at returns with non-linear or non-normal elements, say options
  - Historical simulation
    - Uses historical data to re-produce the distribution of return and no normality assumption
    - Weaknesses: depending on actual data observed
  - Monte Carlo simulation
    - Estimated from a simulated distribution, powerful and be able to handle any type of position
    - Weaknesses: difficult to implement and time-consuming



2. Nature and Extent – Sensitivity

Case

Reference to the time horizon and confidence level of some entities used in VaR analysis for 2007……

Entity name	Time horizon	Confidence	Method	Coverage
BASF	1 day	95%	VC	Commodity
BMW	3 months	99%	HS	Interest
BP plc	24 hours	95%	VC or HS	Market risk
CLP	4 weeks	95%	VC	Energy price
DBS Group	1 day	99%	HS	Trading market risk
HKEx	10 day	95%	HS	Market risk
HSBC	1 day	99%	HS	Market risk
Nokia	1 month	95%	VC or MC	Market risk
Shell	24 hours	95%	VC or MC	Price risk
Standard Chartered	1 day	97.5%	HS	Trading book

Variance-Covariance (VS), Historical simulation (HS) and Monte Carlo simulation (MC)

2. Nature and Extent – Sensitivity

Example

Variance-Covariance Approach in VaR

- Assume you have a financial asset with the following details:
  - $ 10 million in HSBC shares
  - Volatility is 2% per day and 32% per year
- Find 10-day VaR at 99% confidence level

- The standard deviation of daily changes in the value of the asset is:
  2% of $ 10 million = $ 200,000
- Assuming the changes on successive days are independent, the standard deviation over 10-day period to be
  $\$ 200,000 \times \sqrt{10} = \$632,456$
- 99% confidence level implies *N*(-2.33) = 0.01
- Thus, 10-day 99% VaR for that $10 million portfolio is:
  $632,456 x 2.33 = $ 1,473,621

Modified from *Options, Futures, & Other Derivatives*, by John C. Hull, 4th Edition, Prentice Hall, 2000

© 2006-08 Nelson

2. Nature and Extent – Other

Quantitative Disclosures

Other market risk disclosures

- When the sensitivity analyses disclosed (by the 2 approaches) are unrepresentative of a risk inherent in a financial instrument
  - the entity shall disclose
    - that fact and
    - the reason it believes the sensitivity analyses are unrepresentative.

© 2006-08 Nelson

IAS 32, IAS 39, IFRS 4 and IFRS 7

(Part 4) October 2008

Full set of slides in PDF can be found in
www.NelsonCPA.com.hk

Nelson Lam 林智遠
nelson@nelsoncpa.com.hk
www.nelsoncpa.com.hk

© 2006-08 Nelson

IAS 32, IAS 39, IFRS 4 and IFRS 7

(Part 4) October 2008

Full set of slides in PDF can be found in
www.NelsonCPA.com.hk

Nelson Lam 林智遠
nelson@nelsoncpa.com.hk
www.nelsoncpa.com.hk

© 2006-08 Nelson