

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## 1. General Information

Hong Kong Exchanges and Clearing Limited (HKEx) and its subsidiaries (collectively, the Group) own and operate the only stock exchange and a futures exchange in Hong Kong and their related clearing houses.

During the year, the Group acquired control of LME Holdings Limited (LMEH) and its subsidiaries (LME Group). One of its subsidiaries, The London Metal Exchange (LME) (formerly known as The London Metal Exchange Limited), is an exchange for the trading of base metals forward and options contracts operating in the United Kingdom.

HKEx is a limited company incorporated and domiciled in Hong Kong. The address of its registered office is 12<sup>th</sup> Floor, One International Finance Centre, 1 Harbour View Street, Central, Hong Kong.

These consolidated financial statements were approved for issue by the Board of Directors (Board) on 27 February 2013.

## 2. Principal Accounting Policies

### (a) Statement of compliance

These consolidated financial statements have been prepared in accordance with Hong Kong Financial Reporting Standards (HKFRSs), which include all applicable individual Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards (HKASs) and interpretations issued by the Hong Kong Institute of Certified Public Accountants (HKICPA), accounting principles generally accepted in Hong Kong, requirements of the Hong Kong Companies Ordinance and applicable disclosure requirements of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (Main Board Listing Rules).

### (b) Basis of preparation

These consolidated financial statements have been prepared under the historical cost convention, as modified by the revaluation of certain financial assets and financial liabilities measured at fair value.

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. The areas involving a higher degree of judgement, or areas where assumptions and estimates are significant to the consolidated financial statements, are disclosed in note 3.

#### Early adoption of new/revised HKFRSs

In 2012, the Group has early adopted the following new/revised HKFRSs where early adoption is permitted:

## 2. Principal Accounting Policies (continued)

### (b) Basis of preparation (continued)

#### Early adoption of new/revised HKFRSs (continued)

Amendments to HKAS 1 (Revised)	Presentation of Financial Statements
HKAS 19 (2011)	Employee Benefits
HKAS 27 (2011)	Separate Financial Statements
HKAS 28 (2011)	Investments in Associates and Joint Ventures
HKFRS 10	Consolidated Financial Statements
Amendments to HKFRS 10	Consolidated Financial Statements – Transition Guidance
HKFRS 11	Joint Arrangements
Amendments to HKFRS 11	Joint Arrangements – Transition Guidance
HKFRS 12	Disclosure of Interests in Other Entities
Amendments to HKFRS 12	Disclosure of Interests in Other Entities – Transition Guidance
HKFRS 13	Fair Value Measurement

The amendments to HKAS 1 (Revised) require companies to classify items within other comprehensive income under two categories: (i) items which may be reclassified to profit or loss in the future and (ii) items which would never be reclassified to profit or loss. The adoption of the amended HKAS 1 (Revised) only affects the presentation of the consolidated statement of comprehensive income.

HKAS 19 (2011) eliminates the option of deferring the recognition of gains and losses arising from defined benefit plans, and enhances the disclosure requirements for defined benefit plans. The early adoption of HKAS 19 (2011) does not have any impact on the Group as it does not have a defined benefit plan.

Under HKFRS 10, there is a single approach for determining control for the purpose of consolidation of subsidiaries by an entity based on the concept of power, variability of returns and the ability to use power to affect the amount of returns. This replaces the previous approach which emphasised legal control under HKAS 27 (Revised) (for companies) or exposure to risks and rewards under HK(SIC)-INT 12 (for special purpose entities). The adoption of HKFRS 10 does not have any financial impact on the Group as all subsidiaries within the Group satisfy the requirements for control under HKFRS 10 and there are no new subsidiaries identified under the new guidance.

Under HKFRS 11, investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations each investor has rather than the legal structure of the joint arrangements. In accordance with HKFRS 11, a joint venture is accounted for by the Group using the equity method under HKAS 28 (2011), while assets, liabilities, revenue and expenses of a joint operation are apportioned between the joint operators in accordance with the agreement. As the Group's new investment in China Exchanges Services Company Limited (note 27(a)) is a joint arrangement under which each investor has joint control and the rights to the net assets of the arrangement, it is a joint venture. In accordance with HKFRS 11, the joint venture is accounted for by the Group using the equity method under HKAS 28 (2011). The Group's newly acquired subsidiary, LME, has an interest in a joint operation (note 27(b)). Accordingly, assets, liabilities, revenue and expenses of the joint operation were apportioned in accordance with the agreement and included in the Group's consolidated financial statements.

## 2. Principal Accounting Policies (continued)

### (b) Basis of preparation (continued)

#### Early adoption of new/revised HKFRSs (continued)

HKAS 28 (2011) stipulates that the equity method shall be applied to both joint ventures and associates. Under the equity method, the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the Group's share of net assets of the investee. The consolidated statement of comprehensive income includes the Group's share of the post-acquisition profit or loss and the Group's share of movements in other comprehensive income of the investee.

HKAS 27 (2011) was issued following the issuance of HKFRS 10. The revised HKAS 27 only deals with the accounting for subsidiaries, associates and joint ventures in the separate financial statements of the parent company. The adoption of HKAS 27(2011) does not have any impact on HKEx's financial statements as it already complies with the requirements of the standard.

HKFRS 12 specifies the disclosure requirements for subsidiaries, joint arrangements and associates, and introduces new disclosure requirements for unconsolidated structured entities. The adoption of HKFRS 12 only affects the disclosures relating to the subsidiaries and the joint arrangements in the Group's consolidated financial statements.

The amendments to HKFRSs 10, 11 and 12 provide additional transition guidance on adopting the standards. The amendments aim to simplify the process of adopting HKFRSs 10 and 11 and provide relief from disclosures in respect of unconsolidated structured entities. There is no impact on the Group on adoption of the amendments.

The Group has applied the above new/revised HKFRSs retrospectively.

HKFRS 13 establishes a single source of guidance for all fair value measurements required or permitted by HKFRSs. It clarifies the definition of fair value as an exit price, which is defined as a price at which an orderly transaction to sell the asset or transfer the liability would take place between market participants at the measurement date under market conditions, and enhances disclosures about fair value measurement. The adoption of HKFRS 13 only affects disclosures on financial assets and financial liabilities in the Group's and HKEx's financial statements.

#### Change in presentation of Margin deposits from Clearing Participants on derivatives contracts and cash collateral from Clearing Participants of Hong Kong Securities Clearing Company Limited (HKSCC)

In previous years, the obligation to refund margin deposits from Clearing Participants of HKFE Clearing Corporation Limited (HKCC) and The SEHK Options Clearing House Limited (SECH) was disclosed as Margin deposits from Clearing Participants on derivatives contracts and the obligation to refund the cash collateral received from HKSCC Clearing Participants was disclosed as Cash collateral from HKSCC Clearing Participants on the face of the consolidated statement of financial position. Details of the financial assets of Margin Funds and cash collateral were separately disclosed in the notes to the consolidated financial statements.

## 2. Principal Accounting Policies (continued)

### (b) Basis of preparation (continued)

#### Change in presentation of Margin deposits from Clearing Participants on derivatives contracts and cash collateral from Clearing Participants of Hong Kong Securities Clearing Company Limited (HKSCC) (continued)

Following the HKEx Clearing House Risk Management Reform in November 2012, HKSCC introduced margining as a measure to safeguard against exposures to future market movements. Thereafter, the Group presents the combined balance of “Margin deposits from Clearing Participants on derivatives contracts” and “Margin deposits and cash collateral from HKSCC Clearing Participants” as “Margin deposits and cash collateral from Clearing Participants” on the face of the consolidated statement of financial position, with the breakdown of the balances shown in the notes to the consolidated financial statements. Similarly, the financial assets of the HKSCC Margin Funds and cash collateral and Margin Funds of SEOCH and HKCC are grouped together and disclosed in the details of the financial assets of “Margin Funds and cash collateral”, a new caption replacing the previous captions, “Margin Funds” and “Cash collateral”.

Comparative figures have been adjusted to conform with the changes in the revised presentation.

#### New/revised HKFRSs issued before 31 December 2012 but not yet effective and not early adopted

The Group has not applied the following new/revised HKFRSs which were issued before 31 December 2012 and are pertinent to its operations but not yet effective:

Amendments to HKFRS 7	Financial Instruments: Disclosures – Offsetting Financial Assets and Financial Liabilities <sup>1</sup>
Amendments to HKAS 32	Financial Instruments: Presentation – Offsetting Financial Assets and Financial Liabilities <sup>2</sup>
Annual Improvements to HKFRSs 2009 – 2011 Cycle <sup>1</sup>	

<sup>1</sup> Effective for accounting periods beginning on or after 1 January 2013

<sup>2</sup> Effective for accounting periods beginning on or after 1 January 2014

The Group has adopted these HKFRSs from 1 January 2013 onwards. The adoption of the amendments to HKAS 32 and the amended HKFRSs included in annual improvements to HKFRSs 2009 – 2011 Cycle is not expected to have any material impact on the Group as these changes do not affect the Group and the adoption of amendments to HKFRS 7 will only affect certain disclosures in the Group’s consolidated financial statements.

### (c) Subsidiaries

#### (i) Consolidation

Subsidiaries are entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has the rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases. All material intra-group transactions, unrealised gains and losses and balances have been eliminated on consolidation.

## 2. Principal Accounting Policies (continued)

### (c) Subsidiaries (continued)

#### (i) Consolidation (continued)

Accounting policies of subsidiaries have been aligned on consolidation to ensure consistency with the policies adopted by the Group.

#### Business combination

The Group uses the acquisition method of accounting to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. Acquisition-related costs are expensed when incurred in the Group's consolidated financial statements. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The Group recognises any non-controlling interest in the acquiree on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets.

The excess of the consideration transferred and the amount of any non-controlling interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill.

#### (ii) Separate financial statements

In HKEx's statement of financial position, investments in subsidiaries are stated at cost less provision for impairment, if necessary. The results of subsidiaries are accounted for by HKEx on the basis of dividends received and receivable.

### (d) Controlled special purpose entity

HKEx controls a special purpose entity, The HKEx Employees' Share Award Scheme (HKEx Employee Share Trust), which is set up solely for the purpose of purchasing, administering and holding HKEx shares for an employees' share award scheme (Share Award Scheme). As HKEx has the power to direct the relevant activities of the HKEx Employee Share Trust and it has the ability to use its power over the HKEx Employee Share Trust to affect its exposure to returns, the assets and liabilities of HKEx Employee Share Trust are included in HKEx's statement of financial position and the HKEx shares held by the HKEx Employee Share Trust are presented as a deduction in equity as Shares held for Share Award Scheme.

### (e) Joint arrangements

A joint arrangement is an arrangement which operates under a contractual arrangement between the Group and other parties, where the contractual arrangement establishes the Group and other parties have joint control of the arrangement.

#### (i) Joint ventures

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

## 2. Principal Accounting Policies (continued)

### (e) Joint arrangements (continued)

#### (i) Joint ventures (continued)

An interest in a joint venture is accounted for in the consolidated financial statements under the equity method. Under the equity method, the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the Group's share of net assets of the investee and any impairment loss relating to the investment. The consolidated statement of comprehensive income includes the Group's share of post-acquisition profit or loss and the Group's share of movements in other comprehensive income of the investee and any impairment loss of the investment.

Unrealised gains and losses resulting from transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint ventures. The accounting policies of the joint ventures are the same as the policies adopted by the Group.

In HKEx's statement of financial position, interests in joint ventures are stated at cost less provision for impairment losses, if necessary. The results of the joint ventures are accounted for by HKEx on the basis of dividends received and receivable.

#### (ii) Joint operations

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Assets, liabilities, revenue and expenses of a joint operation are apportioned between the joint operators in accordance with the agreement.

### (f) Revenue and other income recognition

Turnover consists of revenues from principal activities and is the same as Revenue in the consolidated statement of comprehensive income. Revenue and other income are recognised in the consolidated statement of comprehensive income on the following basis:

- (i) Trading fees and trading tariff are recognised on a trade date basis.
- (ii) Initial listing fees for initial public offering (IPO) are recognised upon the listing of an applicant, cancellation of the application or six months after submission of the application, whichever is earlier. Initial listing fees for warrants, callable bull/bear contracts (CBBCs) and other securities are recognised upon the listing of the securities. Income from annual listing fees is recognised on a straight-line basis over the period covered by the respective fees received in advance.
- (iii) Fees for clearing and settlement of trades between Participants in eligible securities transacted on The Stock Exchange of Hong Kong Limited (Stock Exchange) are recognised in full on T+1, ie, on the day following the trade day, upon acceptance of the trades. Fees for other settlement transactions are recognised upon completion of the settlement.
- (iv) Custody fees for securities held in the Central Clearing and Settlement System (CCASS) depository are calculated and accrued on a monthly basis. Income on registration and transfer fees on nominee services are calculated and accrued on the book close dates of the relevant stocks during the financial year.

## 2. Principal Accounting Policies (continued)

### (f) Revenue and other income recognition (continued)

- (v) Market data fees and other fees are recognised when the related services are rendered.
- (vi) Interest income on investments represents gross interest income from bank deposits and securities and is recognised on a time apportionment basis using the effective interest method.

Interest income on impaired loans is recognised using the original effective interest rate.

- (vii) Cash dividends held by HKSCC Nominees Limited (HKSX) which have remained unclaimed for a period of more than seven years are forfeited and recognised as other income.

### (g) EBITDA

EBITDA is defined as earnings before interest expenses and other finance costs, taxation, depreciation and amortisation. It excludes the Group's share of results of the joint venture and other non-recurring costs arising from the acquisition of the LME Group. EBITDA has been included in the Group's consolidated financial statements as it has been used by the Group as a measure of business performance from 2012 onwards.

### (h) Net investment income

Net investment income comprises interest income (net of interest rebates to Participants), net fair value gains/losses on financial assets and financial liabilities and dividend income, which is presented on the face of the consolidated statement of comprehensive income.

### (i) Interest expenses and interest rebates to Participants

Interest expenses and interest rebates to Participants are recognised on a time apportionment basis, taking into account the principal outstanding and the applicable interest rates using the effective interest method. All interest expenses and interest rebates to Participants are charged to profit or loss in the year in which they are incurred.

### (j) Employee benefit costs

#### (i) Employee leave entitlements

The cost of accumulating compensated absences is recognised as an expense and measured based on the additional amount the Group expects to pay as a result of the unused entitlement that has accumulated at the end of the reporting period.



## 2. Principal Accounting Policies (continued)

### (j) Employee benefit costs (continued)

#### (ii) Equity compensation benefits

##### Equity-settled share-based payment transactions

For share awards granted under the HKEx Share Award Scheme (Awarded Shares), the estimated fair value of the Awarded Shares (for shares awarded from forfeited or unallocated shares held by the Share Award Scheme) granted and the cost of Awarded Shares (for shares purchased from the market) are recognised as employee share-based compensation expense and credited to an employee share-based compensation reserve under equity over the vesting periods (note 40(c)(i)).

At the end of each reporting period, the Group revises its estimates of the number of Awarded Shares that are expected to ultimately vest. Any resulting adjustment to the cumulative fair value recognised in prior years is charged/credited to employee share-based compensation expense in the current year, with a corresponding adjustment to the employee share-based compensation reserve.

##### Cash-settled share-based payment transactions

For share options granted under the LME Shadow Equity Long-Term Incentive Plan (LME Long-Term Incentive Plan), a cash-settled share-based arrangement, the fair value of employee services received in exchange for the grant of options has been credited to the LME Long-Term Incentive Plan payable under accounts payable, accruals and other liabilities on the acquisition date.

At the end of each reporting period and at the date of settlement, the Group remeasures the fair value of the LME Long-Term Incentive Plan payable, with any changes in fair value charged/credited to the employee share-based compensation expense.

#### (iii) Retirement benefit costs

Contributions to the defined contribution plans are expensed as incurred.

### (k) Operating leases

Leases where substantially all the rewards and risks of ownership of assets remain with the lessor are accounted for as operating leases. Rentals under such operating leases net of any incentives received from the lessor are charged to profit or loss on a straight-line basis over the lease term.

### (l) Finance leases

Leases where substantially all the rewards and risks of ownership are transferred to the Group are accounted for as finance leases. Government land leases in Hong Kong are classified as finance leases as the present value of the minimum lease payments (ie, transaction price) of the land amounted to substantially all of the fair value of the land as if it were freehold. Finance leases are capitalised at the commencement of the leases at the lower of the fair values of the leased assets and the present values of the minimum lease payments.



## 2. Principal Accounting Policies (continued)

### (m) Fixed assets

Tangible fixed assets (including leasehold land classified as finance lease) are stated at historical cost less accumulated depreciation and impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the assets.

Tangible fixed assets are depreciated when they are available for use. They are depreciated at rates sufficient to write off their costs net of expected residual values over their estimated useful lives on a straight-line basis. The residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

The useful lives of major categories of fixed assets are as follows:

Leasehold land classified as finance lease	Over the remaining lives of the leases
Leasehold buildings	Up to 35 years or remaining lives of the leases if shorter
Leasehold improvements	Over the remaining lives of the leases but not exceeding 10 years
Computer trading and clearing systems – hardware and software	Up to 5 years
Other computer hardware and software	3 years
Furniture, equipment and motor vehicles	Up to 5 years
Data centre facilities and equipment	Up to 20 years

#### Change in useful lives of leasehold buildings and leasehold improvements

Effective from 1 January 2012, the estimated useful lives of leasehold buildings and leasehold improvements were revised to better reflect the useful lives of the fixed assets as follows:

	Old useful lives	New useful lives
Leasehold buildings	25 years	Up to 35 years or remaining lives of the leases if shorter
Leasehold improvements	Over the remaining lives of the leases but not exceeding 5 years	Over the remaining lives of the leases but not exceeding 10 years

The effect of the above changes in estimated useful lives resulted in a decrease in depreciation charge of \$5 million and \$14 million for the year ended 31 December 2012 and year ending 31 December 2013 respectively.

Expenditures incurred in the construction of leasehold buildings and other directly attributable costs are capitalised when it is probable that future economic benefits associated with the expenditures will flow to the Group and the costs can be measured reliably. Other costs such as relocation costs and administration and other overhead costs are charged to profit or loss during the year in which they are incurred.

Qualifying software system development expenditures and related directly attributable costs are capitalised and recognised as a fixed asset if the software forms an integral part of the hardware on which it operates.

## 2. Principal Accounting Policies (continued)

### (m) Fixed assets (continued)

Subsequent costs and qualifying development expenditures incurred after the completion of a system are included in the asset's carrying amount or recognised as a separate asset only when it is probable that future economic benefits associated with that item will flow to the Group and the cost of the item can be measured reliably. All other repairs and maintenance costs and other subsequent expenditures are charged to profit or loss during the year in which they are incurred.

### (n) Lease premium for land

Leasehold land premiums are up-front payments to acquire medium-term interests in non-Hong Kong Government leasehold land classified as operating leases. The premiums are stated at cost and are amortised over the period of the lease on a straight-line basis. The amortisation is capitalised as part of leasehold buildings under fixed assets during the construction period of the building, and charged to profit or loss thereafter.

### (o) Intangible assets

#### (i) Goodwill

Goodwill arises on the acquisition of subsidiaries and represents the excess of the consideration transferred over the Group's interest in net fair value of the net identifiable assets, liabilities and contingent liabilities of the acquiree and the fair value of the non-controlling interest in the acquiree.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units (CGUs), or groups of CGUs, that is expected to benefit from the synergies of the combination. Each CGU or group of CGUs to which the goodwill is allocated represents the lowest level within the entity (ie, operating segment level) at which the goodwill is monitored for internal management purposes.

Goodwill is not amortised but impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. The carrying value of goodwill is compared to the recoverable amount, which is the higher of value-in-use and the fair value less costs to sell. Any impairment is recognised immediately in profit or loss and is not subsequently reversed.

#### (ii) Tradenames

Tradenames acquired in a business combination are recognised at fair value at the acquisition date. The fair value is based on the discounted estimated royalty payments that are expected to be avoided as a result of the tradenames being owned. Tradenames arising from the acquisition of LME Group have indefinite useful lives and are carried at cost less accumulated impairment losses. Tradenames are reviewed annually to determine whether events and circumstances continue to support the indefinite useful life assessment.

## 2. Principal Accounting Policies (continued)

### (o) Intangible assets (continued)

#### (iii) Customer relationships

Customer relationships acquired in a business combination are recognised at fair value at the acquisition date. The fair value is determined using the multi-period excess earnings method, whereby the asset is valued after deducting a fair return on all other assets that are part of creating the related cash flows. The customer relationships have finite useful lives and are carried at cost less accumulated amortisation and impairment losses. Amortisation is calculated using the straight-line method over the expected lives of the customer relationships, which are determined to be 20 to 25 years.

#### (iv) Computer software systems

Development costs that are directly attributable to the design and testing of identifiable and unique software products controlled by the Group are recognised as intangible assets if the related software does not form an integral part of the hardware on which it operates and when the following criteria are met:

- It is technically feasible to complete the software product so that it will be available for use;
- Management intends to complete the software product and use or sell it;
- There is an ability to use or sell the software product;
- It can be demonstrated how the software product will generate probable future economic benefits;
- Adequate technical, financial and other resources to complete the development and to use or sell the software product are available; and
- The expenditure attributable to the software product during its development can be reliably measured.

Software development costs acquired in a business combination are recognised at fair value at the acquisition date based on the depreciated replacement cost method.

Other development expenditures that do not meet these criteria are recognised in profit or loss as incurred. Development costs previously recognised in profit or loss are not recognised as an asset in a subsequent period.

Qualifying software system development expenditures and related directly attributable costs capitalised as intangible assets are amortised when they are available for use. They are amortised at rates sufficient to write off their costs net of residual values over their estimated useful lives on a straight-line basis, which do not exceed five years. The residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

Costs associated with maintaining computer systems and software programmes are recognised in profit or loss as incurred.

## 2. Principal Accounting Policies (continued)

### (p) Impairment of non-financial assets

Assets that have an indefinite useful life, which include goodwill and tradenames (note 2(o)), are not subject to amortisation and are tested at least annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever there is any indication that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount (ie, the higher of an asset's fair value less costs to sell and value-in-use). Such impairment losses are recognised in profit or loss. An impairment loss other than goodwill is reversed if the circumstances and events leading to the impairment cease to exist.

The Group assesses at the end of each reporting period whether there is any objective evidence that its interests in joint ventures are impaired. Such objective evidence includes whether there have been any significant adverse changes in the technological, markets, economic or legal environment in which the joint ventures operate or whether there has been a significant or prolonged decline in value below their cost. If there is an indication that an interest in a joint venture is impaired, the Group assesses whether the entire carrying amount of the investment (including goodwill) is recoverable. An impairment loss is recognised in profit or loss for the amount by which the carrying amount is lower than the higher of the investment's fair value less costs to sell or value-in-use. Any reversal of such impairment loss in subsequent periods is reversed through profit or loss.

Impairment testing of the investment in a subsidiary is required upon receiving a dividend from that subsidiary if the dividend exceeds the total comprehensive income of the subsidiary concerned in the period the dividend is declared or if the carrying amount of the subsidiary in HKEx's statement of financial position exceeds the carrying amount of the subsidiary's net assets including goodwill in the consolidated statement of financial position.

### (q) Margin deposits and cash collateral from Clearing Participants

The Group receives margin deposits from the Clearing Participants of SEOCH and HKCC for covering their open positions in derivatives contracts. Margin deposits and cash collateral are also received from HKSCC Clearing Participants for covering their open positions.

The obligation to refund the margin deposits and cash collateral is disclosed as Margin deposits and cash collateral from Clearing Participants under current liabilities. Non-cash collateral (ie, securities and bank guarantees) received from Clearing Participants is not recognised on the consolidated statement of financial position.

### (r) Participants' contributions to Clearing House Funds

The Group receives contributions to Clearing House Funds from Clearing Participants of HKSCC, SEOCH and HKCC.

Participants' contributions to Clearing House Funds are included under current liabilities. Non-cash collateral received from Clearing Participants (ie, contributions receivable from Clearing Participants fully secured by bank guarantees) is not recognised on the consolidated statement of financial position.

## 2. Principal Accounting Policies (continued)

### (s) Derivative financial instruments

Derivatives, which may include forward foreign exchange, futures and options contracts, are initially recognised at fair value on trade-date and subsequently remeasured at their fair values. Changes in fair value are recognised in profit or loss, except when the derivatives are designated as cash flow hedges (note 2(t)). All derivatives outstanding on the reporting date are classified as financial assets measured at fair value through profit or loss when their fair values are positive and as financial liabilities at fair value through profit or loss when their fair values are negative.

### (t) Hedge accounting

The Group documents at the inception of the hedge transactions the relationship between the hedging instruments and the hedged items, as well as the risk management objectives and strategies for undertaking various hedge transactions. The Group also documents its assessment, both at the inception of the hedges and on an ongoing basis, of whether the hedging instruments are highly effective in offsetting changes in cash flows of the hedged items caused by the risk being hedged.

For hedging instruments that are designated and qualify as cash flow hedges, the changes in the fair value relating to the effective portion of the hedges are recognised in other comprehensive income and accumulated in equity in a hedging reserve. The gains or losses relating to the ineffective portion of the hedges are recognised immediately in profit or loss.

Amounts accumulated in hedging reserve are reclassified to profit or loss in the periods when the hedged items affect profit or loss. However, when the forecast transactions that are hedged result in the recognition of a non-financial asset, the gains or losses previously deferred in hedging reserve are transferred from hedging reserve and included in the initial measurement of the cost of the non-financial asset. In case of business combination, the amounts accumulated in the hedging reserve will be treated as a basis adjustment to goodwill (and as part of the consideration payable).

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss that has been retained in hedging reserve at that time remains in hedging reserve and is recognised in accordance with the above policy when the forecast transaction occurs. When a forecast transaction is no longer expected to occur, the cumulative gain or loss retained in hedging reserve is immediately reclassified to profit or loss.

### (u) Financial assets

#### (i) Classification

Financial assets of the Group are maintained for the Corporate Funds, Clearing House Funds, Margin Funds and cash collateral received from the Participants (note 21).

Investments and other financial assets of the Group are classified under the following categories:

#### Financial assets measured at amortised cost

Investments are classified under this category if they satisfy both of the following conditions:

- the assets are held within a business model whose objective is to hold assets in order to collect contractual cash flows for managing liquidity and generating income on the investments, but not for the purpose of realising fair value gains; and

## 2. Principal Accounting Policies (continued)

### (u) Financial assets (continued)

#### (i) Classification (continued)

##### Financial assets measured at amortised cost (continued)

- the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, with interest being the consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and are unleveraged.

The nature of any derivatives embedded in the financial assets is considered in determining whether the cash flows are solely payment of principal and interest on the principal outstanding and are not accounted for separately.

Bank deposits, trade and accounts receivable and other deposits are also classified under this category.

##### Financial assets measured at fair value through profit or loss

Investments and other financial assets are classified under this category if they do not meet the conditions to be measured at amortised cost.

Securities or bank deposits with embedded derivatives whose cash flows are not solely payments of principal and interest on the principal amount outstanding or the interest rate does not reflect only consideration for the time value of money and credit risk are classified in their entirety as measured at fair value through profit or loss.

The Group will reclassify all affected investments when and only when its business model for managing these assets changes.

Financial assets of Clearing House Funds, Margin Funds and cash collateral are classified as current assets as they will be liquidated whenever liquid funds are required.

Financial assets of Corporate Funds, which include those held for trading purpose, are classified as current assets unless they are non-trading assets that are expected to mature or be disposed of after twelve months from the end of the reporting period, in which case, they are included in non-current assets. For equities and mutual funds, which have no maturity date, they are included in current assets if they are held for trading or are expected to be disposed of within twelve months at the end of the reporting period.

#### (ii) Recognition and initial measurement

Purchases and sales of financial assets are recognised on trade-date. Assets classified as financial assets measured at fair value through profit or loss are initially recognised at fair value with transaction costs recognised as expenses in profit or loss. Financial assets measured at amortised cost are initially recognised at fair value plus transaction costs.

#### (iii) Derecognition

Financial assets are derecognised when the rights to receive cash flows from the assets have expired or the Group has transferred substantially all the risks and rewards of ownership of the assets.

## 2. Principal Accounting Policies (continued)

### (u) Financial assets (continued)

#### (iv) Gains or losses on subsequent measurement, interest income and dividend income

##### Financial assets measured at fair value through profit or loss

- Financial assets under this category are investments carried at fair value. Gains and losses arising from changes in fair value are included in profit or loss in the period in which they arise.
- Interest income is recognised in profit or loss using the effective interest method and included in net fair value gains/(losses) and interest income from these financial assets.
- Dividend income is recognised when the right to receive a dividend is established and included under “others” in net investment income.

##### Financial assets measured at amortised cost

- Financial assets under this category are carried at amortised cost using the effective interest method less provision for impairment.
- Interest income is recognised in profit or loss using the effective interest method and disclosed as interest income.

#### (v) Fair value measurement principles

Fair values of quoted investments are based on bid prices. For unlisted securities or financial assets without an active market, the Group establishes the fair value by using valuation techniques including the use of recent arm's length transactions, reference to other instruments that are substantially the same and discounted cash flow analysis.

#### (vi) Impairment of financial assets measured at amortised cost

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. Impairment losses are incurred if and only if there is objective evidence of impairment as a result of one or more loss events that have occurred after the initial recognition of the financial assets and have an impact on their estimated future cash flows that can be reliably estimated. Objective evidence that a financial asset or group of assets is impaired includes observable data that comes to the attention of the Group about the following loss events:

- significant financial difficulty of the debtor or obligor;
- fees receivable that have been outstanding for over 180 days;
- it is becoming probable that the debtor or obligor will enter into bankruptcy or other financial reorganisation;
- the disappearance of an active market for that financial asset because of financial difficulties; or
- observable data indicating that there is a measurable decrease in the estimated future cash flows from a group of financial assets since the initial recognition of those assets, although the decrease cannot yet be identified with the individual financial assets in the Group.



## 2. Principal Accounting Policies (continued)

### (u) Financial assets (continued)

#### (vi) Impairment of financial assets measured at amortised cost (continued)

The Group first assesses whether objective evidence of impairment exists individually for financial assets that are individually significant, and individually or collectively for financial assets that are not individually significant.

For the purposes of a collective evaluation of impairment, financial assets are grouped on the basis of similar credit risk characteristics relevant to the estimation of future cash flows. These financial assets are collectively assessed based on historical loss experience on each type of assets and management judgement of the current economic and credit environment.

If there is objective evidence that an impairment loss has been incurred, the loss is measured as the difference between the assets' carrying amounts and the present values of estimated future cash flows discounted at the financial assets' original effective interest rates. The carrying amounts of the assets are reduced through the use of a doubtful debt allowance account and the amount of the loss is recognised in profit or loss.

If, in a subsequent period, the amount of impairment loss decreases and the decrease can be shown to relate objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed by adjusting the doubtful debt allowance account. The amount of reversal is recognised in profit or loss.

### (v) Financial liabilities

#### (i) Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss are financial liabilities held for trading.

Liabilities under this category are initially recognised at fair value on trade-date and subsequently remeasured at their fair values. Changes in fair value of the liabilities are recognised in profit or loss.

#### (ii) Financial guarantee contracts

A financial guarantee contract is a contract that requires the Group to make specified payments to reimburse the holder for a loss it incurs because a specified entity or person fails to make payment when due in accordance with the original or modified terms of an undertaking.

Financial guarantee contracts are initially recognised at fair value. Subsequently, such contracts are measured at the higher of the best estimate of the amount required to settle the guarantee and the amount initially recognised less, where appropriate, cumulative amortisation over the life of the guarantee on a straight-line basis.

Financial guarantee contracts issued by HKEx to guarantee borrowings of subsidiaries are eliminated on consolidation.

## 2. Principal Accounting Policies (continued)

### (v) Financial liabilities (continued)

#### (iii) Other financial liabilities

Financial liabilities, other than financial liabilities at fair value through profit or loss and financial guarantee contracts, are initially recognised at fair value and subsequently carried at amortised cost using the effective interest method.

### (w) Recognition of receivables and payables from/to HKSCC Clearing Participants on Stock Exchange trades settled under the Continuous Net Settlement (CNS) basis

Upon acceptance of Stock Exchange trades for settlement in CCASS under the CNS basis, HKSCC interposes itself between the HKSCC Clearing Participants as the settlement counterparty to the trades through novation.

The CNS money obligations due by/to HKSCC Clearing Participants on the Stock Exchange trades are recognised as receivables and payables when they are confirmed and accepted on T+1.

### (x) Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in profit or loss as interest expense over the period of the borrowings using the effective interest method.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent that there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a prepayment for liquidity services and amortised over the period of the facility to which it relates. When the facility is cancelled, the fees paid are charged to profit or loss.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least twelve months after the end of the reporting period.

### (y) Convertible bonds

Convertible bonds with conversion options which are not settled by exchanging a fixed amount of cash for a fixed number of HKEx shares comprise a derivative component and a liability component.

Convertible bonds with conversion options which are settled by exchanging a fixed amount of cash for a fixed number of HKEx shares comprise an equity component and a liability component.

At initial recognition the derivative component of the convertible bonds is measured at fair value. Any excess of the proceeds over the amount initially recognised as the derivative component is recognised as the liability component. Transaction costs relating to the issue of the convertible bonds are allocated to the liability and derivative components in proportion to the allocation of proceeds. The portion of the transaction costs relating to the liability component is recognised initially as part of the liability component. The portion relating to the derivative component is recognised immediately in profit or loss.

## 2. Principal Accounting Policies (continued)

### (y) Convertible bonds (continued)

The derivative component is subsequently remeasured at fair value, with changes in fair value recognised immediately in profit or loss. The liability component is subsequently measured at amortised cost. The interest expense recognised in profit or loss on the liability component is calculated using the effective interest method. The liability component is classified as current unless the Group has an unconditional right to defer settlement of the liability for at least twelve months after the end of the reporting period.

When the obligation to deliver a variable number of shares upon conversion expires, lapses or is cancelled and the convertible bonds with conversion options are to be settled by exchanging a fixed amount of cash for a fixed number of HKEx shares, the conversion option is reclassified from derivative liability to the convertible bond reserve under equity. The convertible bond reserve is not remeasured subsequent to initial recognition.

### (z) Current and deferred tax

Tax charge for the period comprises current and deferred tax. Tax is recognised in profit or loss.

#### (i) Current tax

The current tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where HKEx's subsidiaries operate and generate taxable income. Provisions are established where appropriate on the basis of amounts expected to be paid to the tax authorities.

#### (ii) Deferred tax

Deferred tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements, except that deferred tax liabilities are not recognised if they arise from the initial recognition of goodwill. Tax rates enacted or substantively enacted by the end of the reporting period are used to determine the deferred tax assets and liabilities.

Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences or the current tax losses can be utilised.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

### (aa) Deferred revenue

Deferred revenue mainly comprises listing fees received in advance and payments received in advance for services in relation to the sales of market data.

## 2. Principal Accounting Policies (continued)

### (ab) Provisions and contingent liabilities

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made. The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period.

A contingent liability is a possible obligation that arises from past events and whose existence will only be confirmed by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group. It can also be a present obligation arising from past events that is not recognised because it is not probable that outflow of economic resources will be required or the amount of obligation cannot be measured reliably.

A contingent liability is not recognised but is disclosed in the notes to the consolidated financial statements. When a change in the probability of an outflow occurs so that outflow is probable or when the amount of obligation becomes reliably measurable, it will then be recognised as a provision.

### (ac) Foreign currency translation

#### (i) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in Hong Kong dollars (HKD), which is the Group's presentation currency and HKEx's functional and presentation currency.

#### (ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss except when deferred in equity as qualifying cash flow hedges (note 2(t)).

Translation differences on non-monetary financial assets that are classified as financial assets measured at fair value through profit or loss are reported as part of the fair value gain or loss.

#### (iii) Group companies

The results and financial position of all the Group entities that have a non-HKD functional currency are translated into HKD as follows:

- assets and liabilities (including goodwill and fair value adjustments arising on the acquisition of foreign subsidiaries) for each statement of financial position presented are translated at the closing rate at the end of the reporting period;
- income and expenses for each statement of comprehensive income are translated at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions; and
- all resulting exchange differences are recognised in other comprehensive income and accumulated separately in the exchange reserve under equity.

## 2. Principal Accounting Policies (continued)

### (ad) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, bank balances and other short-term highly liquid investments that are readily convertible into known amounts of cash and are subject to an insignificant risk of changes in value (mainly time deposits), with original maturities of three months or less.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise cash and cash equivalents available for the disposition of the Group and exclude cash and cash equivalents held for specific purposes such as those held for the purpose of the Margin Funds and cash collateral and the Clearing House Funds.

### (ae) Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction from the proceeds.

### (af) Shares held for Share Award Scheme

Where HKEx shares are acquired by the Share Award Scheme from the market or by electing scrip in lieu of cash dividends, the total consideration of shares acquired from the market (including any directly attributable incremental costs) or under the scrip dividend scheme is presented as Shares held for Share Award Scheme and deducted from total equity.

Upon vesting, the related costs of the vested Awarded Shares purchased from the market and shares acquired from reinvesting dividends received on the Awarded Shares or under the scrip dividend scheme (dividend shares) are credited to Shares held for Share Award Scheme, with a corresponding decrease in employee share-based compensation reserve for Awarded Shares, and decrease in retained earnings for dividend shares.

For vesting of forfeited or unallocated shares regranted, the related costs of the forfeited or unallocated shares regranted are credited to Shares held for Share Award Scheme, and the related fair value of the shares regranted are debited to employee share-based compensation reserve. The difference between the cost and the fair value of the shares regranted is credited to share premium if the fair value is higher than the cost or debited against retained earnings if the fair value is less than the cost.

### (ag) Operating Segments

Operating segments are reported in a manner consistent with the internal management reports provided to the chief operating decision-maker (note 4). The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Chief Executive. Information relating to segment assets and liabilities is not disclosed as such information is not regularly reported to the chief operating decision-maker.

## 2. Principal Accounting Policies (continued)

### (ah) Dividends

Dividends disclosed in note 20 to the consolidated financial statements represent interim dividend paid and final dividend proposed for the year (based on the issued share capital less the number of shares held for the Share Award Scheme at the end of the reporting period).

Dividends declared are recognised as liabilities in the financial statements when the dividends are approved by the shareholders.

## 3. Critical Accounting Estimates and Assumptions

The Group makes estimates and assumptions concerning the future when the consolidated financial statements are prepared. The resulting accounting estimates may differ from the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below:

### (a) Valuation of intangible assets acquired in the acquisition of LME Group

Intangible assets acquired by the Group in the acquisition of the LME Group include tradenames, customer relationships and software systems. In addition, a significant portion of the purchase consideration was allocated to goodwill, which represents the balance of the purchase consideration and fair value of identifiable net assets acquired by the Group.

Except for the fair values of software systems which were determined using the depreciated replacement cost method, the fair values of the other identifiable intangible assets acquired through the acquisition of the LME Group have been determined using an income approach. The fair value of the tradenames was determined based on the discounted estimated royalty payments that are expected to be avoided as a result of the tradenames being owned. The fair value of customer relationships was determined using the multi-period excess earnings method, under which the assets are valued after deducting a fair return on all other assets that are part of creating the related cash flows. The purchase price allocation of intangible assets involved significant management judgement and estimation. Customer relationships have finite useful lives and therefore are subject to amortisation whereas goodwill (being the residual value after the allocation of net identifiable assets, liabilities, contingent liabilities and non-controlling interests) and tradenames have indefinite useful lives. All intangible assets are subject to impairment review and could affect the future results of the Group. Further information on the valuation basis of the intangible assets and the carrying amounts of the intangible assets is included in note 2(o) and note 28 respectively.

### (b) Estimated impairment of goodwill and tradenames

The Group tests in the year of acquisition and annually whether goodwill and tradenames have suffered any impairment in accordance with the accounting policy stated in note 2(p). The Group acquired the LME Group on 6 December 2012 and performed an allocation of the purchase price against the acquired assets. A detailed review of the fair value of the acquired intangible assets and goodwill was performed at 6 December 2012 and the Group considers that the assumptions used in the valuation are still valid and there are no triggering events which would indicate an impairment of the intangible assets or goodwill at 31 December 2012.

### 3. Critical Accounting Estimates and Assumptions (continued)

#### (c) Deferred tax assets

Deferred tax assets are recognised for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Management judgement is required to determine the amount of deferred tax assets that can be recognised, based on the estimated level of future taxable profits of the subsidiaries concerned.

At 31 December 2012, the Group had unrecognised tax losses carried forward amounting to \$431 million (31 December 2011: \$449 million). These losses relate to subsidiaries that have a history of tax losses and the Group has not accounted for the relevant deferred tax assets. They will not expire and may be available to offset against taxable income in the future. If the Group were to recognise all unrecognised deferred tax assets, the Group's profit would increase by \$71 million (2011: \$74 million).

#### (d) Valuation of investments

The Group has a significant amount of investments that are classified as Level 2 and Level 3 investments under HKFRS 13. Except for a non-controlling shareholding in an unlisted company, held by a subsidiary, the valuations are either provided by banks or the custodian of the investments, a reputable independent third party custodian bank.

As the unlisted investment held by a subsidiary is not traded in an active market, its fair value has been determined using discounted cash flow valuation techniques. Major assumptions used in the valuation include historical financial results, assumptions about future growth rates, an estimate of weighted average cost of capital, the effect of expected changes in regulation and an adjustment for the value of the investment attributable to a minority stake.

At 31 December 2012, the financial assets that are classified as Level 2 and Level 3 investments under HKFRS 13, amounted to \$4,273 million (31 December 2011: \$10,931 million). If the fair value of such financial assets dropped by 1 per cent, the Group's profit before taxation would decrease by \$43 million (2011: \$109 million).

### 4. Operating Segments

The Group determines its operating segments based on the reports that are used to make strategic decisions reviewed by the chief operating decision-maker.

In 2012, the Group has amended the format of management information provided to the chief operating decision-maker for the purpose of assessing the performance of the operating segments. Previously, central income (mainly net investment income of the Corporate Funds) and central costs (mainly costs of support functions that centrally provide services to all of the operating segments and other costs not directly related to any of the operating segments) were allocated to the respective operating segments. From June 2012 onwards, the central income and central costs are included as "Corporate Items" and are no longer allocated to the respective operating segments. Income and expenses that are directly attributable to the reportable segments are not affected. Comparative figures have been restated to conform to the current year's presentation.

In December 2012, the Group completed the acquisition of the LME Group (note 49). Its results are included in a new separate reportable segment, commodities, as it is closely monitored as a separate business segment by the chief operating decision-maker.



#### 4. Operating Segments (continued)

After the acquisition, the Group has five reportable segments (“Corporate Items” is not a reportable segment). The segments are managed separately as each segment offers different products and services and requires different information technology systems and marketing strategies. The following summary describes the operations in each of the Group’s reportable segments:

The **Cash Market** segment mainly refers to the operations of the Stock Exchange, which covers all products traded on the Cash Market platforms, such as equities, CBBCs and derivative warrants (DWs). Currently, the Group operates two Cash Market platforms, the Main Board and the Growth Enterprise Market (GEM). The major sources of revenue of the segment are trading fees, trading tariff and listing fees. Results of the Listing Function are included in the Cash Market. Stock Exchange listing fees and costs of the Listing Function are further explained in note 6.

The **Derivatives Market** segment refers to the derivatives products traded on Hong Kong Futures Exchange Limited (Futures Exchange) and stock options traded on the Stock Exchange, which includes the provision and maintenance of trading platforms for a range of derivatives products, such as stock and equity index futures and options. Its revenue and other income mainly comprises trading fees, trading tariff and net investment income on the Margin Funds on derivatives contracts invested.

The **Commodities** segment refers to the operations of the LME Group, which operates an exchange in the United Kingdom for the trading of base metals forward and options contracts. The major sources of revenue of the segment are trading fees, commodity market data fees and fees generated from other ancillary operations.

The **Clearing** segment refers to the operations of the three clearing houses, namely HKSCC, SEOCH and HKCC, which are responsible for clearing, settlement and custodian activities of the Cash and Derivatives Markets operated by the Group. Its revenue and other income is derived primarily from providing clearing, settlement, depository, custody and nominee services and net investment income earned on the Clearing House Funds and Margin Funds and cash collateral from HKSCC Clearing Participants.

The **Market Data** segment is responsible for developing, promoting, compiling and sales of real-time, historical as well as statistical market data and issuer information. Its revenue comprises primarily market data fees of the Cash and Derivatives Markets.

#### 4. Operating Segments (continued)

The chief operating decision-maker assesses the performance of the operating segments based on their EBITDA (note 2(g)). An analysis of the Group's EBITDA, profit before taxation and other selected financial information for the year by operating segment is as follows:

	2012						
	Cash Market \$m	Derivatives Market \$m	Commodities \$m	Clearing \$m	Market Data \$m	Corporate Items \$m	Group \$m
Revenue from external customers	2,824	761	74	2,209	563	1	6,432
Net investment income	–	422	2	31	–	311	766
Sundry income	–	–	–	13	–	–	13
Revenue and other income	2,824	1,183	76	2,253	563	312	7,211
Operating expenses (excluding depreciation and amortisation)	647	178	41	332	76	683	1,957
Reportable segment EBITDA	2,177	1,005	35	1,921	487	(371)	5,254
Depreciation and amortisation	(42)	(13)	(22)	(46)	(13)	(22)	(158)
Costs relating to acquisition of LME Group	–	–	–	–	–	(138)	(138)
Finance costs	–	–	–	–	–	(55)	(55)
Fair value loss on derivative component of convertible bonds	–	–	–	–	–	(55)	(55)
Share of loss of a joint venture	–	(3)	–	–	–	–	(3)
Reportable segment profit before taxation	2,135	989	13	1,875	474	(641)	4,845
Interest income	–	303	1	26	–	51	381
Interest rebates to Participants	–	(2)	–	(1)	–	–	(3)
Other material non-cash items:							
Forfeiture of unclaimed cash dividends held by HKSN	–	–	–	13	–	–	13
Employee share-based compensation expenses	(32)	(5)	–	(11)	(5)	(52)	(105)
Reversal of provision for impairment losses	1	–	–	–	–	–	1

## 4. Operating Segments (continued)

	As restated 2011						
	Cash Market \$m	Derivatives Market \$m	Commodities \$m	Clearing \$m	Market Data \$m	Corporate Items \$m	Group \$m
Revenue from external customers	3,344	855	–	2,519	639	–	7,357
Net investment income	–	250	–	19	–	121	390
Sundry income	–	–	–	108	–	–	108
Revenue and other income	3,344	1,105	–	2,646	639	121	7,855
Operating expenses (excluding depreciation and amortisation)	633	161	–	314	70	555	1,733
Reportable segment EBITDA	2,711	944	–	2,332	569	(434)	6,122
Depreciation and amortisation	(32)	(13)	–	(36)	(3)	(6)	(90)
Reportable segment profit before taxation	2,679	931	–	2,296	566	(440)	6,032
Interest income	–	207	–	21	–	50	278
Interest rebates to Participants	–	(2)	–	–	–	–	(2)
Other material non-cash items:							
Forfeiture of unclaimed cash dividends held by HKSN	–	–	–	108	–	–	108
Employee share-based compensation expenses	(20)	(3)	–	(6)	(3)	(29)	(61)
Provision for impairment losses	(1)	–	–	–	(1)	–	(2)

- (a) The accounting policies of the reportable segments are the same as the Group's accounting policies described in note 2.

Central income (mainly net investment income of the Corporate Funds) and central costs (mainly costs of support functions that centrally provide services to all of the operating segments, finance costs and other costs not directly related to any of the operating segments) are not allocated to the operating segments and are included as "Corporate Items". Taxation charge/(credit) is not allocated to reportable segments.

- (b) Geographical information

- (i) Revenue

The Group's revenue from external customers is derived from its operations in the following geographical location:

	2012 \$m	2011 \$m
Hong Kong (place of domicile)	6,358	7,357
United Kingdom	74	–
	<b>6,432</b>	<b>7,357</b>

#### 4. Operating Segments (continued)

##### (b) Geographical information (continued)

##### (ii) Non-current assets

The Group's non-current assets (excluding financial assets and deferred tax assets) by geographical location are detailed below:

	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Hong Kong (place of domicile)	1,966	994
United Kingdom	18,018	–
China	2	2
	<b>19,986</b>	<b>996</b>

##### (c) Information about major customers

In 2012 and 2011, the revenue from the Group's largest customer amounted to less than 10 per cent of the Group's total revenue.

#### 5. Trading Fees and Trading Tariff

	2012 \$m	2011 \$m
Trading fees and trading tariff were derived from:		
Securities traded on the Cash Market	1,583	2,010
Derivatives contracts traded on the Derivatives Market	814	926
Base metals forward and options contracts traded on the LME	51	–
	<b>2,448</b>	<b>2,936</b>

#### 6. Stock Exchange Listing Fees

Stock Exchange listing fees and costs of listing function comprised the following:

	2012				As restated 2011			
	Equity		CBBCs, DWs & others \$m	Total \$m	Equity		CBBCs, DWs & others \$m	Total \$m
	Main Board \$m	GEM \$m			Main Board \$m	GEM \$m		
<b>Stock Exchange Listing Fees</b>								
Annual listing fees	444	24	3	471	418	24	2	444
Initial and subsequent issue listing fees	92	10	339	441	112	8	380	500
Other listing fees	3	1	–	4	4	1	–	5
<b>Total</b>	<b>539</b>	<b>35</b>	<b>342</b>	<b>916</b>	<b>534</b>	<b>33</b>	<b>382</b>	<b>949</b>
<b>Direct costs of listing function</b>	<b>267</b>	<b>76</b>	<b>19</b>	<b>362</b>	<b>256</b>	<b>57</b>	<b>18</b>	<b>331</b>
<b>Contribution to Cash Market segment operating results</b>	<b>272</b>	<b>(41)</b>	<b>323</b>	<b>554</b>	<b>278</b>	<b>(24)</b>	<b>364</b>	<b>618</b>

Listing fees are primarily fees paid by issuers to enable them to gain access to the Stock Exchange and enjoy the privileges and facilities by being admitted, listed and traded on the Stock Exchange.

## 6. Stock Exchange Listing Fees (continued)

The costs listed above are regulatory in nature, which comprise costs of the Listing Function on vetting IPOs, enforcing the Main Board Listing Rules and the Rules Governing the Listing of Securities on the Growth Enterprise Market of The Stock Exchange of Hong Kong Limited, and disseminating information relating to listed companies.

Previously, central costs (mainly costs of support functions that centrally provide services to all of the operating segments and other costs not directly related to any of the operating segments) were allocated as indirect costs of listing function. As a result of the change in the format of management information provided to the chief operating decision-maker, these costs are no longer included as costs of the Listing Function. Comparative figures have been restated to conform to current year's presentation.

## 7. Other Revenue

	2012 \$m	2011 \$m
Network, terminal user, dataline and software sub-license fees	334	370
Participants' subscription and application fees	36	35
Brokerage on direct IPO allotments	2	23
Trading booth user fees	11	15
Sales of Trading Rights	19	20
Hosting services	8	–
Commodities stock levies and warehouse listing fees	10	–
Miscellaneous revenue	28	24
	<b>448</b>	<b>487</b>

## 8. Net Investment Income

	2012 \$m	2011 \$m
Interest income from financial assets measured at amortised cost		
– bank deposits	369	261
– listed securities	5	5
– unlisted securities	7	12
Gross interest income	<b>381</b>	<b>278</b>
Interest rebates to Participants	(3)	(2)
Net interest income	<b>378</b>	<b>276</b>
Net fair value gains including interest income on financial assets mandatorily measured at fair value through profit or loss		
– listed securities	191	41
– unlisted securities	179	83
– exchange differences	89	115
	<b>459</b>	<b>239</b>
Net fair value losses on financial liabilities at fair value through profit or loss, held for trading		
– exchange differences	(99)	(137)
Gains on disposal of unlisted financial assets measured at amortised cost	1	–
Others	27	12
Net investment income	<b>766</b>	<b>390</b>

## 9. Sundry Income

In accordance with CCASS Rule 1109, the Group exercised its forfeiture right to appropriate cash dividends of \$13 million (2011: \$108 million) held by HKSN which had remained unclaimed for a period of more than seven years and recognised such dividends as sundry income. The Group has, however, undertaken to honour all claims if adequate proof of entitlement is provided by the beneficial owner claiming the dividends forfeited.

## 10. Staff Costs and Related Expenses

Staff costs and related expenses comprised the following:

	2012 \$m	2011 \$m
Salaries and other short-term employee benefits	989	899
Employee share-based compensation benefits of Share Award Scheme (note 40)	105	61
Termination benefits	3	–
Retirement benefit costs (note (a)):		
– ORSO Plan	80	69
– MPF Scheme	1	1
	1,178	1,030

### (a) Retirement Benefit Costs

The Group has sponsored a defined contribution provident fund scheme (ORSO Plan) which is registered under the Occupational Retirement Schemes Ordinance (ORSO) and a Mandatory Provident Fund scheme (MPF Scheme) for the benefits of its employees in Hong Kong. The Group contributes 12.5 per cent of the employee's basic salary to the ORSO Plan if an employee contributes 5 per cent. If the employee chooses not to contribute, the Group will contribute 10 per cent of the employee's salary to the ORSO Plan. Contributions to the MPF Scheme are in accordance with the statutory limits prescribed by the MPF Ordinance (ie, 5 per cent of the employee's relevant income subject to a maximum contribution, which has been adjusted from \$1,000 to \$1,250 per month with effect from 1 June 2012). Forfeited contributions of the provident fund for employees who leave before the contributions are fully vested are not used to offset existing contributions but are credited to a reserve account of that provident fund, and are available for distribution to the provident fund members at the discretion of the trustees. Assets of the provident fund and the MPF Scheme are held separately from those of the Group and are independently administered.

The Group has also sponsored a defined contribution pension scheme for all employees of the LME Group aged over 25. The Group contributes 15 per cent to 17 per cent of the employee's basic salary to the LME pension scheme. There are no forfeited contributions for the LME pension scheme as the contributions are fully vested to the employees upon payment to the pension scheme. Assets of the LME pension scheme are held separately from those of the Group and are independently administered. The retirement benefit costs incurred by the Group from 6 December 2012 (date of acquisition of the LME Group) to 31 December 2012 were less than \$1 million.

**11. Information Technology and Computer Maintenance Expenses**

	2012 \$m	2011 \$m
Costs of services and goods:		
– consumed by the Group	177	156
– directly consumed by Participants	122	146
	<b>299</b>	<b>302</b>

**12. Other Operating Expenses**

	2012 \$m	2011 \$m
Insurance	5	4
Financial data subscription fees	9	6
Custodian and fund management fees	12	13
Bank charges	20	19
Repair and maintenance expenses	12	10
License fees	19	19
Communication expenses	8	6
Overseas travel expenses	9	10
Contribution to Financial Reporting Council	4	4
Security expenses	7	3
Other miscellaneous expenses	48	39
	<b>153</b>	<b>133</b>

**13. Operating Profit**

	2012 \$m	2011 \$m
Operating profit is stated after (charging)/crediting:		
Amortisation of intangible assets (note 28(a))	(24)	–
Auditor's remuneration		
– statutory audit fees	(6)	(4)
– warehouse stock count fees	(1)	–
– other non-audit fees	(3)	(1)
Depreciation of fixed assets (note 29(a))	(134)	(90)
Operating lease rentals		
– land and buildings	(199)	(174)
– computer systems and equipment	(11)	(7)
Net foreign exchange gains on financial assets and liabilities (excluding financial assets and financial liabilities measured at fair value through profit or loss)	13	2
Gain on disposal of fixed assets	1	–

**14. Costs Relating to Acquisition of LME Group**

	2012 \$m	2011 \$m
Legal and professional fees (note (a))	129	–
Others	9	–
	<b>138</b>	<b>–</b>

(a) Includes \$2 million paid to the auditor for non-audit services.



## 15. Finance Costs

	2012 \$m	2011 \$m
Financing related costs for acquisition of LME Group (note (a))	30	–
Interest expenses:		
– Bank borrowings not wholly repayable within five years (note 35(a))	3	–
– Convertible bonds wholly repayable within five years (note 35(b))	21	–
Net foreign exchange losses on financing activities	1	–
	55	–

- (a) The costs were incurred for the purpose of establishing a banking facility for the acquisition of LME Group. Subsequently, the facility was not used and was cancelled. Accordingly, the costs are charged to profit or loss in 2012.

## 16. Directors' Emoluments

All Directors, including one Executive Director (the Chief Executive), received emoluments during the years ended 31 December 2012 and 31 December 2011. The aggregate emoluments paid and payable to the Directors during the year were as follows:

	2012 \$'000	2011 \$'000
Executive Director:		
Salaries and other short-term employee benefits	7,813	7,667
Performance bonus	6,560	7,524
Retirement benefit costs	955	941
	15,328	16,132
Employee share-based compensation benefits (note (a))	9,247	6,942
	24,575	23,074
Non-executive Directors:		
Fees	8,921	6,219
	33,496	29,293

- (a) Employee share-based compensation benefits represent the fair value of Awarded Shares issued under the Share Award Scheme amortised to profit or loss during the year.
- (b) The emoluments, including employee share-based compensation benefits, of the Directors were within the following bands:

	2012 Number of Directors	2011 Number of Directors
\$1 – \$500,000	2	9
\$500,001 – \$1,000,000	12	4
\$23,000,001 – \$23,500,000	–	1
\$24,500,001 – \$25,000,000	1	–
	15	14

## 16. Directors' Emoluments (continued)

- (c) The emoluments of all Directors, including the Chief Executive who is an ex-officio member, for the years ended 31 December 2012 and 2011 are set out below:

Name of Director	2012							
	Fees \$'000	Salary \$'000	Other benefits (note (i)) \$'000	Performance bonus \$'000	Retirement benefit costs (note (ii)) \$'000	Sub-total \$'000	Employee share-based compensation benefits \$'000	Total \$'000
C K Chow (note (iii))	957	–	–	–	–	957	–	957
Ronald J Arculli	734	–	–	–	–	734	–	734
Charles X Li	–	7,642	171	6,560	955	15,328	9,247	24,575
Laura M Cha (note (iv))	116	–	–	–	–	116	–	116
Ignatius T C Chan	643	–	–	–	–	643	–	643
Moses M C Cheng (note (iv))	116	–	–	–	–	116	–	116
Timothy G Freshwater (note (iii))	532	–	–	–	–	532	–	532
John B Harrison (note (v))	836	–	–	–	–	836	–	836
Stephen C C Hui	643	–	–	–	–	643	–	643
Bill C P Kwok	757	–	–	–	–	757	–	757
Vincent K H Lee	757	–	–	–	–	757	–	757
Michael T H Lee	643	–	–	–	–	643	–	643
John E Strickland	676	–	–	–	–	676	–	676
John M M Williamson	865	–	–	–	–	865	–	865
Oscar S H Wong	646	–	–	–	–	646	–	646
Total	8,921	7,642	171	6,560	955	24,249	9,247	33,496

  

Name of Director	2011							
	Fees \$'000	Salary \$'000	Other benefits (note (i)) \$'000	Performance bonus \$'000	Retirement benefit costs (note (ii)) \$'000	Sub-total \$'000	Employee share-based compensation benefits \$'000	Total \$'000
Ronald J Arculli	753	–	–	–	–	753	–	753
Charles X Li	–	7,524	143	7,524	941	16,132	6,942	23,074
Laura M Cha (note (iv))	451	–	–	–	–	451	–	451
Ignatius T C Chan	456	–	–	–	–	456	–	456
Moses M C Cheng (note (iv))	451	–	–	–	–	451	–	451
Marvin K T Cheung (note (vi))	108	–	–	–	–	108	–	108
John B Harrison (note (v))	431	–	–	–	–	431	–	431
Stephen C C Hui	454	–	–	–	–	454	–	454
Bill C P Kwok	551	–	–	–	–	551	–	551
Vincent K H Lee	567	–	–	–	–	567	–	567
Michael T H Lee	451	–	–	–	–	451	–	451
John E Strickland	476	–	–	–	–	476	–	476
John M M Williamson	619	–	–	–	–	619	–	619
Oscar S H Wong	451	–	–	–	–	451	–	451
Total	6,219	7,524	143	7,524	941	22,351	6,942	29,293

## Notes:

- (i) Other benefits included leave pay, insurance premium and club membership.
- (ii) Employees who retire before normal retirement age are eligible for 18 per cent of the employer's contribution to the provident fund after completion of two years of service. The rate of vested benefit increases at an annual increment of 18 per cent thereafter reaching 100 per cent after completion of seven years of service.
- (iii) Appointment effective 23 April 2012
- (iv) Retired on 23 April 2012
- (v) Appointment effective 20 April 2011
- (vi) Retired on 20 April 2011

## 17. Five Top-paid Employees

One (2011: one) of the five top-paid employees was a Director whose emoluments are disclosed in note 16. Details of the emoluments of the other four (2011: four) top-paid employees were as follows:

	2012 \$'000	2011 \$'000
Salaries and other short-term employee benefits	18,765	18,463
Performance bonus	13,700	11,840
Retirement benefit costs	2,210	2,181
	34,675	32,484
Employee share-based compensation benefits (note (a))	15,243	11,180
	49,918	43,664

- (a) Employee share-based compensation benefits represent the fair value of Awarded Shares issued under the HKEx Share Award Scheme amortised to profit or loss during the year.
- (b) The emoluments of these four (2011: four) employees, including share-based compensation benefits, were within the following bands:

	2012 Number of employees	2011 Number of employees
\$8,000,001 – \$8,500,000	–	1
\$10,000,001 – \$10,500,000	1	1
\$12,000,001 – \$12,500,000	1	–
\$12,500,001 – \$13,000,000	–	2
\$13,000,001 – \$13,500,000	1	–
\$14,500,001 – \$15,000,000	1	–
	4	4

The above employees included senior executives who were also Directors of the subsidiaries during the years. No Directors of the subsidiaries waived any emoluments.

## 18. Taxation

- (a) Taxation charge in the consolidated statement of comprehensive income represented:

	2012 \$m	2011 \$m
Current tax – Hong Kong Profits Tax		
– Provision for the year	740	922
Current tax – Overseas Tax		
– Provision for the year	10	–
	750	922
Deferred tax (note 37(a))	11	17
Taxation charge	761	939

- (i) Hong Kong Profits Tax has been provided at the rate of 16.5 per cent (2011: 16.5 per cent) on the estimated assessable profit for the year. Taxation on overseas profits has been calculated on the estimated assessable profit at the rates of taxation prevailing in the countries in which the Group operates.
- (ii) The weighted average applicable tax rate was 16.5 per cent (2011: 16.5 per cent).

**18. Taxation (continued)**

- (b) The taxation on the Group's profit before taxation differs from the theoretical amount that would arise using the weighted average tax rate applicable to profits of the consolidated entities as follows:

	2012 \$m	2011 \$m
Profit before taxation	4,845	6,032
Tax calculated at domestic tax rates applicable to profits in the respective countries	798	995
Income not subject to taxation	(96)	(83)
Expenses not deductible for taxation purposes	44	5
Change in deferred tax arising from unrecognised tax losses and other deferred tax adjustments	15	22
Taxation charge	761	939

**19. Earnings Per Share**

The calculation of the basic and diluted earnings per share is as follows:

- (a) Basic earnings per share

	2012	As restated 2011
Profit attributable to shareholders (\$m)	4,084	5,093
Weighted average number of shares in issue less shares held for Share Award Scheme (in '000)	1,088,346	1,081,763
Basic earnings per share (\$)	3.75	4.71

- (b) Diluted earnings per share

	2012	As restated 2011
Profit attributable to shareholders (\$m)	4,084	5,093
Weighted average number of shares in issue less shares held for Share Award Scheme (in '000)	1,088,346	1,081,763
Effect of employee share options (in '000)	804	1,035
Effect of Awarded Shares (in '000)	1,961	1,383
Weighted average number of shares for the purpose of calculating diluted earnings per share (in '000)	1,091,111	1,084,181
Diluted earnings per share (\$)	3.74	4.70

- (i) The effect of the outstanding convertible bonds (note 35(b)) was not included in the computation of diluted earnings per share for the year ended 31 December 2012 as it was anti-dilutive.
- (ii) In December 2012, 65,705,000 HKEx shares were issued upon placement at a discount (note 39(a)). The effect of the bonus element of the share placement has been included within the calculation of basic and diluted earnings per share. The effect of the share placement was an increase in the weighted average number of ordinary shares for 2012 and 2011 by 4,589,000 and 4,561,000 respectively.

## 20. Dividends

	2012 \$m	2011 \$m
Interim dividend paid: \$1.85 (2011: \$2.16) per share	2,000	2,331
Less: Dividend for shares held by Share Award Scheme (note (a))	(4)	(4)
	1,996	2,327
Final dividend proposed (note (b)): \$1.46 (2011: \$2.09) per share based on issued share capital at 31 Dec	1,679	2,257
Less: Dividend for shares held by Share Award Scheme at 31 Dec (note (a))	(4)	(5)
	1,675	2,252
	3,671	4,579

- (a) The results and net assets of The HKEx Employees' Share Award Scheme are included in HKEx's financial statements. Therefore, dividends for shares held by The HKEx Employees' Share Award Scheme were deducted from the total dividends.
- (b) The final dividend proposed after 31 December was not recognised as a liability at 31 December.
- (c) The 2012 final dividend will be payable in cash with a scrip dividend alternative subject to the permission of the Securities and Futures Commission (SFC) of the listing of and permission to deal in the new shares to be issued.

## 21. Financial Assets

As part of its day to day operations, the Group receives margin deposits and cash collateral from Clearing Participants (note 31) and Participants' contributions to Clearing House Funds (note 34). The Group classifies the corresponding assets into the following funds:

**Margin Funds and cash collateral** – the Margin Funds and cash collateral are established by cash received or receivable from the Clearing Participants of the three clearing houses (ie, HKSCC, HKCC and SEOCH) to cover their open positions. These funds are held for segregated accounts of the respective clearing houses for this specified purpose and cannot be used by the Group to finance any other activities.

**Clearing House Funds** – The Clearing House Funds are established under the Clearing House Rules. Assets contributed by the Clearing Participants and the Group are held by the respective clearing houses (ie, HKSCC, HKCC and SEOCH) (together with the accumulated income less related expenses) expressly for the purpose of ensuring that the respective clearing houses are able to fulfil their counterparty obligations in the event that one or more of the Clearing Participants fail to meet their obligations to the clearing houses. The HKSCC Guarantee Fund also provides resources to enable HKSCC to discharge the liabilities and obligations of defaulting Clearing Participants arising from depositing defective securities into CCASS. These funds are held for segregated accounts of the respective clearing houses for this specified purpose and cannot be used by the Group to finance any other activities.

Financial assets belonging to the Group and HKEx for its own corporate use are classified as Corporate Funds (note 25).

The Margin Funds and cash collateral, Clearing House Funds and Corporate Funds are invested into cash and cash equivalents (note 22), financial assets measured at fair value through profit or loss (note 23) and financial assets measured at amortised cost (note 24).

## 22. Cash and Cash Equivalents

	Group		HKEx	
	At 31 Dec 2012 \$m	As restated At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Cash and cash equivalents:				
– Clearing House Funds (note 34)	2,325	835	–	–
– Margin Funds and cash collateral (note 31)	27,717	15,046	–	–
– (note (a))	30,042	15,881	–	–
– Corporate Funds (note 25)	4,035	2,340	797	607
	34,077	18,221	797	607

- (a) The cash and cash equivalents of Clearing House Funds, Margin Funds and cash collateral are held for specific purposes and cannot be used by the Group to finance other activities. Therefore they are not included in cash and cash equivalents of the Group for cash flow purpose in the consolidated statement of cash flows.

## 23. Financial Assets Measured at Fair Value through Profit or Loss

	Group			
	At 31 Dec 2012			
	Clearing House Funds (note 34) \$m	Margin Funds and cash collateral (note 31) \$m	Corporate Funds (note 25) \$m	Total \$m
<u>Mandatorily measured at fair value</u>				
Equity securities:				
– listed in Hong Kong	–	–	111	111
– listed outside Hong Kong	–	–	105	105
– unlisted	–	–	292	292
	–	–	508	508
Debt securities:				
– listed in Hong Kong	–	–	193	193
– listed outside Hong Kong	–	–	980	980
– unlisted	–	2,186	622	2,808
	–	2,186	1,795	3,981
Derivative financial instruments:				
– forward foreign exchange contracts (note 53(b))	–	–	3	3
	–	2,186	2,306	4,492
The expected recovery dates of the financial assets are analysed as follows:				
Within twelve months (note (a))	–	2,186	2,183	4,369
More than twelve months	–	–	123	123
	–	2,186	2,306	4,492

**23. Financial Assets Measured at Fair Value through Profit or Loss (continued)**

	Group			
	As restated At 31 Dec 2011			
	Clearing House Funds (note 34) \$m	Margin Funds and cash collateral (note 31) \$m	Corporate Funds (note 25) \$m	Total \$m
<u>Mandatorily measured at fair value</u>				
<u>Equity securities:</u>				
– listed in Hong Kong	–	–	102	102
– listed outside Hong Kong	–	–	284	284
	–	–	386	386
<u>Debt securities:</u>				
– listed in Hong Kong	–	–	217	217
– listed outside Hong Kong	125	283	1,914	2,322
– unlisted	159	5,982	2,251	8,392
	284	6,265	4,382	10,931
<u>Derivative financial instruments:</u>				
– forward foreign exchange contracts (note 53(b))	–	–	32	32
	284	6,265	4,800	11,349
<u>The expected recovery dates of the financial assets are analysed as follows:</u>				
Within twelve months (note (a))	284	6,265	4,620	11,169
More than twelve months	–	–	180	180
	284	6,265	4,800	11,349

- (a) Included financial assets maturing after twelve months is \$1,796 million (31 December 2011: \$1,867 million) attributable to the Margin Funds and cash collateral that could readily be liquidated to meet liquidity requirements of the Funds (note 53(b)).

**24. Financial Assets Measured at Amortised Cost**

- (a) Group

	At 31 Dec 2012			
	Clearing House Funds (note 34) \$m	Margin Funds and cash collateral (note 31) \$m	Corporate Funds (note 25) \$m	Total \$m
Unlisted debt securities	–	–	94	94
Time deposits with original maturities over three months	217	6,880	1,321	8,418
Other financial assets	–	–	61	61
	217	6,880	1,476	8,573
The expected recovery dates of the financial assets are analysed as follows:				
Within twelve months	217	6,880	1,345	8,442
More than twelve months	–	–	131	131
	217	6,880	1,476	8,573



**24. Financial Assets Measured at Amortised Cost (continued)****(a) Group (continued)**

	As restated At 31 Dec 2011			
	Clearing House Funds (note 34) \$m	Margin Funds and cash collateral (note 31) \$m	Corporate Funds (note 25) \$m	Total \$m
Debt securities:				
– listed outside Hong Kong (note (i))	–	–	245	245
– unlisted	–	–	461	461
	–	–	706	706
Time deposits with original maturities over three months	367	13,274	1,855	15,496
Other financial assets	–	–	49	49
	367	13,274	2,610	16,251
The expected recovery dates of the financial assets are analysed as follows:				
Within twelve months	367	13,274	2,207	15,848
More than twelve months	–	–	403	403
	367	13,274	2,610	16,251

(i) The total market value of the listed debt securities at 31 December 2011 was \$246 million.

**(b) HKEx**

	Corporate Funds	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Unlisted debt securities	6	14
Time deposits with original maturities over three months	1,207	1,472
Other financial assets	1	1
	1,214	1,487

(c) The carrying amounts of short-term time deposits approximated their fair values. The fair values of other financial assets maturing after twelve months and debt securities are disclosed in note 53(d)(ii).

**25. Corporate Funds**

	Group		HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
The Corporate Funds were invested in the following instruments:				
Cash and cash equivalents (note 22)	4,035	2,340	797	607
Financial assets measured at fair value through profit or loss (note 23)	2,306	4,800	–	–
Financial assets measured at amortised cost (note 24)	1,476	2,610	1,214	1,487
	7,817	9,750	2,011	2,094

## 26. Accounts Receivable, Prepayments and Deposits

	Group		HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Receivable from Exchange and Clearing Participants:				
– Continuous Net Settlement money obligations	12,733	6,482	–	–
– transaction levy, stamp duty and fees receivable	429	342	–	–
– others	162	164	–	–
Other receivables, prepayments and deposits	531	405	36	26
Less: Provision for impairment losses of receivables (note (b))	(159)	(160)	–	–
	13,696	7,233	36	26

- (a) The carrying amounts of short-term accounts receivable and deposits approximated their fair values.
- (b) The movements in provision for impairment losses of receivables were as follows:

	Group	
	2012 \$m	2011 \$m
At 1 Jan	160	158
(Reversal of provision for)/provision for impairment losses of receivables under other operating expenses	(1)	2
At 31 Dec	159	160

- (c) Continuous Net Settlement money obligations receivable mature within two days after the trade date. Fees receivable are due immediately or up to 60 days depending on the type of services rendered. The majority of the remaining accounts receivable, prepayments and deposits were due within three months.

## 27. Joint Arrangements

- (a) Interest in a joint venture

	Group	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Share of net assets of a joint venture (note (ii))	97	–

  

	HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Investment in unlisted shares, at cost	100	–

## 27. Joint Arrangements (continued)

### (a) Interest in a joint venture (continued)

#### (i) Details of the joint venture at 31 December 2012 were as follows:

Name	Place of business and country of incorporation	Principal activities	Particulars of shares held	% of ownership interest	Measurement method
China Exchanges Services Company Limited (CESC)	Hong Kong	Development of index-linked and equity derivatives products	100,000,000 ordinary shares of \$1 each	33.33%	Equity

On 28 June 2012, HKEx, the Shanghai Stock Exchange (SHSE) and the Shenzhen Stock Exchange (SZSE) (the three JV investors) entered into a tripartite agreement to establish a joint venture with an aim of developing financial products and related services. On 16 August 2012, CESC, a limited company, was incorporated in Hong Kong for such purpose. CESC is a strategic investment for the Group and it is expected to enhance the competitiveness of Hong Kong, help promote the development of China's capital markets and the internationalisation of the Group.

The three JV investors have an equal shareholding interest in CESC and have joint control over CESC as, under the agreement, unanimous consent is required from all investors for all activities that significantly affect the returns of the arrangement (ie, relevant activities). The joint arrangement also provides the three JV investors with rights to the net assets of CESC. Therefore, CESC is classified as a joint venture of the Group.

CESC is a private company and there is no quoted market price available for its shares.

#### (ii) Summarised statement of financial position of CESC and reconciliation to the carrying amount of the Group's share of net assets of CESC at 31 December 2012

	Current \$m	Non-current \$m	Total \$m
<b>Assets</b>			
Cash and cash equivalents	294	–	294
Other assets	–	9	9
<b>Total assets</b>	<b>294</b>	<b>9</b>	<b>303</b>
<b>Liabilities</b>			
Accounts payable, accruals, other liabilities and provisions	12	1	13
<b>Total liabilities</b>	<b>12</b>	<b>1</b>	<b>13</b>
<b>Net assets</b>	<b>282</b>	<b>8</b>	<b>290</b>
<b>Carrying amount of the Group's share of net assets of CESC (@33.33%)</b>			<b>97</b>

#### (iii) Summarised statement of comprehensive income of CESC for the period from 16 August 2012 (date of incorporation) to 31 December 2012

	\$m
Operating expenses	10
<b>Loss and total comprehensive income</b>	<b>(10)</b>
<b>Share of loss of CESC (@33.33%)</b>	<b>(3)</b>

## 27. Joint Arrangements (continued)

### (b) Interest in a joint operation

The Group's newly acquired subsidiary, LME, has entered into an agreement with Singapore Exchange Derivatives Trading Limited (SGX) with the objective of trading, clearing and settling LME mini contracts on systems provided by SGX in Singapore since 2010. LME SGX copper, aluminium and zinc futures were launched in 2011.

Assets, liabilities, income and expenditure were apportioned in accordance with the agreement and included in the Group's consolidated financial statements. Net costs to the Group incurred were less than \$1 million from 6 December 2012 (date of acquisition of the LME Group) to 31 December 2012.

## 28. Goodwill and Other Intangible Assets

### (a) Group

	Goodwill \$m	Other Intangible Assets			Total \$m
		Tradenames \$m	Customer relationships \$m	Software systems \$m	
<b>Cost:</b>					
At 1 Jan 2011 and 1 Jan 2012	–	–	–	–	–
Exchange differences	147	10	34	4	195
Acquisition of subsidiaries (note 49)	13,341	902	3,192	351	17,786
Additions	–	–	–	226	226
At 31 Dec 2012	13,488	912	3,226	581	18,207
<b>Accumulated amortisation:</b>					
At 1 Jan 2011 and 1 Jan 2012	–	–	–	–	–
Amortisation	–	–	11	13	24
At 31 Dec 2012	–	–	11	13	24
<b>Net book value:</b>					
At 31 Dec 2012	13,488	912	3,215	568	18,183
At 31 Dec 2011	–	–	–	–	–
<b>Cost of software systems under development:</b>					
At 31 Dec 2012	–	–	–	361	361
At 31 Dec 2011	–	–	–	–	–

Amortisation of \$24 million (2011: \$Nil) is included in the “depreciation and amortisation” in the consolidated statement of comprehensive income.

Tradenames are regarded to have indefinite useful lives and there is no foreseeable limit to the period over which they are expected to generate cash flows for the Group as it is expected that their value will not be reduced through usage and there are no legal or similar limits on the period for the use of the tradenames.

**28. Goodwill and Other Intangible Assets (continued)****(a) Group (continued)**

The Group has not yet completed its allocation of goodwill, of \$13,488 million, to those cash generating units that are expected to benefit from synergies of combination with the LME Group. During January 2013, the Group announced its Strategic Plan for 2013-2015, which included a re-organisation of the Group's segments/cash generating units and expects the allocation of goodwill to relevant cash generating units to be completed by 31 December 2013.

At 31 December 2012, the Group assessed that no triggering event had occurred since the acquisition date (6 December 2012), which indicated any impairment of the intangible assets or goodwill.

**(b) HKEx**

	Software systems \$m
<b>Cost:</b>	
At 1 Jan 2011 and 1 Jan 2012	–
Additions	22
At 31 Dec 2012	22
<b>Accumulated amortisation:</b>	
At 1 Jan 2011 and 1 Jan 2012	–
Amortisation	–
At 31 Dec 2012	–
<b>Net book value:</b>	
At 31 Dec 2012	22
At 31 Dec 2011	–
<b>Cost of software systems under development:</b>	
At 31 Dec 2012	22
At 31 Dec 2011	–

## 29. Fixed Assets

## (a) Group

	Leasehold land in Hong Kong under long term finance lease \$m	Leasehold buildings \$m	Computer trading and clearing systems \$m	Other computer hardware and software \$m	Data centre facilities and equipment \$m	Leasehold improvements, furniture, equipment and motor vehicles \$m	Total \$m
<b>Cost:</b>							
At 1 Jan 2011	70	37	1,294	227	–	296	1,924
Additions	–	334	129	65	185	30	743
Disposals	–	–	(13)	(9)	–	(2)	(24)
At 31 Dec 2011	70	371	1,410	283	185	324	2,643
At 1 Jan 2012	70	371	1,410	283	185	324	2,643
Exchange differences	–	–	–	1	–	–	1
Acquisition of subsidiaries (note 49)	–	–	–	27	–	1	28
Additions	–	340	29	73	206	223	871
Disposals	–	–	(121)	(10)	–	(2)	(133)
At 31 Dec 2012	70	711	1,318	374	391	546	3,410
<b>Accumulated depreciation:</b>							
At 1 Jan 2011	10	12	1,146	202	–	259	1,629
Depreciation	1	1	53	10	–	25	90
Disposals	–	–	(13)	(9)	–	(2)	(24)
At 31 Dec 2011	11	13	1,186	203	–	282	1,695
At 1 Jan 2012	11	13	1,186	203	–	282	1,695
Depreciation	–	9	63	28	8	26	134
Disposals	–	–	(87)	(5)	–	(2)	(94)
At 31 Dec 2012	11	22	1,162	226	8	306	1,735
<b>Net book value:</b>							
At 31 Dec 2012	59	689	156	148	383	240	1,675
At 31 Dec 2011	59	358	224	80	185	42	948
At 1 Jan 2011	60	25	148	25	–	37	295
<b>Cost of fixed assets in the course of construction (including systems under development):</b>							
At 31 Dec 2012	–	1	9	61	1	80	152
At 31 Dec 2011	–	355	144	63	185	12	759

## 29. Fixed Assets (continued)

(b) HKEx

	Other computer hardware and software \$m	Leasehold improvements, furniture, equipment and motor vehicles \$m	Total \$m
<b>Cost:</b>			
At 1 Jan 2011	65	46	111
Additions	19	21	40
Disposals	(2)	(2)	(4)
At 31 Dec 2011	82	65	147
At 1 Jan 2012	82	65	147
Additions	52	148	200
Disposals	(2)	(2)	(4)
At 31 Dec 2012	132	211	343
<b>Accumulated depreciation:</b>			
At 1 Jan 2011	51	31	82
Depreciation	5	9	14
Disposals	(2)	(2)	(4)
At 31 Dec 2011	54	38	92
At 1 Jan 2012	54	38	92
Depreciation	7	13	20
Disposals	(2)	(1)	(3)
At 31 Dec 2012	59	50	109
<b>Net book value:</b>			
At 31 Dec 2012	73	161	234
At 31 Dec 2011	28	27	55
At 1 Jan 2011	14	15	29
<b>Cost of fixed assets in the course of construction (including systems under development):</b>			
At 31 Dec 2012	58	57	115
At 31 Dec 2011	20	3	23

### 30. Lease Premium for Land

	Group	
	2012	2011
	\$m	\$m
Net book value at 1 Jan	25	25
Amortisation	(1)	–
Net book value at 31 Dec	24	25

(a) The amount represents a non-Hong Kong Government medium-term lease in Hong Kong.

### 31. Margin Deposits and Cash Collateral from Clearing Participants

	Group	
	At 31 Dec 2012	As restated At 31 Dec 2011
	\$m	\$m
Margin deposits and cash collateral from Clearing Participants comprised (notes (a) and 21):		
SEOCH Clearing Participants' margin deposits	4,125	5,302
HKCC Clearing Participants' margin deposits	30,237	26,057
HKSCC Clearing Participants' margin deposits and cash collateral	2,424	3,233
	36,786	34,592
The margin deposits and cash collateral were invested in the following instruments for managing the obligations of the Margin Funds and cash collateral:		
Cash and cash equivalents (note 22)	27,717	15,046
Financial assets measured at fair value through profit or loss (note 23)	2,186	6,265
Financial assets measured at amortised cost (note 24(a))	6,880	13,274
Margin receivable from Clearing Participants	3	7
	36,786	34,592

(a) Amounts excluded non-cash collateral received and utilised as alternative to cash margin and cash collateral.



### 32. Accounts Payable, Accruals and Other Liabilities

	Group		HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Payable to Exchange and Clearing Participants:				
– Continuous Net Settlement money obligations	12,733	6,482	–	–
– others	1,317	1,027	–	–
Transaction levy payable to the SFC	80	66	–	–
Unclaimed dividends (note (b))	215	208	133	118
Stamp duty payable to the Collector of Stamp Revenue	255	146	–	–
LME Long-Term Incentive Plan payable (note 40(d))	279	–	–	–
Other payables, accruals and deposits received	959	527	260	126
	15,838	8,456	393	244

- (a) The carrying amounts of accounts payable and other liabilities approximated their fair values.
- (b) Unclaimed dividends for the Group represent dividends declared by listed companies which were held by HKSX but not yet claimed by shareholders of the companies concerned, and dividends declared by HKEx but not yet claimed by its shareholders. During the year, cash dividends held by HKSX which had remained unclaimed for a period of more than seven years amounting to \$13 million (2011: \$108 million) were forfeited and recognised as sundry income (note 9) and dividends declared by HKEx which were unclaimed over a period of six years from the date of payment amounting to \$7 million (2011: \$6 million) were forfeited and transferred to retained earnings in accordance with HKEx's Articles of Association (note 44).
- (c) Continuous Net Settlement money obligations payable mature within two days after the trade date. The majority of the remaining accounts payable, accruals and other liabilities would mature within three months.

### 33. Other Financial Liabilities

	Group		HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Financial liabilities of Clearing House Funds (note 34)	31	29	–	–
Financial liabilities of Corporate Funds:				
Financial liabilities at fair value through profit or loss (note (a))	6	11	–	–
Financial guarantee contracts (note (b))	20	20	203	11
	26	31	203	11
	57	60	203	11

- (a) Financial liabilities at fair value through profit or loss

	Group	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Held for trading		
Derivative financial instruments:		
– forward foreign exchange contracts (note 53(b))	6	11

**33. Other Financial Liabilities (continued)****(b) Financial guarantee contracts****(i) Group**

The amount represents the carrying value of a financial guarantee provided by the Group to the Collector of Stamp Revenue, details of which are disclosed in note 47(a)(ii).

**(ii) HKEx**

The amounts represent the carrying value of an undertaking provided by HKEx in favour of HKSCC amounting to \$50 million (note 47(b)(i)) and the carrying value of the guarantee provided by HKEx for the convertible bonds issued by HKEx International Limited (note 47(b)(ii)) (2011: carrying value of the undertaking provided by HKEx in favour of HKSCC amounting to \$50 million). The amounts were eliminated on consolidation.

**34. Clearing House Funds**

	<b>Group</b>	
	<b>At 31 Dec 2012 \$m</b>	<b>At 31 Dec 2011 \$m</b>
The Clearing House Funds comprised (note 21):		
Clearing Participants' contributions (note (a))	1,924	880
Designated reserves (notes (b) and 42)	587	577
	<b>2,511</b>	<b>1,457</b>
The Clearing House Funds were invested in the following instruments for managing the obligations of the Funds:		
Cash and cash equivalents (note 22)	2,325	835
Financial assets measured at fair value through profit or loss (note 23)	–	284
Financial assets measured at amortised cost (note 24(a))	217	367
	<b>2,542</b>	<b>1,486</b>
Less: Other financial liabilities of Clearing House Funds (note 33)	<b>(31)</b>	<b>(29)</b>
	<b>2,511</b>	<b>1,457</b>
The Clearing House Funds comprised the following Funds:		
HKSCC Guarantee Fund	228	226
SEOCH Reserve Fund	414	578
HKCC Reserve Fund	1,869	653
	<b>2,511</b>	<b>1,457</b>

- (a) Amounts excluded bank guarantees received and utilised as alternatives to cash contributions.
- (b) Designated reserves comprise contributions from the clearing houses and accumulated net investment income net of expenses of the Clearing House Funds appropriated from retained earnings.

### 35. Borrowings

	Group		HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Bank borrowings (note (a))	3,100	–	3,100	–
Convertible bonds (note (b))	3,515	–	–	–
Total borrowings	6,615	–	3,100	–

At 31 December 2012, the Group's and HKEx's borrowings were repayable as follows:

	Group				HKEx	
	Bank borrowings		Convertible bonds		Bank borrowings	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
After 1 year but within 2 years	31	–	–	–	31	–
After 2 years but within 5 years	124	–	3,515	–	124	–
After 5 years	2,945	–	–	–	2,945	–
	3,100	–	3,515	–	3,100	–

(a) Bank borrowings

Bank borrowings mature within 10 years and bear average coupons of 2.2 per cent per annum. The average effective interest rate of the bank borrowings is 2.3 per cent per annum.

(b) Convertible bonds

On 23 October 2012, HKEx issued convertible bonds (the Bonds) in the principal amount of US\$500 million (HK\$3,875 million). The Bonds pay interest at the rate of 0.50 per cent per annum and mature on 23 October 2017. The redemption value of the Bonds at maturity is 102.56 per cent of their principal amount. At any time between 3 December 2012 and 13 October 2017, the Bonds can be converted into ordinary shares of HKEx at an initial conversion price of HK\$160 per share (subject to adjustments) at the option of the holders of the Bonds.

To the extent that the holders of the Bonds have not previously exercised their conversion option, at any time after 7 November 2014, HKEx may, by giving notice to the holders of the Bonds, elect to redeem the Bonds in whole but not in part, if the closing price of HKEx shares for any 20 out of the 30 consecutive trading days immediately prior to the date upon which notice of such redemption is given, was at least 130 per cent of the applicable early redemption amount (translated into HKD at the fixed exchange rate of HK\$7.7531 = US\$1) divided by the conversion ratio (ie, if the HKEx share price is above the floor price of HK\$208 accreting at 0.5 per cent per annum). HKEx also has the option to redeem the outstanding Bonds in whole but not in part if the aggregate principal amount of the Bonds outstanding is less than US\$50 million. In addition, HKEx was entitled at its option to redeem the Bonds in whole if The Financial Services Authority of the United Kingdom (FSA) did not approve the acquisition of the LME Group.

HKEx used the proceeds of the Bonds to fund part of the acquisition of the LME Group (note 49).

### 35. Borrowings (continued)

#### (b) Convertible bonds (continued)

Prior to the Substitution described below, the Bonds comprised two elements and were accounted for as follows:

- The debt element of HK\$3,521 million was treated as a financial liability and measured at amortised cost and interest expense was recognised in profit or loss using the effective interest method.
- The share conversion option element of HK\$354 million was treated as a derivative liability with subsequent changes in fair value being recognised in profit or loss.

With effect from 17 December 2012, HKEx has substituted in its place HKEx International Limited, a wholly-owned subsidiary of HKEx whose functional currency is United States dollars (USD), as the issuer and the principal obligor under the Bonds (the Substitution); all payments due under the Bonds will be unconditionally and irrevocably guaranteed by HKEx and HKEx remains obliged to issue and deliver HKEx shares on conversion of the Bonds. Following the Substitution and upon receipt of FSA approval for the acquisition of the LME Group, both the number of HKEx shares and the amount of cash that would be exchanged upon conversion of the Bonds became fixed. Accordingly, the share conversion option element of the Bonds was remeasured at its fair value on that date and was transferred from derivative liability to the convertible bond reserve under equity in the consolidated financial statements of the Group and will not be revalued thereafter. In the HKEx's financial statements, the amount included in the convertible bond reserve represents commitment by HKEx to issue shares upon conversion.

The movements of the liability component and derivative component of the Bonds for the year since issuance are set out below:

	Liability component \$m	Group Derivative component \$m	Total \$m
Issuance of the Bonds	3,521	354	3,875
Transaction costs of the Bonds	(27)	–	(27)
Interest expenses (notes (i) and 15)	21	–	21
Changes in fair value recognised in profit or loss during the period from issuance to Substitution (note (ii))	–	55	55
Transfer to convertible bond reserve	–	(409)	(409)
At 31 Dec 2012	3,515	–	3,515

**35. Borrowings (continued)****(b) Convertible bonds (continued)**

		HKEx	
	Liability component \$m	Derivative component \$m	Total \$m
Issuance of the Bonds	3,521	354	3,875
Transaction costs of the Bonds	(27)	–	(27)
Interest expenses (note (i))	16	–	16
Changes in fair value recognised in profit or loss during the period from issuance to Substitution (note (ii))	–	55	55
Transfer to a subsidiary	(3,510)	–	(3,510)
Transfer to convertible bond reserve	–	(409)	(409)
At 31 Dec 2012	–	–	–

- (i) The effective interest rate of the liability component is 3.1 per cent per annum.
- (ii) The changes in fair value of the derivative component were included in “fair value loss on derivative component of convertible bonds” in the consolidated statement of comprehensive income.

**36. Provisions****(a) Group**

	Reinstatement costs \$m	Employee benefit costs \$m	Total \$m
At 1 Jan 2012	29	33	62
Acquisition of subsidiaries (note 49)	–	1	1
Provision for the year	19	57	76
Amount used during the year	–	(47)	(47)
Amount paid during the year	–	(3)	(3)
At 31 Dec 2012	48	41	89

**(b) HKEx**

	Reinstatement costs \$m	Employee benefit costs \$m	Total \$m
At 1 Jan 2012	1	33	34
Provision for the year	1	57	58
Amount used during the year	–	(47)	(47)
Amount paid during the year	–	(3)	(3)
At 31 Dec 2012	2	40	42

- (i) The provision for reinstatement costs represents the estimated costs used for restoring the leased office premises to their original state upon the expiry of the leases. The leases are expected to expire within six years.
- (ii) The provision for employee benefit costs represents unused annual leave that has been accumulated at the end of the reporting period. It is expected to be fully utilised in the coming twelve months.

### 37. Deferred Taxation

Deferred taxation is calculated in full on temporary differences under the liability method.

(a) The movements on the net deferred tax liabilities/(assets) account were as follows:

	Group		HKEx	
	2012 \$m	2011 \$m	2012 \$m	2011 \$m
At 1 Jan	32	15	(1)	(2)
Exchange differences	10	–	–	–
Acquisition of subsidiaries (note 49)	983	–	–	–
Charged to profit or loss (note 18(a))	11	17	14	1
At 31 Dec (note (d))	1,036	32	13	(1)

(b) Deferred tax assets are recognised for tax losses carried forward to the extent that realisation of the related tax benefit through future taxable profits is probable. The Group had unrecognised tax losses of \$431 million at 31 December 2012 (31 December 2011: \$449 million) that may be carried forward for offsetting against future taxable income indefinitely.

(c) The movements on the net deferred tax liabilities/(assets) account were as follows:

	Group											
	Accelerated tax depreciation		Intangible assets		Financial assets		Tax losses		Employee benefits		Total	
	2012 \$m	2011 \$m	2012 \$m	2011 \$m	2012 \$m	2011 \$m	2012 \$m	2011 \$m	2012 \$m	2011 \$m	2012 \$m	2011 \$m
At 1 Jan	49	24	–	–	–	–	(12)	(4)	(5)	(5)	32	15
Exchange differences	–	–	10	–	–	–	–	–	–	–	10	–
Acquisition of subsidiaries (note 49)	(10)	–	942	–	59	–	(8)	–	–	–	983	–
Charged/(credited) to profit or loss	43	25	(3)	–	–	–	(28)	(8)	(1)	–	11	17
At 31 Dec	82	49	949	–	59	–	(48)	(12)	(6)	(5)	1,036	32

  

	HKEx					
	Accelerated tax depreciation		Employee benefits		Total	
	2012 \$m	2011 \$m	2012 \$m	2011 \$m	2012 \$m	2011 \$m
At 1 Jan	4	3	(5)	(5)	(1)	(2)
Charged/(credited) to profit or loss	15	1	(1)	–	14	1
At 31 Dec	19	4	(6)	(5)	13	(1)

**37. Deferred Taxation (continued)**

- (d) Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when the deferred taxes relate to tax levied by the same fiscal authority. The following amounts, determined after appropriate offsetting, are shown in the statements of financial position:

	Group		HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Net deferred tax assets	(20)	(1)	–	(1)
Net deferred tax liabilities	1,056	33	13	–
	1,036	32	13	(1)

- (e) The analysis of deferred tax liabilities/(assets) is as follows:

	Group		HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
<b>Deferred tax liabilities</b>				
Amounts to be recovered or settled after more than 12 months	997	33	19	–
Amounts to be recovered or settled within 12 months	59	–	(6)	–
	1,056	33	13	–

At 31 December 2012 and 31 December 2011, the deferred tax assets were expected to be recovered after more than twelve months.

**38. Investments in and Amounts Due from/to Subsidiaries and Controlled Special Purpose Entity**

- (a) Investments in subsidiaries

	HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Investments in unlisted shares, at cost	4,146	4,146
Adjustment to carrying value (note (i))	(2,303)	(2,303)
	1,843	1,843
Capital contribution to a subsidiary (note (ii))	2,797	–
Financial guarantees granted to subsidiaries (note 33(b)(ii))	203	11
	4,843	1,854

- (i) In 2011, the directors of HKEx's subsidiaries resolved that the subsidiaries would pay substantially all of their annual profits to HKEx prior to the date of their statement of financial position. The subsidiaries had in aggregate retained earnings amounting to \$2,303 million prior to the merger in 2000 and the directors therefore consider that, following the implementation of the new dividend policy by HKEx's subsidiaries, HKEx's investments in its subsidiaries should be reduced by an amount of \$2,303 million.

### 38. Investments in and Amounts Due from/to Subsidiaries and Controlled Special Purpose Entity (continued)

#### (a) Investments in subsidiaries (continued)

- (ii) In 2012, HKEx advanced an interest-free loan of US\$1,586 million (HK\$12,290 million) to a subsidiary, HKEx Investment (UK) Limited. The loan is unsecured and repayable in 2017. The fair value of the loan at initial recognition was \$9,493 million and was determined as the present value of all future cash receipts discounted using prevailing market interest rate for a loan with similar credit rating and maturity. The difference of \$2,797 million between the loan amount and the fair value of the loan was accounted for as a capital contribution to the subsidiary and included in the investments in subsidiaries.

#### (b) Amounts due from/to subsidiaries

The amounts due from/to subsidiaries under current assets and current liabilities are unsecured and repayable on demand. The amounts are interest-free during 2012 and 2011.

The amounts due from subsidiaries at 31 December 2012 under non-current assets represent loans to a subsidiary, HKEx Investment (UK) Limited, for the acquisition of the LME Group. The loans are unsecured and repayable in 2017. Part of the balance amounting to US\$700 million (HK\$5,426 million) is interest bearing at an average interest rate of 5.0 per cent per annum, and the remaining balance is interest-free.

The amounts due to subsidiaries at 31 December 2012 under non-current liabilities represent a loan from a subsidiary, HKEx International Limited, which is unsecured and repayable in 2017. The balance is interest bearing at 0.6 per cent per annum.

#### (c) Particulars of subsidiaries

HKEx had direct or indirect interests in the following subsidiaries at 31 December 2012:

Company	Place of business/ incorporation	Issued and fully paid up share/ registered capital	Principal activities	Interest held by the Group
<b>Direct subsidiaries:</b>				
The Stock Exchange of Hong Kong Limited	Hong Kong	"A" shares \$929	Operates the single Stock Exchange in Hong Kong	100%
Hong Kong Futures Exchange Limited	Hong Kong	Ordinary \$19,600,000 Standard \$850,000	Operates a futures and options exchange	100%
Hong Kong Securities Clearing Company Limited	Hong Kong	Ordinary \$2	Operates a clearing house for securities traded on the Stock Exchange in Hong Kong and the central securities depository and provides custody and nominee services for eligible securities listed in Hong Kong	100%
OTC Clearing Hong Kong Limited	Hong Kong	\$1	Operates a clearing house for over-the-counter derivatives	100%
HKEx Hosting Services Limited (formerly known as The Stock Exchange Nominee Limited) (note (i))	Hong Kong	\$2	Provision of hosting services	100%
HKEx Property Limited	Hong Kong	Ordinary \$2	Property holding	100%
HKEx International Limited	Hong Kong	\$1	Investment holding	100%
HKEx (China) Limited	Hong Kong	\$2	Promotes HKEx products and services	100%



### 38. Investments in and Amounts Due from/to Subsidiaries and Controlled Special Purpose Entity (continued)

(c) Particulars of subsidiaries (continued)

Company	Place of business/ incorporation	Issued and fully paid up share/ registered capital	Principal activities	Interest held by the Group
<b>Indirect subsidiaries:</b>				
The SEHK Options Clearing House Limited	Hong Kong	Ordinary \$1,000,000	Operates a clearing house for options contracts traded on the Stock Exchange in Hong Kong	100%
HKEx Information Services Limited	Hong Kong	\$100	Sales of market data	100%
The Stock Exchange Club Limited	Hong Kong	\$8	Property holding	100%
HKFE Clearing Corporation Limited	Hong Kong	Ordinary \$1,000,000	Operates a clearing house for derivatives contracts traded on the Futures Exchange	100%
HKSCC Nominees Limited	Hong Kong	\$20	Act as common nominee in respect of securities held in the CCASS depository	100%
HK Conversion Agency Services Limited	Hong Kong	\$2	Conversion agency services	100%
HKEx Investment (UK) Limited (formerly known as Alnery No. 3032 Limited)	United Kingdom	Ordinary £1	Investment holding	100%
LME Holdings Limited	United Kingdom	Ordinary £1,290,000	Investment holding	100%
The London Metal Exchange (formerly The London Metal Exchange Limited) (note (ii))	United Kingdom	Ordinary £100	Operates an exchange for the trading of base metals forward and options contracts	100%
LME Clear Limited	United Kingdom	Ordinary £1	Development of a platform for clearing contracts traded on LME	100%
Ganghui Financial Information Services (Shanghai) Limited	China	US\$770,000	Operates a market data hub in China	100%

- (i) On 26 March 2012, The Stock Exchange Nominee Limited, a dormant subsidiary held by the Stock Exchange, was renamed as HKEx Hosting Services Limited. On 2 April 2012, all of the shares of HKEx Hosting Services Limited were transferred to HKEx at a consideration of \$2. There is no financial impact to the Group on the share transfer.
- (ii) On 13 December 2012, The London Metal Exchange Limited was converted from a limited company by guarantee without any share capital to an unlimited company.
- (iii) Significant restrictions

Cash and saving deposits are held by a subsidiary in China and are subject to exchange control restrictions. The carrying amount of these restricted assets in the consolidated financial statements at 31 December 2012 was \$6 million (31 December 2011: \$Nil).

### 38. Investments in and Amounts Due from/to Subsidiaries and Controlled Special Purpose Entity (continued)

#### (d) Controlled special purpose entity

HKEEx controls a special purpose entity which operates in Hong Kong, particulars of which are as follows:

Special purpose entity	Principal activities
The HKEEx Employees' Share Award Scheme (HKEEx Employee Share Trust)	Purchases, administers and holds HKEEx shares for the Share Award Scheme for the benefit of eligible HKEEx employees (note 40(c))

As the HKEEx Employee Share Trust is set up solely for the purpose of purchasing, administering and holding HKEEx shares for the Share Award Scheme (note 40(c)), HKEEx has the power to direct the relevant activities of the HKEEx Employee Share Trust and it has the ability to use its power over the HKEEx Employee Share Trust to affect its exposure to returns. Therefore, the assets and liabilities of HKEEx Employee Share Trust are included in HKEEx's statement of financial position and the HKEEx shares it held are presented as a deduction in equity as Shares held for Share Award Scheme.

### 39. Share Capital, Share Premium and Shares Held for Share Award Scheme

	HKEEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Authorised: 2,000,000,000 shares of \$1 each	2,000	2,000

Issued and fully paid:

	Group and HKEEx				
	Number of shares of \$1 each '000	Share capital \$m	Share premium \$m	Shares held for Share Award Scheme \$m	Total \$m
At 1 Jan 2011	1,076,436	1,078	416	(219)	1,275
Shares issued upon exercise of employee share options (note (b))	470	–	8	–	8
Shares issued in lieu of cash dividends (note (c))	1,298	2	213	(7)	208
Transfer from employee share-based compensation reserve upon exercise of employee share options (note 40)	–	–	2	–	2
Shares purchased for Share Award Scheme (note (d))	(628)	–	–	(80)	(80)
Vesting of shares of Share Award Scheme (note (e))	94	–	–	10	10
At 31 Dec 2011	1,077,670	1,080	639	(296)	1,423
At 1 Jan 2012	1,077,670	1,080	639	(296)	1,423
Shares issued upon placement of shares (note (a))	65,705	66	7,642	–	7,708
Shares issued upon exercise of employee share options (note (b))	122	–	2	–	2
Shares issued in lieu of cash dividends (note (c))	4,004	4	447	(9)	442
Transfer from employee share-based compensation reserve upon exercise of employee share options (note 40)	–	–	1	–	1
Shares purchased for Share Award Scheme (note (d))	(738)	–	–	(93)	(93)
Vesting of shares of Share Award Scheme (note (e))	645	–	–	93	93
At 31 Dec 2012	1,147,408	1,150	8,731	(305)	9,576

**39. Share Capital, Share Premium and Shares Held for Share Award Scheme (continued)**

- (a) On 7 December 2012, 65,705,000 HKEx shares were issued at \$118.00 each to third party independent professional and institutional investors and the Hong Kong Government at a total consideration of \$7,753 million. The price for each share represented a discount of 5.4 per cent to the market price of HKEx shares of \$124.80 on 29 November 2012, the date on which the terms of the issue were fixed. The related transaction costs amounting to \$45 million have been netted off against the proceeds. The net proceeds were used to fund part of the consideration for the acquisition of the LME Group (note 49).
- (b) During the year, employee share options granted under the share option schemes were exercised to subscribe for 121,500 shares (2011: 469,900 shares) in HKEx at a consideration of \$2 million (2011: \$8 million), of which less than \$1 million (2011: less than \$1 million) was credited to share capital and \$2 million (2011: \$8 million) was credited to the share premium account.
- (c) During the year, the following shares were issued to shareholders who elected to receive HKEx shares in lieu of cash dividends pursuant to the scrip dividend scheme:

	2012					
	Number of shares	Scrip price \$	Share capital \$m	Share premium \$m	Shares held for Share Award Scheme \$m	Total \$m
Issued as 2011 final scrip dividends:						
– total	860,935	124.46	1	106	–	107
– to Share Award Scheme	(37,053)	124.46	–	–	(5)	(5)
Issued as 2012 interim scrip dividends:						
– total	3,214,012	106.98	3	341	–	344
– to Share Award Scheme	(33,597)	106.98	–	–	(4)	(4)
	<b>4,004,297</b>		<b>4</b>	<b>447</b>	<b>(9)</b>	<b>442</b>

  

	2011					
	Number of shares	Scrip price \$	Share capital \$m	Share premium \$m	Shares held for Share Award Scheme \$m	Total \$m
Issued as 2010 final scrip dividends:						
– total	586,917	181.14	1	106	–	107
– to Share Award Scheme	(21,148)	181.14	–	–	(4)	(4)
Issued as 2011 interim scrip dividends:						
– total	757,477	142.06	1	107	–	108
– to Share Award Scheme	(25,747)	142.06	–	–	(3)	(3)
	<b>1,297,499</b>		<b>2</b>	<b>213</b>	<b>(7)</b>	<b>208</b>

- (d) During the year, the Share Award Scheme (note 40(c)) acquired 737,800 HKEx shares (2011: 627,700 shares) through purchases on the open market. The total amount paid to acquire the shares during the year was \$93 million (2011: \$80 million).
- (e) During the year, the Share Award Scheme transferred 644,763 HKEx shares (2011: 94,421 shares) to the awardees upon vesting of certain Awarded Shares and the shares arising from related dividends reinvested. The total cost of the vested shares was \$93 million (2011: \$10 million).

#### 40. Employee Share-based Arrangements

The movements of employee share-based compensation reserve were as follows:

	Group and HKEx	
	2012 \$m	2011 \$m
At 1 Jan	106	56
Employee share-based compensation benefits (note 10)	105	61
Transfer to share premium upon exercise of employee share options (note 39)	(1)	(2)
Vesting of shares of Share Award Scheme	(88)	(9)
At 31 Dec	122	106

- (a) The Group operates a share option scheme (HKEx Share Option Scheme) and a share award scheme (HKEx Share Award Scheme) as part of the benefits to its employees in Hong Kong. The LME Group also operates a long-term incentive plan for its employees in the United Kingdom (LME Long-Term Incentive Plan).

- (b) HKEx Share Option Scheme

- (i) Under the terms of the HKEx Post-Listing Share Option Scheme (HKEx Post-Listing Scheme), share options were granted to employees during the period from May 2003 to January 2005 respectively. The share options vest progressively from the second to the fifth year after the grant provided that the relevant employee remained employed by the Group. Forfeited share options would be cancelled. Share options for the HKEx Post-Listing Scheme are exercisable up to 10 years after the grant date.

The estimated fair value of share options granted was determined at the date of the grant and is charged as an expense over the projected vesting period being the period for which the services from the employees were rendered with a corresponding credit to employee share-based compensation reserve.

On exercising the share options, the consideration received is credited to share capital in respect of the nominal value of the shares issued with the balance credited to share premium. The original estimated fair value of the relevant share options is then transferred from employee share-based compensation reserve to share premium.

When vested share options are not exercised on expiry, the original estimated fair value of such share options is transferred from employee share-based compensation reserve to retained earnings.

**40. Employee Share-based Arrangements (continued)**

## (b) HKEx Share Option Scheme (continued)

- (ii) Movements in the number of shares issuable under options granted and their related weighted average exercise prices were as follows:

	2012		2011	
	Average exercise price per share \$	Number of shares issuable under options granted '000	Average exercise price per share \$	Number of shares issuable under options granted '000
<b>HKEx Post-Listing Scheme</b>				
Outstanding at 1 Jan	18.28	985	18.28	1,455
Exercised	17.88	(122)	18.29	(470)
Outstanding at 31 Dec	18.33	863	18.28	985

At 31 December 2012, all outstanding options (31 December 2011: all) were vested and exercisable at a weighted average exercise price of \$18.33 per share (31 December 2011: \$18.28 per share).

Options exercised in 2012 resulted in 121,500 shares (2011: 469,900 shares) being issued at a weighted price of \$17.88 per share (2011: \$18.29 per share). The weighted average closing share price on the dates on which the options were exercised was \$117.02 (2011: \$161.06) per share.

- (iii) Share options outstanding at 31 December had the following remaining contractual lives and exercise prices:

	At 31 Dec 2012		At 31 Dec 2011	
	Remaining contractual life	Number of shares issuable under options granted '000	Remaining contractual life	Number of shares issuable under options granted '000
Exercise price				
\$16.96	1.24 years	309	2.24 years	382
\$15.91	1.37 years	25	2.37 years	25
\$19.25	2.07 years	529	3.07 years	578
	1.75 years	863	2.73 years	985

#### 40. Employee Share-based Arrangements (continued)

##### (c) HKEx Share Award Scheme

- (i) From September 2005, the HKEx Share Award Scheme (the Scheme) has been in effect. The terms of the Scheme provide for shares in HKEx to be awarded to employees of the Group (including the Executive Director) as part of their compensation package. Such shares would be vested progressively over the vesting period after the awards are granted, provided that the relevant awardee remained employed by the Group or retired on reaching normal retirement age. In April 2010, the Board resolved to amend the Scheme and change the vesting period of the Awarded Shares granted on or after 13 May 2010 from 5 years to 3 years, and the shares would be vested in two equal tranches from the second to the third year after the shares are granted, as opposed to four equal tranches from the second to fifth year prior to the change. Before vesting, the Awarded Shares are held in a trust set up by the Scheme.

For awardees who cease employment with the Group before vesting, the unvested shares are forfeited. The forfeited shares are held by the trustee of the Scheme who may award such shares to the awardees taking into consideration recommendations of the Board.

Following the Board's decision to award shares to eligible employees, the Awarded Shares are either purchased from the market or are awarded by regranting the forfeited or unallocated shares held by the Scheme.

The cost of the Awarded Shares (for shares purchased from the market) or the fair value of the Awarded Shares at the date of the grant (for shares awarded by regranting forfeited or unallocated shares held by the Scheme) is charged to staff costs and related expenses over the projected vesting period being the period for which the services from the employees are rendered with a corresponding credit to employee share-based compensation reserve.

Further shares are derived from dividends payable on the Awarded Shares held in the Scheme from reinvesting the dividends or under the scrip dividend scheme (dividend shares), and the amount is debited to Shares held for Share Award Scheme. The dividend shares are allocated to the awardees on a pro rata basis and have the same vesting periods as the related Awarded Shares.

Upon vesting and transfer to the awardees, the related costs of the vested Awarded Shares purchased from the market and the dividend shares are credited to Shares held for Share Award Scheme, with a corresponding decrease in employee share-based compensation reserve for Awarded Shares, and decrease in retained earnings for dividend shares.

For vesting of forfeited or unallocated shares regranting, the related costs of the forfeited or unallocated shares regranting are credited to Shares held for Share Award Scheme, and the related fair value of the shares regranting are debited to employee share-based compensation reserve. The difference between the cost and the fair value of the shares regranting is credited to share premium if the fair value is higher than the cost or debited against retained earnings if the fair value is less than the cost.

#### 40. Employee Share-based Arrangements (continued)

##### (c) HKEx Share Award Scheme (continued)

##### (i) (continued)

Details of the Awarded Shares awarded during 2011 and 2012 are set out below:

Date of approval by Board	Date of award	Awarded Sum \$'000	Number of shares purchased	Number of Awarded Shares awarded	Average fair value per share \$	Vesting period
14 Dec 2010	30 Mar 2011	570	3,300	3,300	169.92	13 Jan 2013 – 13 Jan 2014
14 Dec 2010	30 Mar 2011	2,310	13,600	13,600	169.92	1 Feb 2013 – 1 Feb 2014
14 Dec 2010	8 Apr 2011	263	1,400	1,400	179.55	1 Apr 2013 – 1 Apr 2014
14 Dec 2010	9 Jun 2011	570	3,300	3,300	171.59	26 Apr 2013 – 26 Apr 2014
14 Dec 2010	8 Jul 2011	1,560	9,200	9,200	168.87	8 Jul 2013 – 8 Jul 2014
14 Dec 2010	7 Sept 2011	405	2,900	2,900	137.12	20 Jul 2013 – 20 Jul 2014
14 Dec 2010	11 Oct 2011	1,620	11,800	11,800	137.22	19 Sept 2013 – 19 Sept 2014
14 Dec 2010	11 Oct 2011	1,560	14,400	14,400	108.03	3 Oct 2013 – 3 Oct 2014
14 Dec 2011	30 Dec 2011	113,624	567,800	912,437 <sup>1,2</sup>	124.75	14 Dec 2013 – 14 Dec 2014
14 Dec 2010	28 Mar 2012	500	3,400	3,400	143.74	3 Jan 2014 – 3 Jan 2015
14 Dec 2011	22 Jun 2012	256	2,300	2,300	108.45	26 Mar 2014 – 26 Mar 2015
14 Dec 2011	22 Jun 2012	345	3,100	3,100	108.42	2 Apr 2014 – 2 Apr 2015
14 Dec 2011	22 Jun 2012	412	3,800	3,800	108.45	2 May 2014 – 2 May 2015
14 Dec 2011	22 Jun 2012	990	9,100	9,100	108.39	2 May 2014 – 2 May 2015
14 Dec 2011	5 Sept 2012	975	8,900	8,900	109.00	7 Jul 2014 – 7 Jul 2015
3 Dec 2012	31 Dec 2012	102,398	707,200	810,245 <sup>1,2</sup>	126.71	3 Dec 2014 – 3 Dec 2015

<sup>1</sup> 70,495 and 70,556 shares were awarded to the Chief Executive of HKEx on 30 December 2011 and 31 December 2012 respectively.

<sup>2</sup> 344,706 and 103,116 shares were awarded by re-granting the forfeited or unallocated shares held by the Scheme on 30 December 2011 and 31 December 2012 respectively.

Details of the Awarded Shares vested during 2011 and 2012 are as follows:

Date of award	Average fair value per share \$	2012		2011	
		Number of Awarded Shares vested	Cost of related Awarded Shares \$m	Number of Awarded Shares vested	Cost of related Awarded Shares \$m
15 Jan 2007	72.28	–	–	40,220	3
17 Jul 2007	102.29	1,375	<1	1,375	< 1
4 Feb 2008	163.72	25,688	4	25,961	5
3 Feb 2009	81.96	14,975	1	14,975	1
10 Jun 2010	123.29	308,250 <sup>3</sup>	38	–	–
9 Jul 2010	121.88	3,450	1	–	–
31 Dec 2010	176.75	238,900 <sup>4</sup>	42	–	–
30 Dec 2011	124.75	11,524	2	–	–
		<b>604,162</b>	<b>88</b>	<b>82,531</b>	<b>9</b>

<sup>3</sup> 36,608 of the shares vested were for the Chief Executive of HKEx

<sup>4</sup> 20,428 of the shares vested were for the Chief Executive of HKEx

**40. Employee Share-based Arrangements (continued)****(c) HKEx Share Award Scheme (continued)****(i) (continued)**

During the year, 70,650 HKEx shares (2011: 46,895 shares) were issued to the Scheme in lieu of cash dividends at a total consideration of \$9 million (2011: \$7 million), of which 67,723 shares (2011: 38,052 shares) were subsequently allocated to awardees.

During the year, 40,601 dividend shares (2011: 11,890 shares), including 3,503 shares (2011: Nil) for the Chief Executive of HKEx, at a cost of \$5 million (2011: \$1 million) were vested and transferred to the employees at nil consideration.

**(ii) Movements in the number of Awarded Shares awarded and dividend shares were as follows:**

	<b>2012</b>	<b>2011</b>
	<b>Number of Awarded Shares and dividend shares</b>	<b>Number of Awarded Shares and dividend shares</b>
Outstanding at 1 Jan	2,211,716	1,416,002
Awarded <sup>1</sup>	840,845	972,337
Forfeited	(89,455)	(115,998)
Vested	(604,162)	(82,531)
Dividend shares:		
– allocated to awardees	67,723	38,052
– allocated to awardees but subsequently forfeited	(2,877)	(4,256)
– vested	(40,601)	(11,890)
Outstanding at 31 Dec	<b>2,383,189</b>	2,211,716

<sup>1</sup> Average fair value per share was \$126.19 (2011: \$126.13)

**(iii) The remaining vesting periods of the Awarded Shares awarded and dividend shares outstanding at 31 December were as follows:**

	At 31 Dec 2012		At 31 Dec 2011	
	Remaining vesting period	Number of Awarded Shares and dividend shares outstanding	Remaining vesting period	Number of Awarded Shares and dividend shares outstanding
Shares awarded in				
2007	NA	–	0.47 year	1,375
2008	NA	–	0.95 year	26,059
2009	0.00 year to 1.00 year	29,950	0.00 year to 2.00 years	44,925
2010	0.37 year to 0.95 year	535,130	0.37 year to 1.95 years	1,116,294
2011	0.04 year to 1.95 years	911,393	1.04 years to 2.95 years	972,337
2012	1.01 years to 2.92 years	831,745	N/A	–
Dividend shares	0.00 year to 2.33 years	74,971	0.00 year to 2.55 years	50,726
		2,383,189		2,211,716

**(iv) At 31 December 2012, 16,665 forfeited or unallocated shares (31 December 2011: 24,451 shares) were held by the Scheme and would be regranted to eligible employees in future.**



**40. Employee Share-based Arrangements (continued)****(d) LME Long-Term Incentive Plan**

The LME Long-Term Incentive Plan was set up by the LME Group to provide its chief executive and other selected employees with an entitlement, in the form of share options, to a receipt of cash when the options are exercised, calculated by reference to the unit value price of notional LMEH shares over the exercise price of the options. The unit value price is determined by the Remuneration Committee of the LME Group. At the date of acquisition of the LME Group (6 December 2012) and 31 December 2012, the unit value price was determined to be £73.90, which was calculated using a formula with reference to the consideration paid by HKEx to acquire the LME Group.

The options vest in tranches of 25 per cent over four years and vesting is conditional on continuing employment of the awardees. The options outstanding at the date of acquisition was as follows:

	Average exercise price per share £	Number of notional shares '000
Outstanding at the date of acquisition	7.18	294

One member of the LME Long-Term Incentive Plan exercised options to the value of £10,000 in the period from 6 December 2012 to 31 December 2012.

At the date of acquisition and 31 December 2012, all outstanding options were vested and exercisable at a weighted average exercise price of £7.18 per share with a remaining contractual life of 8 months from 31 December 2012. The liability (including social security contributions payable) at 31 December 2012 was \$279 million (2011: \$Nil) and was included in accounts payable, accruals and other liabilities (note 32).

**41. Hedging Reserve**

	Group	
	2012 \$m	2011 \$m
At 1 Jan	–	–
Cash flow hedges:		
– net fair value gains of hedging instruments	93	–
– net gains reclassified to goodwill as basis adjustment at acquisition (note 49)	(93)	–
At 31 Dec	–	–

During the year ended 31 December 2012, the Group entered into several forward foreign exchange contracts and certain bank deposits to purchase British Pounds Sterling (GBP) totalling £1,368 million. These forward foreign exchange contracts and bank deposits were designated as cash flow hedges for hedging the foreign exchange risks of the consideration for the acquisition of the LME Group.

The net fair value gains of the forward foreign exchange contracts and bank deposits of \$93 million were initially deferred in hedging reserve and included as part of the consideration for the acquisition completed on 6 December 2012. No ineffective portion arose from the cash flow hedges during the year ended 31 December 2012.

## 42. Designated Reserves

Clearing House Funds reserves (note 34(b))

	Group			Total \$m
	HKSCC Guarantee Fund reserve \$m	SEIOCH Reserve Fund reserve \$m	HKCC Reserve Fund reserve \$m	
At 1 Jan 2011	125	111	344	580
Deficit of net investment income net of expenses of Clearing House Funds transferred to retained earnings (note 44)	(2)	(1)	–	(3)
At 31 Dec 2011	123	110	344	577
At 1 Jan 2012	123	110	344	577
Surplus of net investment income net of expenses of Clearing House Funds transferred from retained earnings (note 44)	1	1	8	10
At 31 Dec 2012	124	111	352	587

## 43. Merger Reserve

	HKEx	
	2012 \$m	2011 \$m
At 1 Jan	694	2,997
Transfer to retained earnings (note 44)	–	(2,303)
At 31 Dec	694	694

The Group has taken advantage of the merger relief available under section 48C of the Hong Kong Companies Ordinance and treated the premium created by the issuance of shares on 6 March 2000, the date HKEx became the holding company of the Stock Exchange and the Futures Exchange and their subsidiaries, as a merger reserve.

As a result of the adjustment to the carrying value of the cost of investments of the subsidiaries in 2011 (note 38(a)(i)), \$2,303 million of the merger reserve became realised and hence distributable in accordance with Accounting Bulletin 4: Guidance on the Determination of Realised Profits and Losses in the Context of Distributions under the Hong Kong Companies Ordinance issued by the HKICPA and was transferred to retained earnings during the year end 31 December 2011.

**44. Retained Earnings (Including Proposed Dividend)**

	Group		HKEx	
	2012 \$m	2011 \$m	2012 \$m	2011 \$m
At 1 Jan	7,053	6,766	6,581	1,416
Profit attributable to shareholders (note (a))	4,084	5,093	5,168	7,671
Transfer (to)/from Clearing House Funds reserves (note 42)	(10)	3	–	–
Transfer from merger reserve (note 43)	–	–	–	2,303
Dividends:				
2011/2010 final dividend	(2,252)	(2,487)	(2,252)	(2,487)
2012/2011 interim dividend	(1,996)	(2,327)	(1,996)	(2,327)
Unclaimed HKEx dividends forfeited (note 32(b))	7	6	7	6
Vesting of shares of Share Award Scheme	(5)	(1)	(5)	(1)
At 31 Dec	6,881	7,053	7,503	6,581
Representing:				
Retained earnings	5,206	4,801	5,828	4,329
Proposed dividend	1,675	2,252	1,675	2,252
At 31 Dec	6,881	7,053	7,503	6,581

- (a) Profit attributable to shareholders included a profit of \$5,168 million, which included \$4,926 million of dividends from subsidiaries (2011: profit of \$7,671 million, which included \$9,920 million of dividends from subsidiaries and a reduction in carrying value of investments in subsidiaries of \$2,303 million), and has been dealt with in the financial statements of HKEx, the holding company of the Group.

## 45. Notes to the Consolidated Statement of Cash Flows

Reconciliation of profit before taxation to net cash inflow from operating activities:

	2012 \$m	As restated 2011 \$m
Profit before taxation	4,845	6,032
Adjustments for:		
Net interest income	(378)	(276)
Dividend income	(12)	(10)
Net fair value gains including interest income on financial assets measured at fair value through profit or loss and financial liabilities at fair value through profit or loss	(360)	(102)
Fair value loss on derivative component of convertible bonds	55	–
Transaction costs on issuance of convertible bonds allocated to the derivative component	3	–
Gains on disposal of financial assets measured at amortised cost of Corporate Funds	(1)	–
Forfeiture of unclaimed cash dividends held by HKSN	(13)	(108)
Finance costs	55	–
Depreciation and amortisation	158	90
Employee share-based compensation benefits	105	61
Gain on disposal of fixed assets	(1)	–
(Reversal of provision for)/provision for impairment losses of receivables	(1)	2
Share of loss of a joint venture	3	–
Changes in provisions	7	5
Net increase in financial assets of Margin Funds and cash collateral	(2,152)	(8,379)
Net increase in financial liabilities of Margin Funds and cash collateral	2,194	8,296
Net (increase)/decrease in Clearing House Fund financial assets	(1,051)	1,151
Net increase/(decrease) in Clearing House Fund financial liabilities	1,046	(1,155)
Net decrease/(increase) in financial assets measured at fair value through profit or loss less financial liabilities at fair value through profit or loss	1,804	(104)
(Increase)/decrease in accounts receivable, prepayments and deposits	(6,263)	1,972
Increase/(decrease) in other current liabilities	6,835	(1,613)
Net cash inflow from operations	6,878	5,862
Dividends received	13	9
Interest received from bank deposits	369	261
Interest received from financial assets measured at fair value through profit or loss	106	123
Interest paid to Participants	(3)	(2)
Income tax paid	(872)	(980)
Net cash inflow from operating activities	6,491	5,273

## 46. Commitments

### (a) Commitments in respect of capital expenditures:

	Group		HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Contracted but not provided for:				
– fixed assets	78	729	–	1
– intangible assets	125	–	2	–
Authorised but not contracted for:				
– fixed assets	358	876	67	109
– intangible assets	271	–	32	–
	<b>832</b>	<b>1,605</b>	<b>101</b>	<b>110</b>

The Group's capital expenditure commitments were mainly related to the relocation of the primary data centres to the new Data Centre at Tseung Kwan O, the development of Hosting Services, a new market data system, a clearing system for OTC derivatives and commodities, and a Central Gateway for the Cash Market, the upgrade and enhancement of the Derivatives Market trading and clearing system.

### (b) Commitments for total future minimum lease payments under non-cancellable operating leases

	Group		HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Land and buildings				
– within one year	216	117	2	4
– in the second to fifth years	232	209	1	3
	<b>448</b>	<b>326</b>	<b>3</b>	<b>7</b>
Computer systems, software and equipment				
– within one year	9	7	6	4
– in the second to fifth years	49	–	49	–
– after the fifth year	11	–	11	–
	<b>69</b>	<b>7</b>	<b>66</b>	<b>4</b>
	<b>517</b>	<b>333</b>	<b>69</b>	<b>11</b>

At 31 December 2012 and 31 December 2011, in respect of computer systems, software and equipment, the Group did not have any purchase options.

## 46. Commitments (continued)

### (c) Commitments in respect of financial contributions to Financial Reporting Council

The Financial Reporting Council (FRC) is an independent statutory body established to receive and investigate complaints concerning irregularities of auditors and reporting accountants of listed companies and non-compliances in the financial reports of listed companies. Since the establishment of the FRC in 2006, the Group has been providing funding for the FRC's operations.

Under a memorandum of understanding signed in December 2009, the Group has agreed to make recurrent contributions to the FRC from 2010 to 2014. The first three contributions during 2010 to 2012 were \$4 million per annum. The contributions for 2013 and 2014 would be \$5 million per annum.

## 47. Contingent Liabilities

At 31 December 2012, the Group and HKEx's material contingent liabilities were as follows:

### (a) Group

- (i) The Group had a contingent liability in respect of potential calls to be made by the SFC to replenish all or part of compensation less recoveries paid by the Unified Exchange Compensation Fund established under the Securities Ordinance up to an amount not exceeding \$71 million (31 December 2011: \$71 million). Up to 31 December 2012, no calls had been made by the SFC in this connection.
- (ii) The Group had undertaken to indemnify the Collector of Stamp Revenue against any underpayment of stamp duty by its Participants of up to \$200,000 for each Participant (note 33(b)(i)). In the unlikely event that all of its 511 trading Participants covered by the indemnity at 31 December 2012 (31 December 2011: 498) defaulted, the maximum contingent liability of the Group under the indemnity would amount to \$102 million (31 December 2011: \$100 million).

### (b) HKEx

- (i) HKEx had given an undertaking in favour of HKSCC to contribute up to \$50 million in the event of HKSCC being wound up while it is a wholly-owned subsidiary of HKEx or within one year after HKSCC ceases to be a wholly-owned subsidiary of HKEx, for payment of the liabilities of HKSCC contracted before HKSCC ceases to be a wholly-owned subsidiary of HKEx, and for the costs of winding up (note 33(b)(ii)).
- (ii) The convertible bonds issued by HKEx International Limited are irrevocably and unconditionally guaranteed by HKEx (notes 33(b)(ii) and 35(b)).
- (iii) HKEx had issued two guarantees to two banks in respect of banking facilities granted to three wholly-owned subsidiaries amounting to \$7,000 million (31 December 2011: \$4,000 million). At 31 December 2012 and 31 December 2011, the banking facilities had not been drawn down.

#### 48. Future Operating Lease Receipts

At 31 December, the future aggregate minimum lease receipts under non-cancellable operating leases of the Group were as follows:

	Group	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Trading booths and related facilities		
– within one year	11	11
– in the second to fifth years	10	21
Total	21	32

#### 49. Business Combination

On 6 December 2012, the Group completed the acquisition of the entire issued ordinary share capital of LMEH for a total cash consideration of £1,388 million (\$17,298 million). The LME Group operates an exchange for the trading of base metals forward and options contracts in the United Kingdom.

The acquisition offers an opportunity for the Group to develop as a global horizontally and vertically integrated exchange group beyond equities. The addition of a strong commodities component to the Group's existing businesses through the acquisition is expected to support and enhance the Group's growth prospects while diversifying its earnings base thereby enhancing value mainly from the significant opportunities for revenue synergies.

The goodwill arising from the acquisition is attributable to diversity of earnings through new customers and introduction of new products in the future, buyer specific synergies in relation to the potential future value of expanding the LME business in China by leveraging HKEx's resources, infrastructure and network in China, and the benefit of skills and technical talents of the acquired work force. The goodwill recognised is not expected to be deductible for income tax purposes.

The following table summarises the consideration paid for the LME Group, the fair value of assets acquired and liabilities assumed at the acquisition date.

	\$m
Cash and cash equivalents	451
Financial assets measured at fair value through profit or loss	289
Accounts receivable, prepayments and deposits	216
Intangible assets (note 28(a))	4,445
Fixed assets (note 29(a))	28
Deferred revenue	(5)
Taxation payable	(38)
Provisions (note 36(a))	(1)
Accounts payable, accruals and other liabilities	(538)
Net deferred tax liabilities (note 37(a))	(983)
<b>Total identifiable net assets</b>	<b>3,864</b>
Goodwill (note 28(a))	13,341
<b>Total</b>	<b>17,205</b>
Total consideration satisfied by cash	17,298
Less: net gains on cash flow hedges reclassified from hedging reserve (note 41)	(93)
<b>Total</b>	<b>17,205</b>
Net cash outflow in respect of the acquisition of the LME Group	16,754

#### 49. Business Combination (continued)

Acquisition-related costs were disclosed as “Costs relating to acquisition of LME Group” (note 14) in the consolidated statement of comprehensive income for the year ended 31 December 2012.

The accounts receivables, prepayment and deposits acquired included accounts receivables of \$189 million, which represented their gross contractual amount and fair value. No accounts receivable is expected to be uncollectible.

At the date of acquisition, the share capital of LMEH includes 1,365,000 “B” shares with a nominal value of £0.01 each which do not carry any voting rights, nor any rights to participate in any dividends. Trading rights are attached to the “B” shares. On winding up, “B” shareholders would only be entitled to receive, in priority to the ordinary shareholders, the nominal value of the capital paid up on each “B” share they held. Since LMEH is required to repay the “B” shareholders in cash only in the event of LMEH’s liquidation, such “B” shares (less than \$1 million) are included in non-controlling interests in equity of the Group’s consolidated statement of financial position.

The total revenue included in the consolidated statement of comprehensive income from its date of acquisition (ie, 6 December 2012) to 31 December 2012 contributed by the LME Group was \$74 million. The LME Group also contributed net profit of \$19 million over the same period.

Had the LME Group been consolidated from 1 January 2012, the HKEx Group’s pro-forma revenue, EBITDA and profit attributable to shareholders would have been \$7,332 million, \$5,093 million and \$3,601 million, respectively. These amounts have been calculated by adopting the Group’s accounting policies. In determining these amounts, it is assumed that the fair value adjustments that arose on the acquisition date would have been the same had the acquisition occurred on 1 January 2012. The pro-forma amounts also include the depreciation and amortisation of the acquired fixed assets and intangible assets and finance costs on the borrowings as a result of the acquisition.

#### 50. Connected Transactions and Material Related Party Transactions

##### (a) Connected transactions and material related party transactions

Certain Directors of HKEx may be directors and/or shareholders of (i) Stock Exchange Participants and Futures Exchange Participants (Exchange Participants) and Clearing Participants of HKSCC, HKCC and SEOCH (Clearing Participants); (ii) companies listed on the Stock Exchange; and (iii) Exchange Participants for buying shares on behalf of HKSCC. Securities and derivatives contracts traded by, and fees levied on, these Exchange Participants and Clearing Participants, fees levied on these listed companies and fees paid to these Exchange Participants for buying shares on behalf of HKSCC are all undertaken in the ordinary course of business of the Group on the standard terms and conditions applicable to all other Exchange Participants, Clearing Participants, listed companies and Exchange Participants for buying shares on behalf of HKSCC.



**50. Connected Transactions and Material Related Party Transactions (continued)****(b) Material related party transactions**

In addition to the above and those disclosed elsewhere in these consolidated financial statements, the Group or HKEx entered into the following material related party transactions which are not regarded as connected transactions as defined under the Main Board Listing Rules:

**(i) Transactions with subsidiaries**

	HKEx	
	2012 \$m	2011 \$m
Dividend income	4,926	9,920
Management fees and equipment rental fees charged	671	588
Interest income (note 38(b))	37	–
Expenses recharged	1,178	1,023
Interest expenses (note 38(b))	3	–

**(ii) Transactions with a joint venture**

	Group and HKEx	
	2012 \$m	2011 \$m
Management fee charged	1	–

**(iii) Key management personnel compensation**

	Group		HKEx	
	2012 \$m	2011 \$m	2012 \$m	2011 \$m
Salaries and other short-term employee benefits	94	84	74	70
Employee share-based compensation benefits	31	26	25	21
Retirement benefit costs	6	6	5	5
	131	116	104	96

**(iv) Balances with related parties**

	Group		HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Amounts due from subsidiaries (note 38(b))	–	–	20,320	5,123
Amounts due to subsidiaries (note 38(b))	–	–	(5,496)	(39)
Amount due from a joint venture	7	–	7	–
Financial guarantee granted to HKSCC (maximum amount guaranteed) (notes 47(b)(i))	–	–	50	50
Financial guarantee for convertible bonds issued by HKEx International Limited (maximum amount guaranteed with accrued interest up to 31 Dec) (note 47(b)(ii))	–	–	3,896	–

**50. Connected Transactions and Material Related Party Transactions (continued)****(b) Material related party transactions (continued)****(v) Post-retirement benefit plans**

The Group has sponsored an ORSO Plan, an MPF Scheme and the LME pension fund as its post-retirement benefit plans (note 10(a)).

The retirement benefit costs charged to the consolidated statement of comprehensive income represent contributions paid and payable by the Group to the ORSO Plan, the MPF Scheme and the LME pension fund and related fees. The contributions payable to the respective post-retirement benefit plans at 31 December were as follows:

	Group		HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
ORSO Plan	–	–	–	–
MPF Scheme	<1	<1	<1	<1
LME pension fund	1	–	–	–
	1	<1	<1	<1

- (vi) Save as aforesaid, the Group and HKEx have entered into other transactions in the ordinary course of business with companies that are related parties but the amounts were immaterial.

**51. Banking Facilities with Assets Pledged**

The Group did not have any assets pledged at 31 December 2012 and 31 December 2011.

**52. Capital Management**

The Group's objectives when managing capital are:

- To safeguard the Group's ability to continue as a going concern, so that it continues to provide returns for shareholders and benefits for other stakeholders;
- To support the Group's stability and growth; and
- To provide capital for the purpose of strengthening the Group's risk management capability.

The Group actively and regularly reviews and manages its capital structure to ensure optimal capital structure and shareholder returns, taking into consideration the expected capital requirements of the Group and capital efficiency, prevailing and projected profitability, projected operating cash flows, projected capital expenditures and projected strategic investment opportunities. The Group adopts a dividend policy of providing shareholders with regular dividends with a normal target payout ratio of 90 per cent of the Group's profit of the year, while retaining 10 per cent of the profit as capital of the Group for future use. At 31 December 2012, the Group had set aside \$4,000 million (31 December 2011: \$4,000 million) of shareholders' funds for the purpose of strengthening the risk management regime of the clearing houses and supporting their roles as central counterparties.

## 52. Capital Management (continued)

In prior years, the Group had no borrowings and it monitored capital by reviewing the level of capital that was at the disposal of the Group (adjusted capital). Adjusted capital comprises all components of shareholders' equity other than designated reserves. The adjusted capital of the Group and HKEx at 31 December 2011 was \$8,582 million and \$8,804 million respectively.

After the acquisition of the LME Group, the Group monitors capital on the basis of its gearing ratio. The ratio is calculated as net debt divided by adjusted capital. For this purpose, the Group defines net debt as bank loans and convertible bonds (total borrowings) less cash and cash equivalents of Corporate Funds. The Group's strategy is to maintain the gearing ratio at less than 50 per cent.

	Group	HKEx
	At 31 Dec 2012	At 31 Dec 2012
	\$m	\$m
Total borrowings	6,615	3,100
Less: cash and cash equivalents of Corporate Funds	(4,035)	(797)
Net debt	2,580	2,303
Total equity	17,764	18,304
Less: designated reserves	(587)	–
Adjusted capital	17,177	18,304
Gearing ratio	15%	13%

## 53. Financial Risk Management

The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk, equity price risk and interest rate risk), liquidity risk and credit risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's performance.

### (a) Market risk management

Market risk is the risk of loss arising from movements in observable market variables such as foreign exchange rates, equity prices and interest rates. The Group is exposed to market risk primarily through its financial assets and financial liabilities (including borrowings).

Financial assets of the Group are maintained for the Corporate Funds, Clearing House Funds, Margin Funds and cash collateral received from Participants.

The Group's investment policy is to prudently invest all funds managed by the Group in a manner which will satisfy liquidity requirements, safeguard financial assets and manage risks while optimising return on investments.

Investment and fund management by HKEx and the Group's subsidiaries in Hong Kong is governed by the HKEx Investment Policy, Restrictions and Guidelines, which is approved by the Board and reviewed regularly and at least once every three years. Investment restrictions and guidelines form an integral part of risk control. Fund-specific restrictions and guidelines are set according to the investment objectives of each fund. Investments are diversified to minimise risks and no investments are made for speculative purposes. In addition, specific limits are set for each fund to control risks (eg, permissible asset type, asset allocation, liquidity, credit requirement, counterparty concentration, maturity, foreign exchange exposures and interest rate risks) of the investments.

### 53. Financial Risk Management (continued)

#### (a) Market risk management (continued)

An Investment Advisory Committee, comprised of Non-executive Directors of HKEx and an external member from the financial community, advises the Board on portfolio management and monitors the risk and performance of HKEx's investments. A Treasury team in the Finance Department is dedicated to the day-to-day management and investment of the funds. External fund managers have also been appointed to manage part of the Corporate Funds since July 2001. The external fund managers are stable and financially strong financial institutions and each has a worldwide aggregate fund size of a minimum of US\$10 billion under management.

The LME Group, the Group's newly acquired subsidiaries in the United Kingdom, has its own financial risk management policies approved by the Board of LMEH. The LME Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on its financial performance. The policies will be reviewed in the next twelve months to align with the overall objectives of the Group.

#### (i) Foreign exchange risk management

Foreign exchange risk is the risk that the value or cash flows of an asset, liability or highly probable forecast transaction denominated in foreign currency (ie, a currency other than the functional currency of the entity to which the transactions relate) will fluctuate because of changes in foreign exchange rates. In June 2012, the Group made an offer to acquire the LME Group at a consideration of £1,388 million. The Group designated certain forward foreign exchange contracts and bank deposits as cash flow hedges for hedging the foreign exchange risks of the consideration (note 41). In respect of its funds available for investment in Hong Kong, the Group may invest in non-HKD securities from time to time. Forward foreign exchange contracts and foreign currency bank deposits have also been used to hedge the currency exposure of the Group's non-HKD securities and liabilities to mitigate risks arising from fluctuations in exchange rates.

Under the HKEx Investment Policy, Restrictions and Guidelines, the investment in non-HKD instruments is subject to the following restrictions:

- up to 20 per cent of the externally-managed Corporate Funds may be invested in non-HKD and non-USD investments without economic hedging;
- For internally-managed Corporate Funds, Clearing House Funds, Margin Funds and cash collateral, unhedged investments in currencies other than HKD or USD must fully match the respective liabilities or forecast payments for the funds. Unhedged investments in USD may not exceed 20 per cent of the respective funds. Holdings in Renminbi (RMB) are permitted if the currencies have been received in connection with the trading, clearing, settlement or services in respect of the Group's RMB products.

The Group's non-HKD borrowings by the Hong Kong entities are denominated in USD, which is pegged against HKD, and therefore are not subject to significant foreign currency risks.

The LME Group is exposed to foreign exchange risk arising from various currency exposures (mainly USD and Euro). Its risk management policy in the normal course of events is to convert non-GBP currencies into GBP as soon as deemed appropriate. Forward foreign exchange contracts may be used to hedge the currency exposure of the USD portion of LME Group's revenue against GBP.

**53. Financial Risk Management (continued)**

## (a) Market risk management (continued)

## (i) Foreign exchange risk management (continued)

The following table details the Group's and HKEx's financial assets and financial liabilities denominated in a currency other than the functional currency of the entity to which they relate and the net open foreign currency positions (ie, gross positions less forward foreign exchange contracts and other offsetting exposures (economic hedges)) at 31 December presented in HKD equivalents.

	Foreign currency	Group		
		At 31 Dec 2012		
		Gross open position \$m	Economic hedges \$m	Net open position \$m
<b>Financial assets/(financial liabilities)</b>				
Cash and cash equivalents <sup>1</sup>	AUD	1	–	1
	CAD	1	–	1
	EUR	1,672	(1,668)	4
	GBP	535	–	535
	JPY	90	(90)	–
	NZD	2	–	2
	RMB	101	(68)	33
	SGD	2	–	2
	USD	281	(19)	262
Financial assets measured at fair value through profit or loss <sup>1,2</sup>	AUD	243	(236)	7
	CAD	53	(16)	37
	CHF	6	–	6
	EUR	360	(40)	320
	GBP	101	(95)	6
	JPY	27	(17)	10
	NZD	51	(45)	6
	RMB	229	(59)	170
	SGD	30	–	30
	USD	1,468	(230)	1,238
Financial assets measured at amortised cost	RMB	1	–	1
Accounts receivable and deposits	GBP	10	–	10
	RMB	169	–	169
	USD	88	–	88
Margin deposits and cash collateral from Clearing Participants <sup>1</sup>	EUR	(1,668)	1,668	–
	JPY	(90)	90	–
	RMB	(68)	68	–
	USD	(19)	19	–
Accounts payable, accruals and other liabilities	GBP	(67)	–	(67)
	RMB	(171)	–	(171)
	USD	(78)	–	(78)
Borrowings	USD	(3,100)	–	(3,100)
<b>Total net open positions for the Group</b>	AUD			8
	CAD			38
	CHF			6
	EUR			324
	GBP			484
	JPY			10
	NZD			8
	RMB			202
	SGD			32
	USD			1,590
				<b>2,702</b>

<sup>1</sup> Foreign currency margin deposits received by the Group are economically hedged by investments in the same currencies.

<sup>2</sup> Forward foreign exchange contracts have been used as economic hedges for the currency exposures of the Group's investments by external fund managers.

**53. Financial Risk Management (continued)**

## (a) Market risk management (continued)

## (i) Foreign exchange risk management (continued)

	Foreign currency	Group		
		At 31 Dec 2011		
		Gross open position \$m	Economic hedges \$m	Net open position \$m
<b>Financial assets/(financial liabilities)</b>				
Cash and cash equivalents <sup>1</sup>	AUD	7	–	7
	CHF	3	–	3
	EUR	1	–	1
	GBP	1	–	1
	JPY	129	(101)	28
	RMB	10	–	10
	USD	1,375	(557)	818
Financial assets measured at fair value through profit or loss <sup>1,2</sup>	AUD	291	(261)	30
	CAD	69	(3)	66
	CHF	9	(2)	7
	EUR	311	(289)	22
	GBP	147	(115)	32
	JPY	25	(23)	2
	NZD	24	–	24
	RMB	140	–	140
	SEK	2	–	2
	SGD	53	–	53
	USD	2,327	(1,459)	868
Financial assets measured at amortised cost	RMB	1	–	1
	USD	45	–	45
Accounts receivable and deposits	CAD	1	–	1
	GBP	1	–	1
	RMB	6	–	6
	USD	2	–	2
Margin deposits and cash collateral from Clearing Participants <sup>1</sup>	JPY	(101)	101	–
	USD	(1,125)	1,125	–
Accounts payable, accruals and other liabilities	RMB	(10)	–	(10)
	USD	(44)	–	(44)
<b>Total net open positions for the Group</b>	AUD			37
	CAD			67
	CHF			10
	EUR			23
	GBP			34
	JPY			30
	NZD			24
	RMB			147
	SEK			2
	SGD			53
	USD			1,689
				<b>2,116</b>

<sup>1</sup> Foreign currency margin deposits received by the Group are economically hedged by investments in the same currencies.

<sup>2</sup> Forward foreign exchange contracts have been used as economic hedges for the currency exposures of the Group's investments by external fund managers.

**53. Financial Risk Management (continued)**

## (a) Market risk management (continued)

## (i) Foreign exchange risk management (continued)

	Foreign currency	HKEx	
		Gross and net open position	
		At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
<b>Financial assets/(financial liabilities)</b>			
Cash and cash equivalents	GBP	24	–
	RMB	3	4
	USD	16	–
Financial assets measured at amortised cost	RMB	1	1
Accounts receivable and deposits	GBP	10	–
	RMB	1	1
	USD	5	–
Amounts due from subsidiaries	USD	15,081	–
Accounts payable and other liabilities	GBP	(67)	–
	RMB	(2)	(4)
	USD	(18)	(25)
Amounts due to subsidiaries	USD	(3,294)	–
Borrowings	USD	(3,100)	–
<b>Total net open positions for HKEx</b>	GBP	33	–
	RMB	3	2
	USD	8,690	25
		<b>8,726</b>	<b>27</b>

## (ii) Equity and commodity price risk management

The Group is exposed to equity price risk as mutual funds, equities, equity index futures and options contracts may be held as part of the externally-managed Corporate Fund's investments in Hong Kong. Equity price risk is capped by an asset allocation limit. The Group sets prudent investment limits and restrictions to control investment in equity securities. The Group is also exposed to equity price risk on its subsidiary's investment in an unlisted company (note 3(d)).

The Group was also exposed to equity price risk arising from changes in HKEx's own share price to the extent that HKEx's own equity instruments underlie the fair values of derivatives of the Group. During 2012, the Group was exposed to this risk from 23 October 2012 to 17 December 2012 through the conversion rights attached to the convertible bonds issued by HKEx (note 35(b)).

The Group is not exposed to commodity price risk as investment in commodities is not permitted under the Group's investment policy.

### 53. Financial Risk Management (continued)

#### (a) Market risk management (continued)

##### (iii) Interest rate risk management

There are two types of interest rate risk:

- Fair value interest rate risk – the risk that the value of a financial instrument will fluctuate because of changes in market interest rates; and
- Cash flow interest rate risk – the risk that the future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The Group is exposed to both fair value and cash flow interest rate risks as the Group has significant assets and liabilities (including borrowings) which are interest-bearing. The Group manages its interest rate risks by setting limits on the residual maturity of the investments and on the fixed and floating rate mismatches of its assets and liabilities.

The contractual interest rates of the Group's and HKEx's borrowings and HKEx's loans from/to subsidiaries are disclosed in notes 35 and 38 to the consolidated financial statements respectively.

The following tables present the highest and lowest contractual interest rates of the financial assets held by the Group and HKEx (excluding loans from/to subsidiaries, bank deposits held at savings and current accounts and zero coupon bonds purchased at discounts) at 31 December:

##### Fixed rate financial assets

	Group		HKEx	
	At 31 Dec 2012	At 31 Dec 2011	At 31 Dec 2012	At 31 Dec 2011
Highest contractual interest rates	<b>8.00%</b>	11.25%	<b>3.00%</b>	2.19%
Lowest contractual interest rates	<b>0.01%</b>	0.01%	<b>0.21%</b>	1.00%

##### Floating rate financial assets

	Group		HKEx	
	At 31 Dec 2012	At 31 Dec 2011	At 31 Dec 2012	At 31 Dec 2011
Highest contractual interest rates	<b>3.75%</b>	4.38%	–	–
Lowest contractual interest rates	<b>0.55%</b>	0.53%	–	–



**53. Financial Risk Management (continued)**

## (a) Market risk management (continued)

## (iv) Risk management techniques

Value-at-Risk (VaR) based on historical simulation and portfolio stress testing are used to identify, measure, monitor and control foreign exchange risk, equity price risk and interest rate risks of the Group's investments. VaR measures the expected maximum loss over a given time interval (a holding period of 10 trading days is used by the Group) at a given confidence level (95 per cent confidence interval is adopted by the Group) based on historical data (one year is used by the Group). VaR is monitored on a weekly basis and the Board sets a limit on total VaR for the Group, as well as individual limit for each fund under management (Clearing House Funds, Margin Funds and cash collateral and Corporate Funds).

VaR is a statistical measure of risks and has limitations associated with the assumptions employed. Historical simulation assumes that actual observed historical changes in market indices, such as interest rates, foreign exchange rates and equity prices, reflect possible future changes. This implies that the approach is vulnerable to sudden changes in market behaviour. The use of a 10-day holding period assumes that the positions can be unwound in 10 trading days and the holding period may be insufficient at times of severe illiquidity. Also, VaR does not necessarily reflect all aspects of risks that affect the price of financial instruments and may underestimate real market risk exposure. In addition, VaR does not factor in the possibility of catastrophic risk but the use of stress testing for abnormal market conditions can mitigate this limitation.

The VaR for each risk factor and the total VaR of the investments and related economic hedges of the Group and HKEx at 31 December were as follows:

	Group		HKEx	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Foreign exchange risk	12	8	8	< 1
Equity price risk	8	22	—	—
Interest rate risk	36	16	16	< 1
Total VaR	35	26	16	< 1

VaR for each risk factor is the independently derived largest potential loss due to fluctuations solely in that risk factor. The individual VaRs did not add up to the total VaR as there was diversification effect due to correlation amongst the risk factors.

## (b) Liquidity risk management

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset, and it results from amount and maturity mismatches of assets and liabilities.

The Group employs projected cash flow analysis to manage liquidity risk by forecasting the amount of cash required and monitoring the working capital of the Group to ensure that all liabilities due and known funding requirements could be met.

### 53. Financial Risk Management (continued)

#### (b) Liquidity risk management (continued)

Surplus cash of the Group in Hong Kong is invested by the Treasury team, and the investments of the Group are kept sufficiently liquid to meet the operating needs and possible liquidity requirements of the Clearing House Funds, Margin Funds and cash collateral. The Group also sets a limit on the minimum level of cash or bank deposits held for the Corporate Funds, and the minimum level of investments to be held that would mature the same day for the Clearing House Funds, Margin Funds and cash collateral.

The LME Group also employed prudent liquidity risk management which involves maintaining sufficient cash to meet ongoing operational commitments and adhere to the regulatory requirements to maintain liquid assets amounting to at least six months' operating costs.

The table below analyses the Group's and HKEx's financial assets into the relevant maturity buckets based on the following criteria:

- the expected amounts, subject to costs to liquidate that are expected to be immaterial, that could be realised from the investments, bank deposits and cash and cash equivalents within one month to meet cash outflows on financial liabilities if required are allocated to the up to 1 month bucket; and
- other financial assets are allocated based on their contractual maturity dates or the expected dates of disposal.

	Group					
	At 31 Dec 2012					
	Up to 1 month <sup>1</sup> \$m	>1 month to 3 months \$m	>3 months to 1 year \$m	>1 year to 5 years \$m	>5 years \$m	Total \$m
Cash and cash equivalents	34,077	–	–	–	–	34,077
Financial assets measured at fair value through profit or loss	4,200	–	169	123	–	4,492
Financial assets measured at amortised cost	8,512	–	–	56	5	8,573
Accounts receivable and deposits <sup>2</sup>	13,609	33	2	–	–	13,644
	60,398	33	171	179	5	60,786

  

	Group					
	At 31 Dec 2011					
	Up to 1 month <sup>1</sup> \$m	>1 month to 3 months \$m	>3 months to 1 year \$m	>1 year to 5 years \$m	>5 years \$m	Total \$m
Cash and cash equivalents	18,221	–	–	–	–	18,221
Financial assets measured at fair value through profit or loss	11,349	–	–	–	–	11,349
Financial assets measured at amortised cost	16,203	5	–	43	–	16,251
Accounts receivable and deposits <sup>2</sup>	7,150	35	3	–	–	7,188
	52,923	40	3	43	–	53,009

<sup>1</sup> Amounts included \$1,866 million (31 December 2011: \$2,401 million) of financial assets with contractual maturity over one year. They could readily be liquidated whenever liquid funds are required.

<sup>2</sup> Amounts excluded prepayments of \$52 million (31 December 2011: \$45 million).

**53. Financial Risk Management (continued)****(b) Liquidity risk management (continued)**

	HKEx				
	At 31 Dec 2012				
	Up to 1 month <sup>3</sup> \$m	>1 month to 3 months \$m	>3 months to 1 year \$m	>1 year to 5 years \$m	Total \$m
Cash and cash equivalents	797	–	–	–	797
Financial assets measured at amortised cost	1,213	–	–	1	1,214
Accounts receivable and deposits <sup>4</sup>	15	–	–	–	15
Amounts due from subsidiaries	5,371	–	6	14,943	20,320
	7,396	–	6	14,944	22,346

  

	HKEx				
	At 31 Dec 2011				
	Up to 1 month <sup>3</sup> \$m	>1 month to 3 months \$m	>3 months to 1 year \$m	>1 year to 5 years \$m	Total \$m
Cash and cash equivalents	607	–	–	–	607
Financial assets measured at amortised cost	1,486	–	–	1	1,487
Amounts due from subsidiaries	5,123	–	–	–	5,123
	7,216	–	–	1	7,217

<sup>3</sup> Amounts included \$Nil (31 December 2011: \$6 million) of financial assets with contractual maturity over one year. They could readily be liquidated whenever liquid funds are required.

<sup>4</sup> Amounts excluded prepayments of \$21 million.

In December 2012, HKEx drew down a bank loan of US\$400 million (HK\$3,099 million) to fund the acquisition of the LME Group (note 35(a)).

In addition, banking facilities have been put in place for contingency purposes. At 31 December 2012, the Group's total available banking facilities for its daily operations amounted to \$16,010 million (31 December 2011: \$13,010 million), which included \$7,000 million (31 December 2011: \$4,000 million) of committed banking facilities that provide for same day borrowing in HKD and/or RMB and \$9,000 million (31 December 2011: \$9,000 million) of repurchase facilities.

The Group also put in place foreign exchange facilities for the RMB Equity Trading Support Facility to support the trading of RMB stocks. At 31 December 2012, the amount of such facilities was RMB17,000 million (31 December 2011: RMB Nil).

The table below analyses the Group's and HKEx's non-derivative financial liabilities at 31 December into relevant maturity buckets based on their contractual maturity dates. The amounts disclosed in the table are the contractual undiscounted cash flows.

## 53. Financial Risk Management (continued)

## (b) Liquidity risk management (continued)

	Group					
	At 31 Dec 2012					
	Up to 1 month \$m	>1 month to 3 months \$m	>3 months to 1 year \$m	>1 year to 5 years \$m	>5 years \$m	Total \$m
Margin deposits and cash collateral from Clearing Participants	36,786	–	–	–	–	36,786
Accounts payable, accruals and other liabilities <sup>5</sup>	15,474	228	114	–	–	15,816
Other financial liabilities:						
Other financial liabilities of Clearing House Funds	28	–	3	–	–	31
Other financial liabilities of Corporate Funds:						
Financial guarantee contract (maximum amount guaranteed) (note 47(a)(ii))	102	–	–	–	–	102
Participants' contributions to Clearing House Funds	1,420	457	47	–	–	1,924
Borrowings:						
Bank borrowings	6	11	52	429	3,143	3,641
Convertible bonds	–	–	19	4,053	–	4,072
	53,816	696	235	4,482	3,143	62,372

  

	Group					
	As restated At 31 Dec 2011					
	Up to 1 month \$m	>1 month to 3 months \$m	>3 months to 1 year \$m	>1 year to 5 years \$m	>5 years \$m	Total \$m
Margin deposits and cash collateral from Clearing Participants	34,592	–	–	–	–	34,592
Accounts payable, accruals and other liabilities	8,343	2	111	–	–	8,456
Other financial liabilities:						
Other financial liabilities of Clearing House Funds	26	3	–	–	–	29
Other financial liabilities of Corporate Funds:						
Financial guarantee contract (maximum amount guaranteed) (note 47(a)(ii))	100	–	–	–	–	100
Participants' contributions to Clearing House Funds	394	440	46	–	–	880
	43,455	445	157	–	–	44,057

<sup>5</sup> Amounts excluded non-financial liabilities of \$22 million.

**53. Financial Risk Management (continued)****(b) Liquidity risk management (continued)**

	HKEx					
	At 31 Dec 2012					
	Up to 1 month \$m	>1 month to 3 months \$m	>3 months to 1 year \$m	>1 year to 5 years \$m	>5 years \$m	Total \$m
Accounts payable, accruals and other liabilities	383	3	7	–	–	393
Amounts due to subsidiaries	2,202	–	19	3,590	–	5,811
Other financial liabilities:						
Other financial liabilities of						
Corporate Funds:						
Financial guarantee granted to HKSCC (maximum amount guaranteed) (note 47(b)(i))	50	–	–	–	–	50
Financial guarantee for convertible bonds issued by HKEx International Limited (maximum amount with accrued interest up to guaranteed 31 Dec) (note 47(b)(ii))	3,896	–	–	–	–	3,896
Borrowings:						
Bank borrowings	6	11	52	429	3,143	3,641
	<b>6,537</b>	<b>14</b>	<b>78</b>	<b>4,019</b>	<b>3,143</b>	<b>13,791</b>

  

	HKEx					
	At 31 Dec 2011					
	Up to 1 month \$m	>1 month to 3 months \$m	>3 months to 1 year \$m	>1 year to 5 years \$m	>5 years \$m	Total \$m
Accounts payable, accruals and other liabilities	237	2	5	–	–	244
Amounts due to subsidiaries	39	–	–	–	–	39
Other financial liabilities:						
Other financial liabilities of						
Corporate Funds:						
Financial guarantee granted to HKSCC (maximum amount guaranteed) (note 47(b)(i))	50	–	–	–	–	50
	<b>326</b>	<b>2</b>	<b>5</b>	<b>–</b>	<b>–</b>	<b>333</b>

At 31 December 2012, the maximum gross nominal value of outstanding forward foreign exchange contracts held by the Group was \$1,114 million (31 December 2011: \$5,180 million). The table below analyses the Group's outstanding forward foreign exchange contracts at 31 December (which include all contracts regardless of whether they had gains or losses at the year end) that would be settled on a gross basis into relevant maturity buckets based on their contractual maturity dates. The amounts disclosed in the table are contractual undiscounted cash flows, which are different from the carrying amounts (ie, fair values) in the consolidated statement of financial position.

**53. Financial Risk Management (continued)****(b) Liquidity risk management (continued)**

	Group					
	At 31 Dec 2012			At 31 Dec 2011		
	Up to 1 month \$m	>1 month to 3 months \$m	Total \$m	Up to 1 month \$m	>1 month to 3 months \$m	Total \$m
Forward foreign exchange contracts						
– outflows	928	186	1,114	3,614	1,545	5,159
– inflows	925	186	1,111	3,624	1,556	5,180

**(c) Credit risk management****(i) Investment and accounts receivable-related risk**

The Group is exposed to credit risk, which is the risk that a counterparty will be unable to pay amounts in full when due. It arises primarily from the Group's investments and accounts receivables. Impairment provisions are made for losses that have been incurred at the end of the reporting period. The Group limits its exposure to credit risk by rigorously selecting the counterparties (ie, deposit-takers, bond issuers and debtors) and by diversification. At 31 December 2012, the investment in debt securities for Margin Funds and cash collateral, Clearing House Funds and Corporate Funds held were of investment grade and had a weighted average credit rating of Aa3 (Moody) (31 December 2011: Aa3 (Moody)). Deposits in Hong Kong are placed only with the note-issuing banks in Hong Kong, investment grade licensed banks and restricted licence banks approved by the Board from time to time. All investments are subject to a maximum concentration limit approved by the Board and there was no significant concentration risk to a single counterparty (except certain Hong Kong note-issuing banks). The LME Group's cash and deposit balance are held only with banks with a minimum rating of F1 (Fitch), and the LME Group's only significant concentration risk is with the banks. The Group mitigates its exposure to risks relating to accounts receivable from its Participants by requiring the Participants to meet the Group's established financial requirements and criteria for admission as Participants.

In the normal course of business, the clearing houses of the Group, HKSCC, SEOC and HKCC, act as the counterparties to eligible trades concluded on the Stock Exchange and the Futures Exchange through the novation of the obligations of the buyers and sellers. HKSCC is also responsible for the good title to the securities deposited and accepted in the CCASS depository. As a result, the Group has considerable market risk and credit risk since the Participants' ability to honour their obligations in respect of their trades and securities deposited may be adversely impacted by economic conditions affecting the Cash and Derivatives Markets. If the Participants default on their obligations on settlement or there are defects in the title of securities deposited and accepted in the CCASS depository, the Group could be exposed to potential risks not otherwise accounted for in these financial statements.

### 53. Financial Risk Management (continued)

#### (c) Credit risk management (continued)

##### (ii) Clearing and settlement-related risk management

The Group mitigates its exposure to risks described above by requiring the Participants to meet the Group's established financial requirements and criteria for admission as Participants, monitoring compliance with risk management measures such as position limits established by the Group and requiring Clearing Participants to deposit margins and cash collateral and contribute to the Clearing House Funds set up by HKSCC, SEOCH and HKCC. Under the CCASS Rules, HKSCC has collected additional cash collateral from its Clearing Participants to increase the level of protection not just for HKSCC but also for the HKSCC Guarantee Fund from the risk of material loss in the event of a sizeable default. HKSCC also retains recourse against those Participants whose securities are deposited and accepted in the CCASS depository.

Position limits are imposed by HKCC and SEOCH to regulate or limit the maximum number or value of gross and net positions which can be held or controlled by the Participants based on their liquid capital. Bank guarantees may also be accepted to extend Participants' position limits. At 31 December 2012, bank guarantees of \$1,426 million (31 December 2011: \$1,643 million) were accepted for such purpose.

Under the HKSCC Margining and Guarantee Fund arrangements effective in 2012, each HKSCC Clearing Participant is allowed by HKSCC a Margin Credit of \$5 million and a Dynamic Contribution Credit of \$1 million. If a Clearing Participant defaults and any loss arises, HKSCC will absorb the default loss up to the Margin Credit and Dynamic Contribution Credit utilised by the defaulting Clearing Participant, after deducting its collateral and Guarantee Fund contribution kept by HKSCC. After the initial losses, HKSCC is required to absorb further losses after the HKSCC Guarantee Fund reserve and the Guarantee Fund contribution (excluding the Dynamic Contribution portion) of non-defaulting Clearing Participants are depleted. The amount of losses borne by HKSCC will be calculated on a pro rata basis with reference to the non-defaulting Clearing Participants' Dynamic Contributions and Dynamic Contribution Credits granted by HKSCC. At 31 December 2012, HKSCC has 502 Clearing Participants and the total amounts of Margin Credit and Dynamic Contribution Credit granted to Clearing Participants amounted to \$592 million (2011: \$Nil). The Margin Fund Credit and Dynamic Contribution Credit are supported by the \$4 billion of shareholders' funds set aside by the HKEx Group for risk management purpose.

Following the HKEx Clearing House Risk Management Reform effective in 2012, the HKCC Contingent Advance Capital was introduced through which HKCC shares 50 per cent of the daily Participants' Additional Deposits collectible from Clearing Participants. In case of default, the HKCC Contingent Advance Capital would be utilised only after utilisation of the defaulting Clearing Participants' margin and all available resources of the HKCC Reserve Fund (including but not limited to the defaulting Clearing Participants' Reserve Fund contributions, HKCC Reserve Fund reserve and the non-defaulting Clearing Participants' Reserve Fund contribution) as temporary funding. The non-defaulting Clearing Participants will be responsible for sharing the loss of the defaulting participant and replenishing the HKCC Contingent Advance Capital after utilisation. The HKCC Contingent Advance Capital is supported by the \$4 billion of shareholders' funds set aside by the HKEx Group for risk management purpose.

### 53. Financial Risk Management (continued)

#### (c) Credit risk management (continued)

##### (iii) Exposure to credit risk

At 31 December, the maximum exposure to credit risk of the financial assets of the Group and HKEx were equal to their carrying amounts. The maximum exposure to credit risk of the financial guarantee contracts held by the Group and HKEx was as follows:

	Group			
	At 31 Dec 2012		At 31 Dec 2011	
	Carrying amount in consolidated statement of financial position \$m	Maximum exposure to credit risk \$m	Carrying amount in consolidated statement of financial position \$m	Maximum exposure to credit risk \$m
<b>Financial guarantee contract</b> Undertaking to indemnify the Collector of Stamp Revenue (note 47(a)(ii))	(20)	102	(20)	100
<b>HKEx</b>				
	At 31 Dec 2012		At 31 Dec 2011	
	Carrying amount in consolidated statement of financial position \$m	Maximum exposure to credit risk \$m	Carrying amount in consolidated statement of financial position \$m	Maximum exposure to credit risk \$m
<b>Financial guarantee contracts</b> Financial guarantee granted to HKSCC (note 47(b)(i))	(11)	50	(11)	50
Financial guarantee granted to HKEx International Limited (note 47(b)(ii))	(192)	3,896	–	–

##### (iv) Collateral held for mitigating credit risk

Certain debtors were required to place cash deposits and bank guarantees as collateral with the Group to mitigate the Group's exposure to credit risk. The financial effect of the collateral, which is capped by the amount receivable from each debtor, was as follows:

	Group			
	At 31 Dec 2012		At 31 Dec 2011	
	Carrying amount in consolidated statement of financial position \$m	Collateral held for mitigating credit risk \$m	Carrying amount in consolidated statement of financial position \$m	Collateral held for mitigating credit risk \$m
Accounts receivable and deposits	13,644	1,784	7,188	2,011

No collateral was held by HKEx to mitigate its exposure to credit risk.



**53. Financial Risk Management (continued)****(c) Credit risk management (continued)****(v) Financial assets that were past due but not impaired**

At 31 December, the age analysis of the financial assets (which mainly relate to receivables from Participants and listed companies) of the Group that were past due but determined to be not impaired according to the period past due was as follows:

	Group	
	At 31 Dec 2012 \$m	At 31 Dec 2011 \$m
Up to six months	330	351

No financial assets of HKEx were past due at 31 December 2012 and 31 December 2011.

**(vi) Financial assets that were impaired at the end of the reporting period**

At 31 December 2012, receivables of the Group amounting to \$159 million (31 December 2011: \$160 million) were determined to be impaired and full provision had been made. These receivables were outstanding for over 180 days at the end of the reporting period or were due from companies with financial difficulties. The factors the Group considered in determining whether the financial assets were impaired are disclosed in note 2(u)(vi).

No financial assets of HKEx were impaired at 31 December 2012 and 31 December 2011.

**(vii) Outstanding balances from debtors which were not recognised as income**

As soon as a receivable becomes impaired, the Group may continue to allow the debtors concerned to participate in its markets but no further accounts receivable will be recognised in the consolidated statement of financial position as economic benefits may not flow to the Group. The revenue concerned is not recognised but tracked as doubtful deferred revenue and will only be recognised as income when cash is received. At 31 December 2012, the amount of doubtful deferred revenue amounted to \$94 million (31 December 2011: \$79 million).

At 31 December 2012 and 31 December 2011, HKEx did not have any doubtful deferred revenue.

### 53. Financial Risk Management (continued)

(d) Fair values of assets and liabilities

(i) Assets and liabilities carried at fair value

The following tables present the carrying value of assets and liabilities measured at fair value at 31 December according to the levels of the fair value hierarchy defined in HKFRS 13: Fair Value Measurement, with the fair value of each financial asset and liability categorised based on the lowest level of input that is significant to that fair value measurement. The levels are defined as follows:

- Level 1: fair values measured using quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: fair values measured using valuation techniques in which all significant inputs other than quoted prices included within Level 1 are directly or indirectly based on observable market data.
- Level 3: fair values measured using valuation techniques in which any significant input is not based on observable market data.

	Group			
	At 31 Dec 2012			
	Level 1 \$m	Level 2 \$m	Level 3 \$m	Total \$m
<b>Recurring fair value measurements:</b>				
<b>Assets</b>				
Financial assets measured at fair value through profit or loss:				
– equity securities	216	–	292	508
– debt securities	–	3,981	–	3,981
– forward foreign exchange contracts	3	–	–	3
	219	3,981	292	4,492
<b>Recurring fair value measurements:</b>				
<b>Liabilities</b>				
Other financial liabilities of Corporate Funds:				
Financial liabilities at fair value through profit or loss:				
– forward foreign exchange contracts	6	–	–	6
	6	–	–	6

**53. Financial Risk Management (continued)**

(d) Fair values of assets and liabilities (continued)

(i) Assets and liabilities carried at fair value (continued)

	Group			
	At 31 Dec 2011			
	Level 1 \$m	Level 2 \$m	Level 3 \$m	Total \$m
<b>Recurring fair value measurements:</b>				
<b>Assets</b>				
Financial assets measured at fair value through profit or loss:				
– equity securities	386	–	–	386
– debt securities	–	10,931	–	10,931
– forward foreign exchange contracts	32	–	–	32
	418	10,931	–	11,349
<b>Recurring fair value measurements:</b>				
<b>Liabilities</b>				
Other financial liabilities of Corporate Funds:				
Financial liabilities at fair value through profit or loss:				
– forward foreign exchange contracts	11	–	–	11
	11	–	–	11

During 2011, no financial assets or financial liabilities were classified under Level 3. During 2012 and 2011, there were no transfers of instruments between Level 1 and Level 2.

Level 2 fair values of debt securities have been determined based on quotes from market makers or alternative pricing sources supported by observable inputs. The most significant input is market interest rates.

The Group's policy is to recognise transfers into and out of fair value hierarchy levels as of the date of the event or change in circumstances that caused the transfer.

At 31 December 2012, no non-financial assets or liabilities were carried at fair value.

### 53. Financial Risk Management (continued)

#### (d) Fair values of assets and liabilities (continued)

##### (i) Assets and liabilities carried at fair value (continued)

#### Fair value measurements using significant unobservable inputs (Level 3)

	Group Investment in an unlisted company \$m
At 1 Jan 2012	–
Addition through acquisition of subsidiaries	289
Exchange differences	3
At 31 Dec 2012	292
Total gains for the year included in profit or loss for assets held at 31 Dec 2012	–
Change in unrealised gains for the year included in profit or loss for assets held at 31 Dec 2012	–
	Group and HKEx Conversion option classified as derivative \$m
At 1 Jan 2012	–
Issue of convertible bonds	354
Fair value loss recognised in profit or loss (note 35(b)(ii))	55
Transfer to convertible bond reserve	(409)
At 31 Dec 2012	–

#### Information about fair value measurements using significant unobservable inputs (Level 3)

Group					
Description	Unobservable inputs	Range of unobservable inputs	Relationship of unobservable inputs to fair value	Possible reasonable change	Impact on valuation \$m
Investment in shares in an unlisted company (Fair value at 31 Dec 2012 was \$292 million)	Future growth rates of the company	2% to 4%	The higher the future growth rates, the higher the fair value;	+/-1%	+72/-53
	Estimated WACC	8% to 12%	The higher the WACC, the lower the fair value;	+/-1%	-49/+67
	Dilution effect of capital raise to comply with expected changes in regulatory capital	25% to 35%	The higher the dilution, the lower the fair value;	+/-5%	-22/+22
	Discount for value attributable to a minority stake	10% to 20%	The higher the discount, the lower the fair value.	+/-5%	-17/+17

**53. Financial Risk Management (continued)**

## (d) Fair values of assets and liabilities (continued)

## (i) Assets and liabilities carried at fair value (continued)

Information about fair value measurements using significant unobservable inputs (Level 3)  
(continued)

As the unlisted investment held by a subsidiary is not traded in an active market, its fair value has been determined using discounted cash flow valuation techniques. Major assumptions used in the valuation include historical financial results, assumptions about future growth rates, an estimate of weighted average cost of capital (WACC), the effect of expected changes in regulation and an adjustment for the value of the investment attributable to a minority stake.

## (ii) Fair values of financial assets and financial liabilities not reported at fair values

Summarised in the following table are the carrying amounts and fair values of financial assets and financial liabilities not presented in the Group's and HKEx's statements of financial position at their fair values. These assets and liabilities were classified under Level 2 in the fair value hierarchy. The carrying amounts of bank borrowing with floating interest rates, short-term receivables (eg, accounts receivable, deposits and cash and cash equivalents) and short-term payables (eg, accounts payable and other liabilities) approximated their fair values, and accordingly no disclosure of the fair values of these items is presented.

	Group			
	At 31 Dec 2012		At 31 Dec 2011	
	Carrying amount in consolidated statement of financial position \$m	Fair value \$m	Carrying amount in consolidated statement of financial position \$m	Fair value \$m
<b>Assets</b>				
Financial assets measured at amortised cost:				
– debt securities <sup>1</sup>	94	94	706	710
– other financial assets maturing over one year <sup>2</sup>	61	58	49	48
<b>Liabilities</b>				
Borrowings:				
– liability component of convertible bonds <sup>3</sup>	3,515	3,723	–	–
Financial guarantee to the collector of Stamp Revenue <sup>4</sup>	20	102	20	86

## 53. Financial Risk Management (continued)

(d) Fair values of assets and liabilities (continued)

(ii) Fair values of financial assets and financial liabilities not reported at fair values (continued)

	HKEx			
	At 31 Dec 2012		At 31 Dec 2011	
	Carrying amount in statement of financial position \$m	Fair value \$m	Carrying amount in statement of financial position \$m	Fair value \$m
<b>Assets</b>				
Financial assets measured at amortised cost:				
– debt securities <sup>1</sup>	6	6	14	14
– other financial assets maturing over one year <sup>2</sup>	1	1	1	1
Amounts due from subsidiaries under non-current assets <sup>3</sup>	14,943	14,943	–	–
<b>Liabilities</b>				
Amounts due to subsidiaries under non-current liabilities <sup>3</sup>	3,294	3,294	–	–
Financial guarantee in favour of HKSCC <sup>4</sup>	11	50	11	43
Financial guarantee for convertible bonds issued by HKEx International Limited <sup>5</sup>	192	192	–	–

<sup>1</sup> The fair values are provided by the custodian of the investments, a reputable independent third party custodian bank, or by the banks from whom the investments were purchased.

<sup>2</sup> The fair values are based on cash flows discounted using Hong Kong Government bond rates of a tenor similar to the contractual maturity of the respective assets/liabilities, adjusted by an estimated credit spread. Assets/liabilities without a contractual maturity date are assumed to mature exactly one year after the end of the reporting period. The discount rates used ranged from 0.81 per cent to 1.51 per cent at 31 December 2012 (31 December 2011: 0.83 per cent to 1.13 per cent).

<sup>3</sup> The fair values are based on cash flows discounted using the prevailing market interest rates for loans with similar credit rating and similar tenor of the respective loans. The discount rates used ranged from 1.88 per cent to 5.30 per cent at 31 December 2012.

<sup>4</sup> The fair values are based on the fees charged by financial institutions for granting such guarantees discounted using a ten-year Hong Kong Government bond rate to perpetuity but capped at the maximum exposure of the financial guarantee. The discount rate used was 0.59 per cent at 31 December 2012 (31 December 2011: 1.46 per cent).

<sup>5</sup> The fair value is based on the total fees charged by financial institutions for guaranteeing the debts discounted using a five-year United States Government bond rate. The discount rate used was 0.72 per cent at 31 December 2012.