Notes to the Financial Statements

1. Principal activities

The Company is an investment holding company and its subsidiaries are principally engaged in the provision of banking and related financial services.

The Company is a limited liability company incorporated and listed in Hong Kong. The address of its registered office is 24/F, Bank of China Tower, 1 Garden Road, Hong Kong.

2. Significant accounting policies

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below.

These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of preparation

The consolidated financial statements of the Group have been prepared in accordance with Hong Kong Financial Reporting Standards (HKFRSs is a collective term which includes all applicable individual Hong Kong Financial Reporting Standards, HKASs and Interpretations) issued by the HKICPA and the Hong Kong Companies Ordinance.

The consolidated financial statements have been prepared under the historical cost convention, as modified by the revaluation of available-for-sale securities, financial assets and financial liabilities (including derivative financial instruments) at fair value through profit or loss, precious metals at fair value, investment properties which are carried at fair value and premises which are carried at fair value or revalued amount less accumulated depreciation and accumulated impairment losses. Disposal group and repossessed assets held for sale are stated at the lower of their carrying amounts and fair values less costs to sell as further explained in Notes 2.2 and 2.24 respectively.

The preparation of financial statements in conformity with HKFRSs requires the use of certain critical accounting estimates. It also requires the Management to exercise judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 3.

2. Significant accounting policies (continued)

2.1 Basis of preparation (continued)

(a) Standards and amendments issued that are already mandatorily effective for accounting periods beginning on 1 January 2016

Standards/ Amendments	Content	Applicable for financial years beginning on/after	Currently relevant to the Group
HKAS 1 (Amendment)	Disclosure Initiative	1 January 2016	Yes
HKAS 16 and HKAS 38 (Amendments)	Clarification of Acceptable Methods of Depreciation and Amortisation	1 January 2016	No
HKAS 16 and HKAS 41 (Amendments)	Agriculture: Bearer Plants	1 January 2016	No
HKAS 27 (2011) (Amendment)	Equity Method in Separate Financial Statements	1 January 2016	Yes
HKAS 28 (2011), HKFRS 10 and HKFRS 12 (Amendments)	Investment Entities: Applying the Consolidation Exception	1 January 2016	No
HKFRS 11 (Amendment)	Accounting for Acquisitions of Interests in Joint Operations	1 January 2016	No
HKFRS 14	Regulatory Deferral Accounts	1 January 2016	No

- HKAS 1 (Amendment), "Disclosure Initiative". The amendments to HKAS 1 are designed to further encourage companies to apply professional judgement in determining what information to disclose in their financial statements. For example, the amendments make clear that materiality applies to the whole of financial statements and that the inclusion of immaterial information can inhibit the usefulness of financial disclosures. Furthermore, the amendments clarify that companies should use professional judgement in determining where and in what order information is presented in the financial disclosures. The adoption of this amendment does not have a material impact on the Group's financial statements.

- HKAS 27 (2011) (Amendment), "Equity Method in Separate Financial Statements". The amendment restores the option to allow an entity to apply the equity method to account for its investments in subsidiaries, joint ventures and associates in its separate financial statements. Entities electing to change to the equity method in its separate financial statements shall have to apply the same accounting for each category of investments so elected and are required to apply this change retrospectively. The adoption of this amendment does not have a material impact on the Group's financial statements.

- "Improvements to HKFRSs" contains numerous amendments to HKFRSs which the HKICPA considers not urgent but necessary. It comprises amendments that result in accounting changes for presentation, recognition or measurement purpose as well as terminology or editorial amendments related to a variety of individual HKFRSs. The adoption of these improvements does not have a material impact on the Group's financial statements.

2. Significant accounting policies (continued)

2.1 Basis of preparation (continued)

(b) Standards and amendments issued that are not yet mandatorily effective and have not been early adopted by the Group in 2016

Standards/ Amendments	Content	Applicable for financial years beginning on/after	Currently relevant to the Group
HKAS 7 (Amendment)	Statement of Cash Flows: Disclosure Initiative	1 January 2017	Yes
HKAS 12 (Amendment)	Income Taxes: Recognition of Deferred Tax Assets for Unrealised Losses	1 January 2017	No
HKAS 28 (2011) and HKFRS 10 (Amendments)	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture	To be determined	Yes
HKFRS 2 (Amendment)	Share-Based Payment: Classification and Measurement of Share-Based Payment Transactions	1 January 2018	No
HKFRS 9	Financial Instruments	1 January 2018	Yes
HKFRS 15	Revenue from Contracts with Customers	1 January 2018	Yes
HKFRS 16	Leases	1 January 2019	Yes

Further information about those HKFRSs that are expected to be applicable to the Group is as follows:

- HKAS 7 (Amendment), "Statement of Cash Flows: Disclosure Initiative". The amendments are part of the Disclosure Initiative project and require entities to provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes. No comparative information is required for first time application of these amendments. The amendments will result in additional disclosure to be provided in the financial statements.

- HKAS 28 (2011) and HKFRS 10 (Amendments), "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture". The amendments address an acknowledged inconsistency between the requirements in HKFRS 10 and those in HKAS 28 (2011), in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The main consequence of the amendments is that a full gain or loss is recognised when a transaction involves a business (whether it is housed in a subsidiary or not). A partial gain or loss is recognised when a transaction involves assets that do not constitute a business, even if these assets are housed in a subsidiary. The amendments are to be applied prospectively, early application is permitted. The application of these amendments will not have a material impact on the Group's financial statements.

2. Significant accounting policies (continued)

2.1 Basis of preparation (continued)

(b) Standards and amendments issued that are not yet mandatorily effective and have not been early adopted by the Group in 2016 (continued)

- HKFRS 9, "Financial Instruments". The issuance of IFRS 9 "Financial Instruments" completes the International Accounting Standards Board's comprehensive response to the financial crisis. HKFRS 9, the equivalent standard of IFRS 9 under HKFRS, includes a logical model for classification and measurement, a single, forward-looking "expected loss" impairment model and a tighter linkage of risk management to hedge accounting. The changes introduced in HKFRS 9 are highlighted as follows:

(i) Classification and Measurement

Financial assets

Financial assets are required to be classified into one of the following measurement categories: (1) measured subsequently at amortised cost, (2) measured subsequently at fair value through other comprehensive income (all fair value changes other than interest accrual, amortisation and impairment will be recognised in other comprehensive income) or (3) measured subsequently at fair value through profit or loss. Classification is to be made on transition, and subsequently on initial recognition. The classification depends on the entity's business model for managing its financial instruments and the contractual cash flow characteristics of the instruments.

A financial instrument is subsequently measured at amortised cost only if it is a debt instrument, and the objective of the entity's business model is to hold the asset to collect the contractual cash flows, and the asset's contractual cash flows characteristics represent only unleveraged payments of principal and interest. A debt instrument is subsequently measured at fair value through other comprehensive income if it is held in a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and the instrument fulfils the contractual cash flows characteristics. All other debt instruments are to be measured at fair value through profit or loss.

Equity instruments are generally measured subsequently at fair value with limited circumstances that cost may be an appropriate estimate of fair value. Equity instruments that are held for trading will be measured at fair value through profit or loss. For all other equity investments, an irrevocable election can be made at initial recognition to recognise unrealised and realised fair value gains and losses in other comprehensive income without subsequent reclassification of fair value gains and losses to the income statement even upon disposal. Dividend income is recognised in the income statement when the right to receive payment is established.

2. Significant accounting policies (continued)

2.1 Basis of preparation (continued)

(b) Standards and amendments issued that are not yet mandatorily effective and have not been early adopted by the Group in 2016 (continued)

(i) Classification and Measurement (continued)

Financial liabilities

Except for the two substantial changes described below, the classification and measurement requirements of financial liabilities have been basically carried forward with minimal amendments from HKAS 39.

The accounting for fair value option of financial liabilities were changed to address own credit risk. The amount of change in fair value attributable to changes in the credit risk of the financial liabilities will be presented in other comprehensive income. The remaining amount of the total gain or loss is included in the income statement. If this creates or enlarges an accounting mismatch in profit or loss, then the whole fair value change is presented in the income statement. The determination of whether there will be a mismatch will need to be made at initial recognition of individual liabilities and will not be re-assessed. Amounts presented in other comprehensive income are not subsequently reclassified to the income statement but may be transferred within equity. This removes the volatility in profit or loss that was caused by changes in the credit risk of liabilities elected to be measured at fair value. It also means that gains caused by the deterioration of an entity's own credit risk on such liabilities will no longer be recognised in profit or loss.

The standard also eliminates the exception from fair value measurement contained in HKAS 39 for derivative financial instruments that are linked to and must be settled by delivery of an unquoted equity instrument.

(ii) Impairment

The standard introduces a new, expected-loss impairment model that will require more timely recognition of expected credit losses. Specifically, it requires entities to account for 12 months expected credit losses from inception when financial instruments are first recognised and to recognise full lifetime expected credit losses on a more timely basis when there have been significant increases in credit risk since initial recognition. The impairment for financial instruments that are subsequently measured at amortised cost, fair value through other comprehensive income (debt instruments), loan commitments and financial guarantees will be governed by this standard.

2. Significant accounting policies (continued)

2.1 Basis of preparation (continued)

(b) Standards and amendments issued that are not yet mandatorily effective and have not been early adopted by the Group in 2016 (continued)

(iii) Hedge accounting

The requirements related to hedge accounting would better align the accounting treatments with risk management activities and enable entities to better reflect these activities in their financial statements. It relaxes the requirements for assessing hedge effectiveness which more risk management strategies may be eligible for hedge accounting. It also relaxes the rules on using non-derivative financial instruments as hedging instruments and allows greater flexibility on hedged items. Users of the financial statements will be provided with more relevant information about risk management and the effect of hedge accounting on the financial statements.

Early application of HKFRS 9 in its entirety at the same time is permitted. Only the part related to own credit risk can be elected to be early applied in isolation. The Group has already formed a groupwide project team to assess the impact of HKFRS 9, formulate the work plan and implement the standard. Significant works has been done on analysing our financial instruments, building models and designing new workflows. Due to the complication of the project, no quantitative information of the potential effect is concluded yet.

- HKFRS 15, "Revenue from Contracts with Customers". HKFRS 15 applies a single model and specifies the accounting treatment for all revenue arising from contracts with customers. The new standard is based on the core principle that revenue is recognised to reflect the consideration expected to be entitled when control of promised good or service transfers to customer. It is also applicable to the recognition and measurement of gains or losses on the sale of some non-financial assets such as properties or equipment that are not an output of ordinary activities. HKFRS 15 also includes a set of disclosure requirements about revenue from customer contracts. The new standard will replace the separate models for goods, services and construction contracts stipulated in different standards under the current HKFRS. The Group is considering the financial impact of the standard.

- HKFRS 16, "Leases". HKFRS 16 supersedes the existing standard and interpretations related to leases. It applies a single control model to identify leases and distinguish between leases and service contracts. Significant changes to lessee accounting are introduced, with the distinction between operating and finance leases removed and the right-of-use assets and lease liabilities recognised except under short term and low value leases. There are no significant changes to the lessor accounting requirements. The standard is applied retrospectively. Early application is permitted for entities that have also adopted HKFRS 15 "Revenue from Contracts with Customers". The Group is considering the financial impact of the standard and the timing of its application.

2. Significant accounting policies (continued)

2.2 Consolidation

The consolidated financial statements include the financial statements of the Company and all of its subsidiaries for the year ended 31 December.

(1) Subsidiaries

Subsidiaries are entities (including structured entities), directly or indirectly, controlled by the Group. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e. existing rights that give the Group the current ability to direct the relevant activities of the investee). When the Company has, directly or indirectly, less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including: (a) the contractual arrangement with the other vote holders of the investee; (b) rights arising from other contractual arrangements; and (c) the Group's voting rights and potential voting rights. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are de-consolidated from the date that control ceases.

If the Group loses control over a subsidiary, it derecognises (i) the assets (including goodwill) and liabilities of the subsidiary, (ii) the carrying amount of any non-controlling interest; and recognises (i) the fair value of the consideration received, (ii) the fair value of any investment in that former subsidiary retained; reclassifies the amounts previously recognised in other comprehensive income to the income statement or retained earnings, as appropriate, on the same basis as directly disposed of the related assets or liabilities; recognises any resulting differences as gain or loss in income statement.

If the Group is committed by the Board to a sale plan involving loss of control of a subsidiary (a disposal group) that is unlikely to be withdrawn or changed significantly, the Group shall classify all the assets and liabilities of that subsidiary as held for sale only when the following criteria are met on or before the end of the reporting period: (i) the carrying amount will be recovered principally through a sale transaction rather than through continuing use; (ii) the subsidiary is available for immediate sale in its present condition subject only to terms that are usual and customary for the sale of its kind and its sale must be highly probable, including a high probability of shareholders' approval, if needed; (iii) an active programme to locate a buyer at a reasonable price has been initiated and to complete the sale within one year, regardless of whether the Group will or will not retain a non-controlling interest after the sale. Disposal group (other than investment properties and financial instruments) is initially recognised and subsequently remeasured at the lower of its carrying amount and fair value less costs to sell. Property, plant and equipment classified as held for sale are not depreciated.

(i) Business combinations not under common control

Acquisitions of businesses not under common control are accounted for using the acquisition method. The consideration transferred in a business combination is the fair values at the acquisition date of the assets transferred, the liabilities incurred (including contingent consideration arrangement) and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs are expensed in the income statement as incurred.

2. Significant accounting policies (continued)

2.2 Consolidation (continued)

(1) Subsidiaries (continued)

(i) Business combinations not under common control (continued)

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the Group's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If after assessment, the fair value of the acquiree's identifiable net assets exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the Group's previously held interest in the acquiree (if any), the excess is recognised immediately in the income statement as a bargain purchase gain. Subsequently, goodwill is subject to impairment testing at least annually.

Where the consideration transferred by the Group in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at fair value at the acquisition date and considered as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with the corresponding adjustments being made against goodwill or gain on bargain purchase. Measurement period adjustments are adjustments that arise from additional information obtained during the measurement period about facts and circumstances that existed as of the acquisition date. Measurement period does not exceed one year from the acquisition date.

On an acquisition-by-acquisition basis, the Group recognises any non-controlling interests in the acquiree either at fair value or at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets.

(ii) Business combinations under common control

For a combination with a company under common control, the merger accounting method will be applied. The principle of merger accounting is a way to combine companies under common control as though the business of the acquiree had always been carried out by the acquirer. The Group's consolidated financial statements represent the consolidated results, consolidated cash flows and consolidated financial position of the Group as if any such combination had occurred from the date when the Company and the acquiree first came under common control (i.e. no fair value adjustment on the date of combination is required). The difference between the consideration and carrying amount at the time of combination is recognised in equity. The effects of all transactions between the Group and the acquiree, whether occurring before or after the combination, are eliminated in preparing the consolidated financial statements of the Group. Comparative amounts are presented as if the acquiree had been combined at the end of the previous reporting period. The transaction costs for the combination will be expensed in the income statement.

2. Significant accounting policies (continued)

2.2 Consolidation (continued)

(1) Subsidiaries (continued)

Inter-company transactions, balances and unrealised gains on transactions between Group companies are eliminated; unrealised losses are also eliminated unless the transaction provides evidence of impairment of the assets transferred. Where necessary, accounting policies of subsidiaries have been changed to ensure consistency with the policies adopted by the Group.

In the Company's balance sheet, the investments in subsidiaries are stated at cost less allowance for impairment losses. The results of subsidiaries are accounted for by the Company on the basis of dividends received and receivable. Dividend income from subsidiaries is recognised in the income statement when the right to receive payment is established.

(2) Transactions with non-controlling interests

The Group treats transactions with non-controlling interests without change of control as transactions with equity owners of the Group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recognised in equity. Gains or losses on disposals to non-controlling interests are also recognised in equity.

When the Group ceases to have control or significant influence, any retained interest in the entity is re-measured to its fair value, with the change in carrying amount recognised in the income statement. The fair value is the initial carrying amount for the purposes of subsequent accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. Amounts previously recognised in other comprehensive income are reclassified to the income statement or retained earnings, as appropriate.

(3) Associates and joint ventures

Associate is the entity over which the Group has significant influence but not control or joint control, generally accompanying a shareholding of between 20% and 50% of the voting rights.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

Investments in associates and joint ventures are accounted for using the equity method of accounting and are initially recognised at cost, unless it is classified as held for sale (or included in a disposal group that is classified as held for sale). The Group's investments in associates and joint ventures include goodwill, net of accumulated impairment loss and any related accumulated foreign currency translation difference.

2. Significant accounting policies (continued)

2.2 Consolidation (continued)

(3) Associates and joint ventures (continued)

The Group's share of the post-acquisition profits or losses of associates or joint ventures is recognised in the income statement, and its share of post-acquisition movements in reserves is recognised in reserves. The accumulated post-acquisition movements are adjusted against the cost of the investment. When the Group's share of losses in an associate or a joint venture equals or exceeds its interest in the associate or joint venture, the Group does not recognise further losses unless the Group has incurred obligations or made payments on behalf of the associates or joint ventures.

Unrealised gains on transactions between the Group and its associates or joint ventures are eliminated to the extent of the Group's interest in the associates or joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of impairment of the asset transferred.

If the ownership interest in an associate or a joint venture is reduced but significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income are reclassified to the income statement where appropriate.

2.3 Segmental reporting

The operating result of segments are reported in a manner consistent with the internal reporting provided to the Management Committee, which is the chief operating decision maker of the Group, that allocates resources and assesses the performance of operating segments. Income and expenses directly associated with each segment are included in determining operating segment performance.

2.4 Foreign currency translation

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, which is the Company's functional and presentation currency.

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or exchange rates at the end of the reporting period for items that are re-measured. Foreign exchange gains and losses resulting from the settlement of foreign currency transactions using the exchange rates prevailing at the dates of the transactions and monetary assets and liabilities denominated in foreign currencies translated at the exchange rate at the end of the reporting period are recognised directly in the income statement, except when deferred in other comprehensive income as qualifying cash flow hedges or qualifying net investment hedges.

Translation differences on monetary securities held at fair value through profit or loss are reported as part of the fair value gain or loss. Changes in the fair value of monetary securities denominated in foreign currency classified as available-for-sale are analysed between translation differences resulting from changes in the amortised cost of the securities and other changes in the carrying amount of the securities. Translation differences related to changes in the amortised cost are recognised in the income statement, and other changes in the carrying amount are recognised in other comprehensive income.

2. Significant accounting policies (continued)

2.4 Foreign currency translation (continued)

Translation differences on non-monetary items, such as equities held at fair value through profit or loss, are reported as part of the fair value gain or loss. Translation differences on non-monetary financial assets such as equities classified as available-for-sale are included in other comprehensive income.

The results and financial position of all the Group entities that have a functional currency different from Hong Kong dollars are translated into Hong Kong dollars as follows:

- assets and liabilities are translated at the closing rate at the end of the reporting period;
- income and expenses are translated at average exchange rates; and
- all resulting exchange differences are recognised in the currency translation reserve in equity through other comprehensive income.

On consolidation, exchange differences arising from the translation of the net investment in foreign entities, borrowings and other currency instruments designated as hedges of such investments are taken to other comprehensive income and are accumulated separately in equity in the translation reserve. When a foreign entity is disposed, such exchange differences are reclassified from equity to the income statement, as part of the gain or loss on sale.

2.5 Derivative financial instruments and hedge accounting

Derivatives are initially recognised at fair value on the date the derivative contract is entered into and are subsequently re-measured at fair value. Fair values are obtained from quoted market prices in active markets, including recent market transactions, and through the use of valuation techniques, including discounted cash flow models and option pricing models, as appropriate. All derivatives are carried as assets when fair value is positive and as liabilities when fair value is negative.

Certain derivatives embedded in other financial instruments are treated as separate derivatives when their economic characteristics and risks are not closely related to those of the host contract and the host contract is not carried at fair value through profit or loss. These embedded derivatives are measured at fair value with changes in fair value recognised in the income statement.

Derivatives are categorised as held for trading and changes in their fair value are recognised immediately in the income statement unless they are designated as hedges and are effective hedging instruments, then they are subject to measurement under the hedge accounting requirements.

For derivative instruments designated as hedging instrument and are effectively hedged, the method of recognising the resulting fair value gain or loss depends on the nature of the item being hedged. The Group designates certain derivatives as either:

(a) hedges of the fair value of recognised assets or liabilities or firm commitments (fair value hedge); or

(b) hedges of a particular risk associated with a highly probable future cash flow attributable to a recognised asset or liability, or a highly probable forecasted transaction (cash flow hedge).

2. Significant accounting policies (continued)

2.5 Derivative financial instruments and hedge accounting (continued)

Hedge accounting is used for derivatives designated in this way.

The Group documents at inception the relationship between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. The Group also documents its assessment, both at the hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items. These criteria should be met before a hedge can be qualified to be accounted for under hedge accounting.

(a) Fair value hedge

Changes in the fair value of derivatives that are designated and qualified as effective fair value hedges are recorded in the income statement, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

When fair value hedge accounting is applied to fixed rate financial liabilities, the carrying values of the financial liabilities are adjusted for changes in fair value that are attributable to the interest rate risk being hedged with the derivative instruments rather than carried at amortised cost, such carrying value adjustment is recognised in the income statement together with the changes in fair value of the hedging derivatives.

If the hedge relationship no longer meets the criteria for hedge accounting or is terminated for reasons other than derecognition, e.g. due to repayment of the hedged item, the unamortised carrying value adjustment (the difference between the carrying value of the hedged item at the time of termination and the value at which it would have been carried had the hedge never existed) to the hedged item is amortised to the income statement over the remaining life of the hedged item by the effective interest method. If the hedged item is derecognised, the unamortised carrying value adjustment is recognised immediately in the income statement.

(b) Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualified as cash flow hedges are recognised in other comprehensive income and accumulated in equity. The gain or loss relating to the ineffective portion is recognised immediately in the income statement. Amounts accumulated in equity are reclassified to the income statement in the periods when the hedged item affects profit or loss.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any accumulated gain or loss existing in equity at that time remains in equity and is recognised in the income statement when the forecast transaction is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the accumulated gain or loss that was reported in equity is immediately reclassified to the income statement.

2. Significant accounting policies (continued)

2.5 Derivative financial instruments and hedge accounting (continued)

(c) Net investment hedge

Hedges of net investments in foreign operations are accounted for in a similar way to cash flow hedges. A gain or loss on the effective portion of the hedging instrument is recognised in other comprehensive income and accumulated in equity; a gain or loss on the ineffective portion is recognised immediately in the income statement. Accumulated gains and losses previously recognised in other comprehensive income are reclassified to the income statement upon disposal of the foreign operation as part of the gain or loss on disposal.

2.6 Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously.

2.7 Interest income and expense and fee and commission income and expense

Interest income and expense are recognised in the income statement for all financial assets and financial liabilities using the effective interest method.

The effective interest method is a method of calculating the amortised cost of a financial asset or a financial liability and of allocating the interest income or interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Group estimates future cash flows considering all contractual terms of the financial instrument (e.g. prepayment options or incentives relating to residential mortgage loans) but does not consider future credit losses. The calculation includes fees, premiums or discounts and basis points paid or received between parties to the contract, and directly attributable origination fees and costs which represent an integral part of the effective yield.

For all hedge transactions where interest rate is the hedged risk, interest income or interest expense from hedged instruments such as fixed rate debt securities or fixed rate subordinated notes are disclosed on a net basis together with net interest income/expense arising from the hedging instrument such as interest rate swap.

Once a financial asset or a group of similar financial assets has been written down as a result of an impairment loss, interest income is recognised on the written down value using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. Subsequent unwinding of the discount allowance is recognised as interest income.

Fee and commission income and expenses that are not an integral part of the effective yield are recognised on an accrual basis ratably over the period when the related service is provided, such as administrative fee, asset management fee and custody services fee. Loan syndication fees are recognised as revenue when the related syndication arrangement has been completed and the Group has retained no part of the loan package for itself or has retained a part at the same effective interest rate as applicable to the other participants.

2. Significant accounting policies (continued)

2.8 Financial assets

The Group classifies its financial assets into the following four categories: financial assets at fair value through profit or loss, loans and receivables, held-to-maturity securities and available-for-sale financial assets. The Management determines the classification of investments at initial recognition. The classification depends on the purpose for which the financial assets are held. All financial assets are recognised initially at fair value. Except for financial assets carried at fair value through profit or loss, all transaction costs of financial assets are included in their initial carrying amounts.

(1) Financial assets at fair value through profit or loss

This category has two sub-categories: financial assets held for trading, and those designated at fair value through profit or loss at inception.

A financial asset which has been acquired or incurred principally for the purpose of selling in the short term or is part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking is classified as held for trading. Derivatives are also classified as held for trading unless they are designated as effective hedges.

A financial asset, other than one held for trading, will be designated as a financial asset at fair value through profit or loss, if it meets one of the criteria set out below, and is so designated by the Management:

- eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as "an accounting mismatch") that would otherwise arise from measuring the financial assets or recognising the gains and losses on them on different bases; or

- applies to a group of financial assets, financial liabilities or both that is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the group is provided internally on that basis to the key management; or

- relates to financial assets containing one or more embedded derivative that significantly modifies the cash flow resulting from those financial assets.

These assets are recognised initially at fair value, with transaction costs taken directly to the income statement, and are subsequently re-measured at fair value.

Gains and losses from changes in the fair value of such assets (excluding the interest component) are reported in net trading gain/loss or net gain/loss on financial instruments designated at fair value through profit or loss. The interest component is reported as part of interest income. Dividends on equity instruments of this category are also recognised in net trading gain/loss or net gain/loss on financial instruments designated at fair value through profit or loss when the Group's right to receive payment is established.

2. Significant accounting policies (continued)

2.8 Financial assets (continued)

(2) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market, including placements with and advances to banks and other financial institutions, investment debt securities without an active market and loans and advances to customers. They arise when the Group provides money, goods or services directly to a debtor with no intention of trading the receivable. They are initially recorded at fair value plus any directly attributable transaction costs and are subsequently measured at amortised cost using the effective interest method less allowances for impairment losses.

(3) Held-to-maturity

Financial assets classified as held-to-maturity are those traded in active markets, with fixed or determinable payments and fixed maturities that the Group's Management has both the positive intention and the ability to hold to maturity. Where the Group sold held-to-maturity assets (i) other than due to an isolated event beyond the Group's control, non-recurring and could not have been reasonably anticipated by the Group, such as a significant deterioration in the issuer's creditworthiness, significant change in statutory or regulatory requirement; or (ii) other than an insignificant amount of held-to-maturity assets, the entire category would be tainted and reclassified as available-for-sale. They are initially recorded at fair value plus any directly attributable transaction costs, and are subsequently measured at amortised cost using the effective interest method less allowances for impairment losses.

(4) Available-for-sale

Financial assets classified as available-for-sale are those that are either designated as such or are not classified in any of the other categories. They are intended to be held for an indefinite period of time but may be sold in response to needs for liquidity or changes in interest rates, exchange rates or equity prices.

Available-for-sale financial assets are initially recorded at fair value plus any directly attributable transaction costs, and are subsequently measured at fair value. Unrealised gains and losses arising from changes in the fair value of investments are recognised directly in other comprehensive income, until the financial asset is derecognised or impaired at which time the accumulated gain or loss previously recognised in equity should be transferred to the income statement. However, interest income which includes the amortisation of premium and discount is calculated using the effective interest method and is recognised in the income statement. Dividends on equity instruments classified as available-for-sale are recognised in other operating income when the Group's right to receive payment is established.

For a financial asset reclassified from the available-for-sale category, the fair value carrying amount at the date of reclassification becomes its new amortised cost and any previous gain or loss on that asset that has been recognised in other comprehensive income is amortised to profit or loss over the remaining life of the investment using the effective interest method. Any difference between the new amortised cost and the maturity amount is also amortised over the remaining life of the financial asset using the effective interest method. If the financial asset is subsequently determined to be impaired, the amount recorded in other comprehensive income is reclassified to profit or loss immediately.

The treatment of translation differences on available-for-sale securities is dealt with in Note 2.4.

2. Significant accounting policies (continued)

2.9 Financial liabilities

The Group classifies its financial liabilities under the following categories: trading liabilities, financial liabilities designated at fair value through profit or loss, deposits, debt securities and certificates of deposit in issue, subordinated liabilities, and other liabilities. All financial liabilities are classified at inception and recognised initially at fair value.

(1) Trading liabilities

A financial liability is classified as held for trading if it is incurred principally for the purpose of repurchasing in the short term. Derivatives are also classified as held for trading unless they are designated as effective hedges. It is measured at fair value and any gains and losses from changes in fair value are recognised in the income statement.

(2) Financial liabilities designated at fair value through profit or loss

A financial liability can be designated at fair value through profit or loss if it is so designated at inception. Financial liabilities so designated include certain certificates of deposit in issue and certain deposits received from customers that are embedded with derivatives. A financial liability is so designated if it meets one of the following criteria:

- eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as "an accounting mismatch") that would otherwise arise from measuring the financial liabilities or recognising the gains and losses on them on different bases; or

- applies to a group of financial assets, financial liabilities or both that is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the group is provided internally on that basis to the key management; or

- relates to financial liabilities containing one or more embedded derivative that significantly modifies the cash flow resulting from those financial liabilities.

Financial liabilities designated at fair value through profit or loss are measured at fair value and any gains and losses from changes in fair value are recognised in the income statement.

(3) Deposits, debt securities and certificates of deposit in issue, subordinated liabilities and other liabilities

Deposits and debt securities and certificates of deposit in issue, together with subordinated liabilities and other liabilities, other than those classified as trading liabilities or designated at fair value through profit or loss are carried at amortised cost. Any difference (if available) between proceeds net of transaction costs and the redemption value is recognised in the income statement over the period using the effective interest method.

2. Significant accounting policies (continued)

2.10 Financial guarantee contracts

Financial guarantee contracts are contracts that require the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due, in accordance with the terms of a contract between the holder and the debtor.

Financial guarantee contracts are initially recognised as financial liabilities and reported under "Other accounts and provisions" in the financial statements at fair value on the date the guarantee was given. Subsequent to initial recognition, the Group's liabilities under such guarantees are measured at the higher of (i) the amount determined in accordance with HKAS 37 "Provisions, Contingent Liabilities and Contingent Assets" and (ii) the amount initially recognised less, where appropriate, accumulated amortisation recognised over the life of the guarantee on a straight-line basis. Any changes in the liability relating to financial guarantee contracts are taken to the income statement.

2.11 Recognition and derecognition of financial instruments

Purchases and sales of financial assets at fair value through profit or loss, available-for-sale and held-to-maturity securities are recognised on the trade date, the date on which the Group purchases or sells the assets. Loans and receivables (except investment securities without an active market) are recognised when cash is advanced to the borrowers. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or where the Group has transferred substantially all risks and rewards of ownership. When the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, the Group either continues to recognise the transferred financial asset to the extent of its continuing involvement if control remains or derecognise it if there is no retained control.

Trading liabilities, financial liabilities designated at fair value through profit or loss and debt securities and certificates of deposit in issue are recognised on the trade date. Deposits that are not trading liabilities are recognised when money is received from customers, other liabilities are recognised when such obligations arise. Financial liabilities are derecognised from the balance sheet when and only when the obligation specified in the contract is discharged, cancelled or expires. If the Group purchases its own debt, it is removed from the balance sheet, and the difference between the carrying amount of a liability and the consideration paid is included in net trading gain/loss.

Securities and bills sold to a counterparty with an obligation to repurchase at a pre-determined price on a specified future date under a repurchase agreement are referred to as repos. Securities and bills purchased from a counterparty with an obligation to re-sell to the counterparty at a pre-determined price on a specified future date under a resale agreement are referred to as reverse repos.

Repos or securities lending are initially recorded as due to banks, placements from banks and other financial institutions, as appropriate, at the actual amount of cash received from the counterparty. Financial assets given as collateral for repurchase agreements are not derecognised and are recorded as investment in securities or financial assets at fair value through profit or loss. Reverse repos or securities borrowing are initially recorded in the balance sheet as cash and due from banks or placements with banks and other financial institutions, as appropriate, at the actual amount of cash paid to the counterparty. Financial assets received as collateral under reverse repurchase agreements are not recognised on the balance sheet. The difference between sale and repurchase price is recognised as interest income or interest expense over the life of the agreements using the effective interest method.

2. Significant accounting policies (continued)

2.12 Fair value measurement

The Group measures its premises and investment properties, precious metals and certain financial instruments at fair value at the end of each reporting period. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in its principal market or the most advantageous market accessible by the Group at the measurement date.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

The Group uses the price within the bid-offer spread that is most representative of the fair value of financial instruments, where appropriate, includes using on the residual of the net offsetting risk position of portfolios of financial assets and financial liabilities in cases the Group manages such groups of financial assets and liabilities according to their net market risk exposures. Despite the Group measures the fair value of these groups of financial instruments on a net basis, the underlying financial assets and financial liabilities are separately presented in the financial statements unless the offsetting criteria stated in Note 2.6 are fulfilled.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

If the market for assets or liabilities is not active, the Group uses valuation techniques, including the use of recent arm's length transactions, discounted cash flow analysis, option pricing models and other valuation techniques commonly used by market participants, that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

2.13 Precious metals

Precious metals comprise gold, silver and other precious metals. Precious metals are initially recognised and subsequently re-measured at fair value. Mark-to-market gains or losses on precious metals are included in net trading gain/loss.

2.14 Impairment of financial assets

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

(i) significant financial difficulty of the issuer or obligor;

(ii) a breach of contract, such as a default or delinquency in interest or principal payment;

2. Significant accounting policies (continued)

2.14 Impairment of financial assets (continued)

(iii) the Group granting to the borrower, for economic or legal reasons relating to the borrower's financial difficulty, a concession that the lender would not otherwise consider;

(iv) it becoming probable that the borrower will enter into bankruptcy or other financial reorganisation;

(v) the disappearance of an active market or downgrading below investment grade level for that financial asset because of financial difficulties; or

(vi) 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, including:

- adverse changes in the payment status of borrowers in the group; or
- national or local economic conditions that correlate with defaults on the assets in the group.

(1) Assets carried at amortised cost

The Group first assesses whether objective evidence of impairment exists individually for financial assets. If the Group determines that no individually assessed impairment is provided, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is or continues to be recognised are not included in a collective assessment of impairment.

If there is objective evidence that an impairment loss on loans and receivables or held-to-maturity securities has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred), discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognised in the income statement. If a loan or held-to-maturity security has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract. As a practical expedient, the Group may measure impairment on the basis of an instrument's fair value using an observable market price.

The calculation of the present value of the estimated future cash flows of a collateralised financial asset reflects the cash flows that may result from foreclosure less costs for obtaining and selling the collateral.

For the purposes of a collective assessment of impairment, financial assets are grouped on the basis of similar and relevant credit risk characteristics. Those characteristics are relevant to the estimation of future cash flows for groups of such assets by being indicative of the debtors' ability to pay all amounts due according to the contractual terms of the assets being evaluated.

2. Significant accounting policies (continued)

2.14 Impairment of financial assets (continued)

(1) Assets carried at amortised cost (continued)

Future cash flows in a group of financial assets that are collectively evaluated for impairment are estimated on the basis of the contractual cash flows of the assets in the group and historical loss experience for assets with credit risk characteristics similar to those in the group. Historical loss experience is adjusted on the basis of current observable data to reflect the effects of current conditions that did not affect the period on which the historical loss experience is based and to remove the effects of conditions in the historical period that do not exist currently.

When a loan is uncollectible, it is written off against the related allowance for impairment losses. Such loans are written off after all the necessary procedures have been completed and the amount of the loss has been determined. Subsequent recoveries of amounts previously written off decrease the amount of impairment losses in the income statement.

If, in a subsequent period, the amount of allowance for impairment losses decreases and the decrease can be related objectively to an event occurring after the impairment loss was recognised (such as an improvement in the debtor's credit rating), the previously recognised impairment loss to the extent of its decrease is reversed by adjusting the allowance account. The amount of the reversal is recognised in the income statement.

Loans whose terms have been renegotiated with substantial difference in the terms are no longer considered to be past due but are treated as new loans.

(2) Assets classified as available-for-sale

If evidence of impairment exists for available-for-sale financial assets, the accumulated losses, measured as the difference between the acquisition cost or amortised cost and the current fair value, less any impairment loss on that financial asset previously recognised in the income statement, is removed from equity and recognised in the income statement. In the case of equity investments classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered in determining whether the assets are impaired. If, in a subsequent period, the fair value of a debt instrument classified as available-for-sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in the income statement, the impairment loss to the extent of its decrease is reversed through the income statement. With respect to equity instruments, further fair value changes are recognised in the reserve for fair value change of available-for-sale securities through other comprehensive income, impairment losses are not reversed through the income statement.

2.15 Impairment of investment in subsidiaries, associates, joint ventures and non-financial assets

Assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Potential indications of impairment may include significant adverse changes in the technological, market, economic or legal environment in which the assets operate or whether there has been a significant or prolonged decline in value below their cost. "Significant" is evaluated against the original cost of the investment and "prolonged" against the period in which the fair value has been below its original cost.

2. Significant accounting policies (continued)

2.15 Impairment of investment in subsidiaries, associates, joint ventures and non-financial assets (continued)

An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash generating units). Assets that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

In the Company's balance sheet, impairment testing of the investment in a subsidiary, associate or joint venture is also required upon receiving dividend from that entity if the dividend exceeds the total comprehensive income of that entity concerned in the period the dividend is declared or if the carrying amount of that entity in the Company's balance sheet exceeds the carrying amount of that entity's net assets including goodwill in its consolidated balance sheet.

2.16 Investment properties

Properties that are held for long-term rental yields or for capital appreciation or both, and that are not occupied by the companies in the Group, are classified as investment properties. Properties leased out within Group companies are classified as investment properties in individual companies' financial statements and as premises in consolidated financial statements. Land held under operating lease is classified and accounted for as investment property when the rest of the definition of investment property is met. The operating lease is accounted for as if it is a finance lease.

Investment properties are recognised initially at cost, including related transaction costs. After initial recognition, investment properties are measured at fair value.

Subsequent expenditure is charged to the asset's carrying amount only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The item is stated at cost less impairment and is included in the carrying amount of investment properties. Once the item begins to generate economic benefits, it is then measured at fair value. All other repairs and maintenance costs are expensed in the income statement during the financial period in which they are incurred.

Any changes in fair value are recognised directly in the income statement.

If an investment property becomes owner-occupied, it is reclassified as premises, and its fair value at the date of reclassification becomes its cost for accounting purposes. If an item of premises becomes an investment property because its use has changed, any difference resulting between the carrying amount and the fair value of this item at the date of transfer is recognised in other comprehensive income as a revaluation of premises under HKAS 16 "Property, Plant and Equipment". However, if a fair value gain reverses a previous revaluation loss or impairment loss, the gain is recognised in the income statement up to the amount previously debited.

2.17 Properties, plant and equipment

Properties are mainly branches and office premises. Premises are stated at fair value based on periodic, at least annually, valuations by external independent valuers less any subsequent accumulated depreciation and impairment losses. Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset and the net amount is restated to the revalued amount of the asset. In the intervening periods, the directors review the carrying amount of premises, by reference to the open market value of similar properties, and adjustments are made when there has been a material change.

2. Significant accounting policies (continued)

2.17 Properties, plant and equipment (continued)

Increases in the carrying amount arising on revaluation of premises are credited to the premises revaluation reserve through other comprehensive income. Decreases that offset previous increases of the same individual asset are charged against premises revaluation reserve through other comprehensive income; all other decreases are expensed in the income statement. Any subsequent increases are credited to the income statement up to the amount previously debited, and then to the premises revaluation reserve. Upon disposal of premises, the relevant portion of the premises revaluation reserve realised in respect of previous valuations is released and transferred from the premises revaluation reserve to retained earnings.

All plant and equipment are stated at historical cost less accumulated depreciation and impairment losses. Historical cost includes expenditures that are directly attributable to the acquisition and installation of the items.

Subsequent costs are included in an asset's carrying amount or are recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The item is stated at cost less impairment until it begins to generate economic benefits, then the item is subsequently measured according to the measurement basis of its respective assets class. All other repairs and maintenance costs are charged to the income statement during the financial period in which they are incurred.

Depreciation is calculated on the straight-line method to write down the cost or revalued amount of such assets over their estimated useful lives as follows:

• Properties	Over the life of government land leases
• Plant and equipment	3 to 15 years

The useful lives of assets are reviewed, and adjusted if appropriate, as at the end of each reporting period.

At the end of each reporting period, both internal and external sources of information are considered to determine whether there is any indication that properties, plant and equipment, are impaired. If any such indication exists, the recoverable amount of the asset is estimated and where relevant, an impairment loss is recognised to reduce the asset to its recoverable amount. Such an impairment loss is recognised in the income statement except where the asset is carried at valuation and the impairment loss does not exceed the revaluation surplus for that same asset, in which case it is treated as a revaluation decrease. The recoverable amount is the higher of the asset's fair value less costs to sell and value in use. Impairment loss is reversed through the premises revaluation reserve or the income statement as appropriate.

Gains or losses on disposals are determined as the difference between the net disposal proceeds and the carrying amount, relevant taxes and expenses. These are recognised in the income statement on the date of disposal. Any related revaluation surplus is transferred from the revaluation reserve to retained earnings and is not reclassified to the income statement.

2. Significant accounting policies (continued)

2.18 Leases

(1) Operating leases

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. The total payments made under operating leases (net of any incentives received from the lessor) are charged to the income statement on a straight-line basis over the period of the lease. Contingent rental payable is recognised as expense in the accounting period in which they are incurred.

When an operating lease is terminated before the lease period has expired, any payment required to be made to the lessor by way of penalty is recognised as an expense in the period in which termination takes place. Rental income from operating leases is recognised on a straight-line basis over the lease term.

(2) Finance leases

Leases of assets where lessee have obtained substantially all the risks and rewards of ownership are classified as finance leases. Government land leases in Hong Kong are classified as finance leases as the present value of the minimum lease payments (i.e. 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 lease's commencement at the lower of the fair value of the leased asset and the present value of the minimum lease payments. Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the finance balance outstanding. The corresponding rental obligations, net of finance charges, are included in other liabilities. Investment properties acquired under finance leases are carried at their fair value.

When assets are leased out under a finance lease, the present value of the lease payments is recognised as a receivable. Lease income is recognised over the term of the lease using net investment method, which reflects a constant periodic rate of return.

2.19 Insurance and investment contracts

(1) Insurance and investment contract classification, recognition and measurement

The Group follows the local regulatory requirements to measure the liabilities of its insurance contracts and investment contracts with discretionary participation feature ("DPF").

The Group issues insurance contracts, which are contracts that transfer significant insurance risk and may also transfer financial risk. As a general guideline, the Group defines significant insurance risk as the possibility of having to pay benefits on the occurrence of an insured event that are at least 10% more than the benefit payable if the insured event did not occur. The Group issues long term business insurance contracts, which insure events covered by life policies (for example death, survival, or total permanent disability) over a long duration. A liability for contractual benefits that are expected to be incurred in the future is recorded when premiums are recognised. In addition, the Group issues investment contracts. Investment contracts transfer financial risk with no significant insurance risk. They contain a DPF which entitles the holders to receive additional benefits (supplement to guaranteed benefits) that are likely to be significant based on the performance and return of a specified pool or type of contracts.

2. Significant accounting policies (continued)

2.19 Insurance and investment contracts (continued)

(1) Insurance and investment contract classification, recognition and measurement (continued)

Linked long term insurance contracts with embedded derivatives (which are closely related to the host insurance contracts) linking payments on the contract to units of the investment funds which the Group has invested with the consideration received from the contract holders, the liability is adjusted for all changes in the fair value of the underlying assets, and includes a liability for contractual benefits that are expected to be incurred in the future which is recorded when the premiums are recognised.

Retirement scheme management category I contracts are classified as investment contracts. They also include an investment guarantee element in the determination of the credit rate to policyholders' accounts. The liability for these contracts is determined using a retrospective calculation method which represents an account balance based on the premiums received to date plus interest or bonus credited to the policyholders less policy charges.

Retirement scheme management category III insurance contracts, as defined in the Insurance Companies Ordinance, insure events associated with the cessation of employment due to death. A liability for contractual benefits that are expected to be incurred in the future is recorded when premiums are recognised. The portion of the premium received on in-force contracts that relates to unexpired risks at the end of the reporting period is reported as the unearned premium liability, which is included in insurance liabilities.

Premiums are recognised as revenue when they become payable by the contract holders before the deduction of commissions and are gross of any taxes or duties levied on the premium. Benefits and claims are recorded as an expense when they are incurred.

The Group does not separately measure embedded derivatives that meet the definition of an insurance contract or options to surrender insurance contracts for a fixed amount (or an amount based on a fixed amount and an interest rate).

Contracts entered into by the Group with reinsurers under which the Group is compensated for losses on one or more contracts issued by the Group and that meet the classification requirement for insurance contracts as noted above are classified as reinsurance contracts held.

The benefits to which the Group is entitled under its reinsurance contracts held are recognised as reinsurance assets. These reinsurance assets consist of short-term amounts due from reinsurers as well as longer term receivables that are dependent on the expected claims and benefits arising from the related reinsured insurance contracts. Amounts recoverable from or due to reinsurers are measured consistently with the amounts associated with the underlying insurance contracts and in accordance with the terms of each reinsurance contract. Reinsurance liabilities are primarily premiums payable for reinsurance contracts and are recognised as an expense when due.

2. Significant accounting policies (continued)

2.19 Insurance and investment contracts (continued)

(2) Liability adequacy test

At the end of each reporting period, liability adequacy tests are performed to ensure the adequacy of the insurance contract liabilities. In performing these tests, current best estimates of future contractual cash flows and claims handling and administration expenses, as well as investment income from the assets backing such liabilities, are used. Any deficiency is immediately charged to the consolidated income statement, with a provision established for losses arising from the liability adequacy tests.

2.20 Cash and cash equivalents

For the purposes of the consolidated cash flow statement, cash and cash equivalents comprise balances with original maturity less than three months from the date of acquisition, including cash, balances with banks and other financial institutions, short-term bills and notes classified as investment securities and certificates of deposit.

2.21 Provisions

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 embodying economic benefits will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made.

2.22 Employee benefits

(1) Retirement benefit costs

The Group contributes to defined contribution retirement schemes under either recognised ORSO schemes or MPF schemes that are available to the Group's employees. Contributions to the schemes by the Group and employees are calculated as a percentage of employees' basic salaries for the ORSO schemes and in accordance with the MPF rules for MPF schemes. The retirement benefit scheme costs are charged to the income statement as incurred and represent contributions payable by the Group to the schemes. Contributions made by the Group that are forfeited by those employees who leave the ORSO scheme prior to the full vesting of their entitlement to the contributions are used by the Group to reduce the existing level of contributions or to meet its expenses under the trust deed of the ORSO schemes.

The assets of the schemes are held in independently-administered funds separate from those of the Group.

(2) Leave entitlements

Employee entitlements to annual leave and sick leave are recognised when they accrue to employees. A provision is made for the estimated liability for unused annual leave and the amount of sick leave expected to be paid as a result of services rendered by employees up to the end of the reporting period.

Compensated absences other than sick leave and special approved annual leaves are non-accumulating; they lapse if the current period's entitlement is not used in full. Except for unexpired annual leaves, they do not entitle employees to a cash payment for unused entitlement on leaving the Group.

2. Significant accounting policies (continued)

2.22 Employee benefits (continued)

(3) Bonus plans

The expected cost of bonus payments are recognised as a liability when the Group has a present legal or constructive obligation as a result of services rendered by employees and a reliable estimate of the obligation can be made. Liabilities for bonus plans that are expected to be settled longer than twelve months will be discounted if the amounts are significant.

2.23 Current and deferred income taxes

Tax expenses for the period comprises current and deferred tax. Tax is recognised in the income statement, except to the extent that it relates to items recognised directly in other comprehensive income. In this case, the tax is also recognised in other comprehensive income.

Income tax payable on profits, based on the applicable tax law enacted or substantially enacted at the end of the reporting period in each jurisdiction where the Company and the subsidiaries, associates and joint ventures operate and generate taxable income, is recognised as a current income tax expense in the period in which profits arise.

Deferred income tax is provided in full, using the balance sheet liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred income tax is determined using tax rates and laws that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

The principal temporary differences arise from asset impairment provisions, depreciation of premises and equipment, and revaluation of certain assets including available-for-sale securities and premises. However, the deferred income tax is not recognised if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred income tax liabilities are provided in full on all taxable temporary differences. Deferred income tax assets are recognised on deductible temporary differences, the carry forward of any unused tax credits and unused tax losses to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences, the carry forward of unused tax credits and unused tax losses can be utilised.

Deferred income tax is charged or credited in the income statement except for deferred income tax relating to fair value re-measurement of available-for-sale securities and revaluation of premises which are charged or credited to other comprehensive income, in which case the deferred income tax is also credited or charged to other comprehensive income and is subsequently recognised in the income statement together with the realisation of the deferred gain and loss.

Deferred tax liability or deferred tax asset arising from investment property is determined based on the presumption that the revaluation amount of such investment property will be recovered through sale with the relevant tax rate applied.

2. Significant accounting policies (continued)

2.24 Repossessed assets

Repossessed assets are initially recognised at the lower of their fair value less costs to sell and the amortised cost of the related outstanding loans on the date of repossession, and the related loans and advances together with the related impairment allowances are derecognised from the balance sheet. Subsequently, repossessed assets are measured at the lower of their cost and fair values less costs to sell and are reported as "non-current assets held for sale" included in "Other assets".

2.25 Fiduciary activities

The Group commonly acts as a trustee, or in other fiduciary capacities, that result in its holding or managing assets on behalf of individuals, trusts and other institutions. These assets and any gains or losses arising thereon are excluded from these financial statements, as they are not assets of the Group.

2.26 Contingent liabilities and contingent assets

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 an outflow of economic resources will be required or the amount of obligation cannot be measured reliably.

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

A contingent asset is a possible asset 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.

Contingent assets are not recognised but are disclosed in the notes to the financial statements when an inflow of economic benefits is probable. When the inflow is virtually certain, it will be recognised as an asset.

2.27 Related parties

For the purposes of these financial statements, a party is considered to be related to the Group if that party (i) controls, jointly controls or has significant influence over the Group; (ii) is a member of the same financial reporting group, such as parents, subsidiaries and fellow subsidiaries; (iii) is an associate or a joint venture of the Group or parent reporting group; (iv) is a key management personnel of the Group or parents; (v) is subject to common control with the Group; (vi) is an entity in which a person identified in (iv) controls; and (vii) provides key management personnel services to the Group or its parent. Related parties may be individuals or entities.

3. Critical accounting estimates and judgements in applying accounting policies

The Group makes estimates and assumptions that affect the carrying amounts of assets and liabilities within the next reporting period. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Areas susceptible to changes in essential estimates and judgements, which affect the carrying amount of assets and liabilities, are set out below. The effect of changes to either the key assumptions or other estimation uncertainties will be presented below if it is practicable to determine. It is possible that actual results may require material adjustments to the estimates referred to below.

3.1 Impairment allowances on loans and advances

The Group reviews its loan portfolios to assess impairment at least on a quarterly basis. In determining whether an impairment loss should be recorded in the income statement, the Group makes judgements as to whether there is any observable data indicating that there is a measurable decrease in the estimated future cash flows from a portfolio of loans and advances before the decrease can be identified with an individual loan in that portfolio. This evidence may include observable data indicating that there has been an adverse change in the payment status of borrowers in a group (e.g. payment delinquency or default), or economic conditions that correlate with defaults on assets in the group. The Management uses estimates based on historical loss experience for assets with credit risk characteristics and objective evidence of impairment similar to those in the portfolio when estimating expected future cash flows. The methodology and assumptions used for estimating both the amount and timing of future cash flows are reviewed regularly.

Carrying amounts of loans and advances as at 31 December 2016 are shown in Note 25.

3.2 Impairment of held-to-maturity and available-for-sale securities

The Group reviews its held-to-maturity and available-for-sale investment portfolios to assess impairment at least on a quarterly basis. In determining whether any of these investments is impaired, risk characteristics and performance such as external credit rating and market price, will be assessed. The Group makes estimates on the default rate and loss severity of each investment with reference to market performance of the portfolios, current payment status of the issuers or performance of the underlying assets, or economic conditions that correlate with defaults on the collateralised assets. The methodology and assumptions used for impairment assessments are reviewed regularly.

Carrying amounts of investment in securities as at 31 December 2016 are shown in Note 27.

3. Critical accounting estimates and judgements in applying accounting policies (continued)

3.3 Fair values of derivative financial instruments

The fair values of derivative financial instruments that are not quoted in active markets are determined by using valuation techniques. Valuation techniques used include discounted cash flows analysis and models with built-in functions available in externally acquired financial analysis or risk management systems widely used by the industry such as option pricing models. To the extent practical, the models use observable data. In addition, valuation adjustments may be adopted if factors such as credit risk are not considered in the valuation models. Management judgement and estimates are required for the selection of appropriate valuation parameters, assumptions and modeling techniques. Further details will be discussed in Note 5.

Carrying amounts of derivative financial instruments as at 31 December 2016 are shown in Note 24.

3.4 Held-to-maturity securities

The Group follows the guidance of HKAS 39 in classifying certain non-derivative financial assets with fixed or determinable payments and fixed maturity as held-to-maturity securities. This classification requires significant management judgement to evaluate the Group's intention and ability to hold such investments to maturity. If the Group fails to hold these investments to maturity other than for specific circumstances defined in HKAS 39, such as selling an insignificant amount, selling close to maturity or due to significant credit deterioration of such investments, it will be required to reclassify the entire portfolio of financial assets as available-for-sale securities. The investments would then be measured at fair value and not amortised cost.

Carrying amounts of held-to-maturity securities as at 31 December 2016 are shown in Note 27.

3.5 Estimate of future benefit payments and premiums arising from long term insurance contracts

In determining the Group's long term business fund liabilities (a component of insurance contract liabilities), the Group follows the Insurance Companies (Determination of Long Term Liabilities) Regulation under the Insurance Companies Ordinance and makes prudent assumptions which include appropriate margins for adverse deviation of the relevant factors. Estimates are made as to the expected number of deaths for each of the years in which the Group is exposed to risk. The Group bases these estimates on Hong Kong Assured Lives Mortality Table HKA01 that reflects recent historical mortality experience, adjusted where appropriate to reflect the Group's own experience. For contracts that insure the risk of longevity, appropriate prudent allowances are made for expected mortality improvements. The estimated number of deaths determines the value of the benefit payments and the value of the valuation premiums. The main source of uncertainty is that epidemics such as AIDS, SARS, avian flu and wide-ranging lifestyle changes, such as in eating, smoking and exercise habits, could result in future mortality being significantly worse than in the past for the age groups in which the Group has significant exposure to mortality risk. However, continuing improvements in medical care and social conditions could result in improvements in longevity in excess of those allowed for in the estimates used to determine the liability for contracts where the Group is exposed to longevity risk.

3. Critical accounting estimates and judgements in applying accounting policies (continued)

3.5 Estimate of future benefit payments and premiums arising from long term insurance contracts (continued)

Were the number of deaths in future years to differ by 10% (2015: 10%) from the Management's estimate, the long term business fund liability would increase by approximately HK$131 million (2015: approximately HK$87 million), which accounts for 0.22% (2015: 0.14%) of the liability. In this case, it is assumed there is no relief arising from reinsurance contracts held.

For linked long term insurance contracts with a life cover component, it is assumed that the Group will be able to increase mortality risk charges in future years in line with emerging mortality experience.

Estimates are also made as to future investment income arising from the assets backing long term insurance contracts. These estimates are based on current market returns as well as expectations about future economic and financial developments. Were the average future investment returns to decrease by 50 basis points (2015: 50 basis points) from the Management's estimates, the long term business fund liability would increase by approximately HK$1,225 million (2015: approximately HK$1,088 million). In this case, it is assumed there is no relief arising from reinsurance contracts held.

The Group has also assessed whether a provision for expense is necessary in accordance with the Insurance Companies Ordinance. A provision for expense is the amount required to meet the total net cost that would likely be incurred in fulfilling contracts if the Group were to cease to transact new business 12 months after the valuation date. As of 31 December 2016, nil of provision for maintenance expenses was provided (2015: Nil).

A resilience reserve was set up and included in long term business fund liabilities in accordance with the Insurance Companies (Determination of Long Term Liabilities) Regulation to provide a prudent provision against the effects of possible future changes to the value of the assets to meet the liabilities. The resilience reserve was set up based on the appointed actuary's advice of a 30 basis points (2015: 30 basis points) change in market yield of the underlying assets and valuation interest rates. The amount of resilience reserve set up depends on the degree of change in interest rate assumed.

3.6 Deferred tax assets

Deferred tax assets on unused tax losses are recognised to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of future taxable profits.

Deferred tax assets on unused tax credits are recognised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the estimation of available tax credits and the possibility to recover such deferred tax assets recognised.

4. Financial risk management

The Group is exposed to financial risks as a result of engaging in a variety of business activities. The principal financial risks are credit risk, market risk (including currency risk and interest rate risk) and liquidity risk. This note summarises the Group's exposures to these risks, as well as its objectives, risk management governance structure, policies and processes for managing and the methods used to measure these risks.

Financial risk management framework

The Group's risk management governance structure is designed to cover all business processes and ensures various risks are properly managed and controlled in the course of conducting business. The Group has a robust risk management organisational structure with a comprehensive set of policies and procedures to identify, measure, monitor and control various risks that may arise. These risk management policies and procedures are regularly reviewed and updated to reflect changes in markets and business strategies. Various groups of risk takers assume their respective responsibilities for risk management.

The Board of Directors, representing the interests of shareholders, is the highest decision-making authority of the Group and has the ultimate responsibility for risk management. The Board, with the assistance of its committees, has the primary responsibility for the formulation of risk management strategies and ensuring that the Group has an effective risk management system to implement these strategies.

The RC, a standing committee established by the Board of Directors, is responsible for overseeing the Group's various types of risks, approving Level I risk management policies and monitoring their implementation, reviewing significant or high risk exposures or transactions and exercising its power of veto if it considers that any transaction should not proceed. The Audit Committee assists the Board in fulfilling its role in overseeing the internal control system.

The Chief Executive ("CE") is responsible for managing the Group's various types of risks, and material risk exposures or transactions within his authority delegated by the Board of Directors. The Deputy Chief Executives ("DCEs") assist the CE in fulfilling his responsibilities on the day-to-day management of various types of risk, and are responsible for approving material risk exposures or transactions within their authorities delegated by the CE. The Chief Risk Officer ("CRO") assists the CE in fulfilling his responsibilities for the day-to-day management of risks. The CRO is responsible for initiating new risk management strategies, projects and measures in response to regulatory changes that will enable the Group to better monitor and manage new risk issues or areas that may arise from time to time from new businesses, products and changes in the operating environment. The CRO is also responsible for reviewing material risk exposures or transactions within his delegated authority. In accordance with the principle of setting the hierarchy of risk management policies approved by the Board, Senior Management are also responsible for approving the detailed risk management policies of their responsible areas.

Various units of the Group have their respective risk management responsibilities. Business units act as the first line of defence while risk management units, which are independent from the business units, are responsible for the day-to-day management of different kinds of risks. Risk management units have the primary responsibilities for drafting, reviewing and updating various risk management policies and procedures.

The Group's principal banking subsidiaries are subject to risk management policies that are consistent with those of the Group. Moreover, the Group's non-banking subsidiaries, such as BOC Life, are subject to the Group's risk management requirements. These subsidiaries are required to formulate their respective risk management policies based on the characteristics of their own industries, perform daily risk management responsibilities and report to BOCHK on a regular basis. Risk management units of BOCHK monitor the risk management status of these subsidiaries.

4. Financial risk management (continued)

Financial risk management framework (continued)

The Group has put in place appropriate internal control systems, including establishment of an organisation structure that sets clear lines of authority and responsibility for monitoring compliance with policies, procedures and limits. Proper reporting lines also provide sufficient independence of the control functions from the business areas, as well as adequate segregation of duties throughout the organisation which helps to promote an appropriate internal control environment.

Product development and risk monitoring

To ensure the effectiveness of risk assessment and monitoring, the Group has a comprehensive product development and risk monitoring system where roles and responsibilities of all related units are clearly defined and proper due diligence processes on product development are in place.

In accordance with the strategic objectives set by the Board and the Management, respective product management units are responsible for formulating business and product development plans, and proceeding to specific product development activities. The department of strategic development shall ensure the plans are aligned with the Group's overall strategies. Departments that are responsible for risk management, legal, compliance and finance, etc. are accountable for risk assessment and review.

Apart from product development, respective product management units shall work closely with relevant risk evaluating departments to identify and assess the risks of new products. Risk evaluating departments shall conduct independent review on the risk assessment results and the corresponding risk management measures. Products can only be launched upon completion of the product due diligence process to the satisfaction of all risk evaluating departments.

A prudent approach is adopted in offering treasury products to our clients. All new treasury products require approval from a special committee before launching.

4.1 Credit risk

Credit risk is the risk of loss that a customer or counterparty is unable to or unwilling to meet its contractual obligations. Credit risk exists in the trading book and banking book, as well as from on- and off-balance sheet transactions of the Group. It arises principally from lending, trade finance and treasury businesses. The Group's exposures set out in Note 4.1 below exclude assets held for sale.

Credit risk management framework

The Group has formulated a comprehensive set of credit risk management policies and procedures, and appropriate credit risk limits to manage and control credit risk that may arise. These policies, procedures and credit risk limits are regularly reviewed and updated to cope with changes in market conditions and business strategies.

The Group's organisation structure establishes a clear set of authority and responsibility for monitoring compliance with policies, procedures and limits.

4. Financial risk management (continued)

4.1 Credit risk (continued)

Credit risk management framework (continued)

The Chief Credit Officer, who reports directly to the CRO, takes charge of credit risk management and is also responsible for the control of credit risk exposures of subsidiaries in line with the credit risk management principles and requirements set by the Group. Various units of the Group have their respective credit risk management responsibilities. Business units act as the first line of defence. The Risk Management Department ("RMD"), which is independent from the business units, is responsible for the day-to-day management of credit risks and has the primary responsibility for providing an independent due diligence through identifying, measuring, monitoring and controlling credit risk to ensure an effective checks and balances, as well as drafting, reviewing and updating credit risk management policies and procedures. It is also responsible for the design, development and maintenance of the Group's internal rating system and ensures the system complies with the relevant regulatory requirements.

In accordance with Group's operating principle, the Group's principal banking subsidiaries have to formulate their own credit risk policies that are consistent with those of the Group's core principles. These subsidiaries are required to submit their risk management reports to the Group's Management on a regular basis.

The Board of Directors delegates credit approval authority to the CE. The CE can further delegate to the subordinates within his limit authorised by the Board of Directors. The Group sets the limits of credit approval authority according to the credit business nature, rating, the level of transaction risk, and the extent of the credit exposure.

Credit risk measurement and control

In view of the rapidly changing market conditions, the Group has been continuously revisiting its credit strategies and conducting rigorous reviews on the concerned portfolios.

Advances

Different credit approval and control procedures are adopted according to the level of risk associated with the customer, counterparty or transaction. The Credit Risk Assessment Committee, comprising experts from credit and other functions, is responsible for making an independent assessment of material credit applications which require the approval of Deputy Chief Executives ("DCE") or above. Credit applications for non-retail exposures are independently reviewed and objectively assessed by risk management units. Obligor ratings (in terms of probability of default) and facility ratings (in terms of loss given default) are assigned to these portfolios to support credit approval. Retail internal rating systems are deployed in the risk assessment of retail credit transactions, including small business retail exposures, residential mortgage loans, personal loans and credit cards. Loan grades, obligor and facility ratings as well as loss estimates (if applicable) are used to support credit approval.

The Group also uses loan grades, obligor ratings and loss estimates (if applicable) to support credit monitoring, reporting and analysis of credit risk information. For non-retail exposures, more frequent rating review and closer monitoring are required for higher-risk customers. For retail exposures, monthly updated internal ratings and loss estimates are used for credit monitoring on a portfolio basis. More comprehensive review is required for obligors being identified under high-risk pools.

4. Financial risk management (continued)

4.1 Credit risk (continued)

Credit risk measurement and control (continued)

Advances (continued)

The Group employs an internal master rating scale that can be mapped to Standard & Poor's external credit ratings. The structure of internal master rating scale is in compliance with the requirement of the Banking (Capital) Rules under the Hong Kong Banking Ordinance.

RMD provides regular credit management information reports and ad hoc reports to the MC, RC and Board of Directors to facilitate their continuous monitoring of credit risk.

In addition, the Group identifies credit concentration risk by industry, geography, customer and counterparty. The Group monitors changes to counterparty credit risk, quality of the credit portfolio and credit risk concentrations, and reports regularly to the Group's Management.

The Group adopts loan grading criteria which divides credit assets into five categories with reference to the HKMA's guidelines, as below:

"Pass" represents loans where the borrower is current in meeting its repayment obligations and full repayment of interest and principal is not in doubt.

"Special Mention" represents loans where the borrower is experiencing difficulties which may threaten the Group's position. Ultimate loss is not expected at this stage but could occur if adverse conditions persist.

"Substandard" represents loans where the borrower displays a definable weakness that is likely to jeopardise repayment.

"Doubtful" represents loans where collection in full is improbable and the Group expects to sustain a loss of principal and/or interest, taking into account the net realisable value of the collateral.

"Loss" represents loans which are considered uncollectible after all collection options (such as the realisation of collateral or the institution of legal proceedings) have been exhausted.

4. Financial risk management (continued)

4.1 Credit risk (continued)

Credit risk measurement and control (continued)

Debt securities and derivatives

For investments in debt securities and securitisation assets, the obligor ratings or external credit ratings, assessment of the underlying assets and credit limits setting on customer/security issuer basis are used for managing credit risk associated with the investment. For derivatives, the Group sets customer limits to manage the credit risk involved and follows the same approval and control processes as applied for advances. On-going monitoring and stop-loss procedures are established.

The methodology and assumptions used for impairment assessments are reviewed regularly. In evaluating impairment of asset backed securities ("ABS") and mortgage backed securities ("MBS"), the Group continued to use a significant decline in market price and credit deterioration of the underlying assets to be the key indicators of impairment. The Group also considered other objective evidence of impairment, taking into account the impact of liquidity on market prices and the movement in loss coverage ratios of individual ABS and MBS held by the Group.

Settlement risk arises mainly from foreign exchange transactions with counterparties and also from derivatives transactions in any situation where a payment in cash, securities or equities is made in the expectation of a corresponding receipt in cash, securities or equities. Daily settlement limits are established for each counterparty or customer to cover all settlement risk arising from the Group's market transactions on any single day.

Collateral held as security and other credit enhancements

The valuation and management of collateral have been documented in the credit risk management policies and procedures which cover acceptance criteria, validity of collateral, loan-to-value ratio, haircut ratio, valuation and insurance, etc. The collateral is revalued on a regular basis, though the frequency and the method used varies with the type of collateral involved and the nature and the risk of the underlying credit. The Group has established a mechanism to update the value of its main type of collateral, real estate properties, with the use of public indices on a portfolio basis. Collateral is insured with the Group as the beneficiary. In the personal sector, the main types of collateral are real estate properties, cash deposits and securities. In the commercial and industrial sector, the main types of collateral are real estate properties, securities, receivables, cash deposits and machinery.

For loans guaranteed by a third party, the Group will assess the guarantor's financial condition, credit history and ability to meet obligations.

As at 31 December 2016, the fair value of collateral held by the Group that was permitted to sell or re-pledge in the absence of default by the borrower amounted to HK$7,013 million (2015: HK$1,018 million). The Group had not sold or re-pledged such collateral (2015: Nil). These transactions are conducted under terms that are usual and customary to reverse repurchase and securities borrowing agreements.

4. Financial risk management (continued)

4.1 Credit risk (continued)

(A) Credit exposures

The maximum credit exposure is the worst case scenario of exposure to the Group without taking into account any collateral held or other credit enhancements. For on-balance sheet assets, the maximum exposure to credit risk equals their carrying amount. For letters of guarantee issued, the maximum exposure to credit risk is the maximum amount that the Group could be required to pay if the guarantees are called upon. For loan commitment and other credit related liabilities, the maximum exposure to credit risk is the full amount of the committed facilities.

The nature of the collateral held and other credit enhancements and their financial effect to the different classes of the Group's financial assets are as follows.

Balances and placements with banks and other financial institutions

These exposures are generally considered to be low risk due to the nature of the counterparties. Collateral is generally not sought on these assets.

Financial assets at fair value through profit or loss and investment in securities

Collateral is generally not sought on debt securities.

Derivative financial instruments

The Master Agreement published by the International Swaps and Derivatives Association, Inc. ("ISDA Master Agreement") is the preferred agreement for documenting derivatives activities of the Group. It provides the contractual framework under which dealing activities of over-the-counter ("OTC") transactions are conducted, and sets out close-out netting provisions upon termination following the occurrence of an event of default or a termination event. In addition, if deemed necessary, Credit Support Annex ("CSA") will be included to form part of the Schedule to the ISDA Master Agreement. Under a CSA, collateral is passed from one counterparty to another, as appropriate, to mitigate the exposures.

Advances and other accounts, contingent liabilities and commitments

The general types of collateral are disclosed on page 166. Advances and other accounts, contingent liabilities and commitments are collateralised to the extent considered appropriate by the Group taking account of the risk assessment of individual exposures. The collateral coverage of advances to customers is analysed on pages 175 to 176. The components and nature of contingent liabilities and commitments are disclosed in Note 43. Regarding the commitments that are unconditionally cancellable without prior notice, the Group would assess the necessity to withdraw the credit line in case where the credit quality of a borrower deteriorates. For contingent liabilities and commitments, 10.91% (2015: 10.28%) was covered by collateral as at 31 December 2016.

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts

Gross advances and other accounts before impairment allowances are summarised by product type as follows:

	2016 HK$'m	2015 HK$'m
Advances to customers		
Personal		
– Mortgages	**227,987**	218,846
– Credit cards	**13,819**	13,833
– Others	**50,119**	42,424
Corporate		
– Commercial loans	**609,025**	544,205
– Trade finance	**72,121**	79,305
	973,071	898,613
Trade bills	**16,174**	32,372
Advances to banks and other financial institutions	**6,016**	969
	995,261	931,954

Advances with a specific repayment date are classified as overdue when the principal or interest is past due and remains unpaid. Advances repayable by regular instalments are classified as overdue when an instalment payment is past due and remains unpaid. Advances repayable on demand are classified as overdue either when a demand for repayment has been served on the borrower but repayment has not been made in accordance with the instruction or when the advances have remained continuously exceeded the approved limit that was advised to the borrower.

Advances are impaired and impairment losses are incurred if, and only if, there is objective evidence of impairment as a result of one or more events that occurred and that loss event(s) has an impact on the estimated future cash flows of the advances that can be reliably estimated.

If there is objective evidence that an impairment loss on advances has been incurred, the amount of loss is measured as the difference between the carrying amount and the present value of estimated future cash flows generated by the advances. Objective evidence that advances are impaired includes observable data that comes to the attention of the Group about the loss events.

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts (continued)

The criteria that the Group uses to determine that there is objective evidence of an impairment loss include:

– Significant financial difficulty incurred by the borrower;

– A breach of contract, such as a default or delinquency in principal or interest payment;

– For economic or legal reasons related to the borrower's financial difficulty, the Group has granted to the borrower a concession that it would not otherwise consider;

– Probable that the borrower will become bankrupt or undergo other financial reorganisation; or

– Other observable data indicating that there is a measurable decrease in the estimated future cash flows from such advances.

(a) Advances neither overdue nor impaired

Advances that were neither overdue nor impaired are analysed by internal credit grade as follows:

	2016			
	Pass HK$'m	Special mention HK$'m	Substandard or below HK$'m	Total HK$'m
Advances to customers				
Personal				
– Mortgages	225,767	181	41	225,989
– Credit cards	13,472	–	–	13,472
– Others	49,718	78	2	49,798
Corporate				
– Commercial loans	606,545	332	650	607,527
– Trade finance	72,019	44	10	72,073
	967,521	635	703	968,859
Trade bills	16,174	–	–	16,174
Advances to banks and other financial institutions	6,016	–	–	6,016
	989,711	635	703	991,049

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts (continued)

(a) Advances neither overdue nor impaired (continued)

	2015			
	Pass HK$'m	Special mention HK$'m	Substandard or below HK$'m	Total HK$'m
Advances to customers				
Personal				
– Mortgages	216,722	167	31	216,920
– Credit cards	13,346	–	–	13,346
– Others	41,829	54	12	41,895
Corporate				
– Commercial loans	540,936	983	657	542,576
– Trade finance	78,913	131	–	79,044
	891,746	1,335	700	893,781
Trade bills	32,372	–	–	32,372
Advances to banks and other financial institutions	969	–	–	969
	925,087	1,335	700	927,122

The occurrence of loss event(s) may not necessarily result in impairment loss where the advances are fully collateralised. While such advances are of "substandard" or lower grades, they are regarded as not being impaired and have been included in the above tables.

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts (continued)

(b) Advances overdue but not impaired

The gross amount of advances overdue but not impaired is analysed as follows:

	2016				
	Overdue for three months or less HK$'m	Overdue for six months or less but over three months HK$'m	Overdue for one year or less but over six months HK$'m	Overdue for over one year HK$'m	Total HK$'m
Advances to customers					
Personal					
– Mortgages	**1,953**	**18**	**17**	**7**	**1,995**
– Credit cards	**306**	**–**	**–**	**–**	**306**
– Others	**281**	**1**	**3**	**1**	**286**
Corporate					
– Commercial loans	**443**	**–**	**–**	**5**	**448**
– Trade finance	**3**	**–**	**–**	**2**	**5**
	2,986	**19**	**20**	**15**	**3,040**

	2015				
	Overdue for three months or less HK$'m	Overdue for six months or less but over three months HK$'m	Overdue for one year or less but over six months HK$'m	Overdue for over one year HK$'m	Total HK$'m
Advances to customers					
Personal					
– Mortgages	1,885	15	19	–	1,919
– Credit cards	448	–	–	–	448
– Others	496	–	1	1	498
Corporate					
– Commercial loans	485	2	–	28	515
– Trade finance	41	32	2	4	79
	3,355	49	22	33	3,459

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts (continued)

(c) Impaired advances

Advances individually identified to be impaired are analysed by product type as follows:

	2016		2015	
	Gross advances HK$'m	**Market value of collateral HK$'m**	Gross advances HK$'m	Market value of collateral HK$'m
Advances to customers				
Personal				
– Mortgages	**3**	**6**	7	11
– Credit cards	**41**	**–**	39	–
– Others	**35**	**25**	31	20
Corporate				
– Commercial loans	**1,050**	**815**	1,114	1,072
– Trade finance	**43**	**14**	182	57
	1,172	**860**	1,373	1,160
Impairment allowances made in respect of such advances	**501**		624	

	2016 HK$'m	2015 HK$'m
Current market value of collateral held against the covered portion of such advances to customers	**860**	1,160
Covered portion of such advances to customers	**786**	920
Uncovered portion of such advances to customers	**386**	453

The impairment allowances were made after taking into account the value of collateral in respect of such advances.

As at 31 December 2016, there were no impaired trade bills and advances to banks and other financial institutions (2015: Nil).

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts (continued)

(c) Impaired advances (continued)

Classified or impaired advances to customers are analysed as follows:

	2016 HK$'m	2015 HK$'m
Gross classified or impaired advances to customers	**1,955**	2,176
Gross classified or impaired advances to customers as a percentage of gross advances to customers	**0.20%**	0.24%
Individually assessed impairment allowances made in respect of such advances	**449**	578

Classified or impaired advances to customers represent advances which are either classified as "substandard", "doubtful" or "loss" under the Group's classification of loan quality, or individually assessed to be impaired.

(d) Advances overdue for more than three months

The gross amount of advances overdue for more than three months is analysed as follows:

	2016		2015	
	Amount HK$'m	**% of gross advances to customers**	Amount HK$'m	% of gross advances to customers
Gross advances to customers which have been overdue for:				
– six months or less but over three months	**92**	**0.01%**	128	0.01%
– one year or less but over six months	**54**	**0.01%**	170	0.02%
– over one year	**106**	**0.01%**	217	0.03%
Advances overdue for over three months	**252**	**0.03%**	515	0.06%
Individually assessed impairment allowances made in respect of such advances	**60**		163	

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts (continued)

(d) Advances overdue for more than three months (continued)

	2016 HK$'m	2015 HK$'m
Current market value of collateral held against the covered portion of such advances to customers	**324**	694
Covered portion of such advances to customers	**130**	346
Uncovered portion of such advances to customers	**122**	169

Collateral held against overdue or impaired loans is principally represented by charges over business assets such as commercial, residential premises and vessels for corporate loans and mortgages over residential properties for personal loans.

As at 31 December 2016, there were no trade bills and advances to banks and other financial institutions overdue for more than three months (2015: Nil).

(e) Rescheduled advances

Rescheduled advances are those advances that have been restructured or renegotiated because of deterioration in the financial position of the borrower or of the inability of the borrower to meet the original repayment schedule. Rescheduled advances, which have been overdue for more than three months under the revised repayment terms, are included in "Advances overdue for more than three months".

As at 31 December 2016, there were no rescheduled advances to customers net of amounts included in "Advances overdue for more than three months" (2015: Nil).

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts (continued)

(f) Concentration of advances to customers

(i) Sectoral analysis of gross advances to customers

The following analysis of the gross advances to customers by industry sector is based on the categories with reference to the completion instructions for the HKMA return of loans and advances.

	2016					
	Gross advances to customers HK$'m	% covered by collateral or other security	Classified or impaired HK$'m	Overdue HK$'m	Individually assessed impairment allowances HK$'m	Collectively assessed impairment allowances HK$'m
Loans for use in Hong Kong						
Industrial, commercial and financial						
– Property development	73,336	22.91%	–	1	–	245
– Property investment	53,908	81.58%	27	133	–	180
– Financial concerns	5,438	3.53%	–	–	–	45
– Stockbrokers	2,647	95.17%	–	–	–	9
– Wholesale and retail trade	34,997	37.24%	39	183	26	127
– Manufacturing	25,981	17.60%	49	51	7	98
– Transport and transport equipment	53,074	31.31%	1,239	17	289	186
– Recreational activities	2,510	1.59%	–	–	–	8
– Information technology	17,938	1.30%	–	–	–	58
– Others	105,062	24.96%	15	89	10	341
Individuals						
– Loans for the purchase of flats in Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme	8,562	99.84%	10	170	–	5
– Loans for purchase of other residential properties	218,426	99.93%	89	1,812	2	101
– Credit card advances	13,819	–	41	524	–	123
– Others	47,717	71.08%	36	495	3	68
Total loans for use in Hong Kong	663,415	58.03%	1,545	3,475	337	1,594
Trade finance	72,121	14.00%	56	49	21	256
Loans for use outside Hong Kong	237,535	13.48%	354	201	91	825
Gross advances to customers	973,071	43.89%	1,955	3,725	449	2,675

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts (continued)

(f) Concentration of advances to customers (continued)

(i) Sectoral analysis of gross advances to customers (continued)

	2015					
	Gross advances to customers HK$'m	% covered by collateral or other security	Classified or impaired HK$'m	Overdue HK$'m	Individually assessed impairment allowances HK$'m	Collectively assessed impairment allowances HK$'m
Loans for use in Hong Kong						
Industrial, commercial and financial						
– Property development	65,148	26.15%	1	1	–	224
– Property investment	57,101	88.21%	4	93	–	205
– Financial concerns	11,453	3.57%	–	1	–	64
– Stockbrokers	1,743	81.56%	–	–	–	6
– Wholesale and retail trade	28,633	53.04%	62	268	24	109
– Manufacturing	21,798	26.70%	24	32	7	83
– Transport and transport equipment	45,616	33.07%	1,478	4	360	159
– Recreational activities	393	18.84%	–	–	–	1
– Information technology	13,064	0.72%	–	1	–	42
– Others	55,817	42.91%	16	123	7	186
Individuals						
– Loans for the purchase of flats in Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme	8,523	99.94%	16	180	–	5
– Loans for purchase of other residential properties	209,777	99.92%	67	1,728	1	99
– Credit card advances	13,834	–	39	487	–	101
– Others	38,587	72.76%	36	440	7	67
Total loans for use in Hong Kong	571,487	65.73%	1,743	3,358	406	1,351
Trade finance	79,305	13.11%	195	255	103	281
Loans for use outside Hong Kong	247,821	17.71%	238	354	69	873
Gross advances to customers	898,613	47.84%	2,176	3,967	578	2,505

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts (continued)

(f) Concentration of advances to customers (continued)

(i) Sectoral analysis of gross advances to customers (continued)

The amounts of new impairment allowances charged to the income statement, and classified or impaired loans written off during the year are shown below:

	2016		2015	
	New impairment allowances HK$'m	Classified or impaired loans written off HK$'m	New impairment allowances HK$'m	Classified or impaired loans written off HK$'m
Loans for use in Hong Kong				
Industrial, commercial and financial				
– Property development	25	–	45	–
– Property investment	–	–	–	1
– Financial concerns	–	–	21	–
– Stockbrokers	2	–	1	–
– Wholesale and retail trade	50	18	24	3
– Manufacturing	19	2	13	1
– Transport and transport equipment	50	1	361	–
– Recreational activities	5	–	–	–
– Information technology	11	–	3	–
– Others	125	8	15	3
Individuals				
– Loans for the purchase of flats in Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme	–	–	–	–
– Loans for purchase of other residential properties	6	–	–	–
– Credit card advances	248	228	222	214
– Others	190	182	173	166
Total loans for use in Hong Kong	731	439	878	388
Trade finance	18	62	169	159
Loans for use outside Hong Kong	117	–	208	203
Gross advances to customers	866	501	1,255	750

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts (continued)

(f) Concentration of advances to customers (continued)

(ii) Geographical analysis of gross advances to customers

The following geographical analysis of advances to customers is based on the locations of the counterparties, after taking into account the transfer of risk. For an advance to customer guaranteed by a party situated in a country different from the customer, the risk will be transferred to the country of the guarantor.

Gross advances to customers

	2016 HK$'m	2015 HK$'m
Hong Kong	**780,886**	727,625
Mainland of China	**119,882**	119,279
Others	**72,303**	51,709
	973,071	898,613
Collectively assessed impairment allowances in respect of the gross advances to customers		
Hong Kong	**2,017**	1,913
Mainland of China	**379**	377
Others	**279**	215
	2,675	2,505

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts (continued)

(f) Concentration of advances to customers (continued)

(ii) Geographical analysis of gross advances to customers (continued)

Overdue advances

	2016 HK$'m	2015 HK$'m
Hong Kong	**3,407**	3,289
Mainland of China	**139**	406
Others	**179**	272
	3,725	3,967
Individually assessed impairment allowances in respect of the overdue advances		
Hong Kong	**109**	126
Mainland of China	**7**	78
Others	**3**	10
	119	214
Collectively assessed impairment allowances in respect of the overdue advances		
Hong Kong	**96**	84
Mainland of China	**2**	5
Others	**2**	2
	100	91

4. Financial risk management (continued)

4.1 Credit risk (continued)

(B) Gross advances and other accounts (continued)

(f) Concentration of advances to customers (continued)

(ii) Geographical analysis of gross advances to customers (continued)

Classified or impaired advances

	2016 HK$'m	2015 HK$'m
Hong Kong	**1,705**	1,699
Mainland of China	**52**	394
Others	**198**	83
	1,955	2,176
Individually assessed impairment allowances in respect of the classified or impaired advances		
Hong Kong	**408**	407
Mainland of China	**10**	157
Others	**31**	14
	449	578
Collectively assessed impairment allowances in respect of the classified or impaired advances		
Hong Kong	**52**	45
Mainland of China	**1**	3
Others	**1**	–
	54	48

(C) Repossessed assets

During the year, the Group obtained assets by taking possession of collateral held as security. The nature and carrying value of these assets held as at 31 December are summarised as follows:

	2016 HK$'m	2015 HK$'m
Residential properties	**38**	44

4. Financial risk management (continued)

4.1 Credit risk (continued)

(C) Repossessed assets (continued)

The estimated market value of repossessed assets held by the Group as at 31 December 2016 amounted to HK$72 million (2015: HK$55 million). The repossessed assets comprise properties in respect of which the Group has acquired access or control (e.g. through court proceedings or voluntary actions by the proprietors concerned) for release in full or in part of the obligations of the borrowers.

When the repossessed assets are not readily convertible into cash, the Group may consider the following alternatives:

– adjusting the selling prices

– selling the loans together with the assets

– arranging loan restructuring

(D) Balances and placements with banks and other financial institutions

The following tables present an analysis of balances and placements with banks and other financial institutions that are neither overdue nor impaired as at 31 December by rating agency designation.

	2016			
	Aaa to A3 HK$'m	**Lower than A3 HK$'m**	**Unrated HK$'m**	**Total HK$'m**
Central banks	**68,724**	**–**	**4,589**	**73,313**
Banks and other financial institutions	**186,394**	**26,297**	**752**	**213,443**
	255,118	**26,297**	**5,341**	**286,756**

	2015			
	Aaa to A3 HK$'m	Lower than A3 HK$'m	Unrated HK$'m	Total HK$'m
Central banks	110,225	–	2,304	112,529
Banks and other financial institutions	159,001	17,490	3,439	179,930
	269,226	17,490	5,743	292,459

As at 31 December 2016, there were no overdue or impaired balances and placements with banks and other financial institutions (2015: Nil).

4. Financial risk management (continued)

4.1 Credit risk (continued)

(E) Debt securities and certificates of deposit

The following tables present an analysis of the carrying value of debt securities and certificates of deposit by issue rating. In the absence of such issue ratings, the ratings designated for the issuers are reported.

	2016					
	Aaa HK$'m	Aa1 to Aa3 HK$'m	A1 to A3 HK$'m	Lower than A3 HK$'m	Unrated HK$'m	Total HK$'m
Available-for-sale securities	**106,276**	**171,851**	**186,790**	**41,056**	**20,654**	**526,627**
Held-to-maturity securities	**19,805**	**21,671**	**12,365**	**4,434**	**1,919**	**60,194**
Loans and receivables	**–**	**149**	**786**	**–**	**–**	**935**
Financial assets at fair value through profit or loss	**14,927**	**16,615**	**14,817**	**6,501**	**3,456**	**56,316**
	141,008	**210,286**	**214,758**	**51,991**	**26,029**	**644,072**

	2015					
	Aaa HK$'m	Aa1 to Aa3 HK$'m	A1 to A3 HK$'m	Lower than A3 HK$'m	Unrated HK$'m	Total HK$'m
Available-for-sale securities	84,691	88,062	207,071	28,073	22,286	430,183
Held-to-maturity securities	29,958	30,602	12,898	4,717	3,668	81,843
Loans and receivables	–	–	3,166	–	–	3,166
Financial assets at fair value through profit or loss	8,943	21,953	12,344	5,250	4,612	53,102
	123,592	140,617	235,479	38,040	30,566	568,294

4. Financial risk management (continued)

4.1 Credit risk (continued)

(E) Debt securities and certificates of deposit (continued)

The following tables present an analysis of debt securities and certificates of deposit neither overdue nor impaired as at 31 December by issue rating. In the absence of such issue ratings, the ratings designated for the issuers are reported.

	2016					
	Aaa HK$'m	Aa1 to Aa3 HK$'m	A1 to A3 HK$'m	Lower than A3 HK$'m	Unrated HK$'m	Total HK$'m
Available-for-sale securities	**106,276**	**171,851**	**186,790**	**41,056**	**20,654**	**526,627**
Held-to-maturity securities	**19,804**	**21,671**	**12,365**	**4,434**	**1,919**	**60,193**
Loans and receivables	**–**	**149**	**786**	**–**	**–**	**935**
Financial assets at fair value through profit or loss	**14,927**	**16,615**	**14,817**	**6,501**	**3,456**	**56,316**
	141,007	**210,286**	**214,758**	**51,991**	**26,029**	**644,071**

	2015					
	Aaa HK$'m	Aa1 to Aa3 HK$'m	A1 to A3 HK$'m	Lower than A3 HK$'m	Unrated HK$'m	Total HK$'m
Available-for-sale securities	84,691	88,062	207,071	28,073	22,286	430,183
Held-to-maturity securities	29,955	30,602	12,898	4,717	3,668	81,840
Loans and receivables	–	–	3,166	–	–	3,166
Financial assets at fair value through profit or loss	8,943	21,953	12,344	5,250	4,612	53,102
	123,589	140,617	235,479	38,040	30,566	568,291

4. Financial risk management (continued)

4.1 Credit risk (continued)

(E) Debt securities and certificates of deposit (continued)

The following tables present an analysis of impaired debt securities by issue rating. In the absence of such issue ratings, the ratings designated for the issuers are reported.

	2016					
	Aaa HK$'m	Aa1 to Aa3 HK$'m	A1 to A3 HK$'m	Lower than A3 HK$'m	Unrated HK$'m	Total HK$'m
Held-to-maturity securities	1	–	–	–	–	1

	2015					
	Aaa HK$'m	Aa1 to Aa3 HK$'m	A1 to A3 HK$'m	Lower than A3 HK$'m	Unrated HK$'m	Total HK$'m
Held-to-maturity securities	3	–	–	–	–	3

As at 31 December 2016, there were no impaired certificates of deposit and no overdue debt securities and certificates of deposit (2015: Nil).

4.2 Market risk

Market risk refers to the risk of loss arising from movements in the value of foreign exchange, interest rate, equity and commodity positions held by the Group due to the volatility of financial market price (foreign exchange rate, interest rate, equity price, commodity price). The Group adopts a moderate market risk appetite to achieve a balance between risk and return. The Group's objective in managing market risk is to secure healthy growth of the treasury business, by effective management of potential market risk in the Group's business, according to the Group's overall risk appetite and strategy of treasury business on the basis of a well-established risk management regime and related management measures.

In accordance with the Group's corporate governance principles in respect of risk management, the Board and RC, senior management and functional departments/units perform their duties and responsibilities to manage the Group's market risk. The RMD is mainly responsible for managing market risk, assisting senior management to perform their day-to-day duties, independently monitoring the market risk profile and compliance of management policies and limits of the Group and BOCHK, and ensuring that the aggregate and individual market risks are within acceptable levels.

The Group's market risk management covers BOCHK and its subsidiaries. The Group establishes consistent market risk management policies to regulate BOCHK's and subsidiaries' market risk management; meanwhile, the Group sets up the Group VAR and stress test limits, which are allocated and monitored across the Group, according to the subsidiaries' business requirements and risk tolerance levels. In line with the requirements set in the Group policy, the management of subsidiaries may, subject to prior consent by BOCHK, formulate the detailed policies and procedures and are responsible for managing their daily market risk.

4. Financial risk management (continued)

4.2 Market risk (continued)

The Group sets up market risk indicators and limits to identify, measure, monitor and control market risk. Major risk indicators and limits include but are not limited to VAR, Stop Loss, Open Position, Stress Testing and Sensitivity Analysis (Basis Point Value, Greeks), etc. To meet management requirements, major risk indicators and limits are classified into four levels, and are approved by the RC, MC, CRO and the DCE in charge of the treasury business or the head of the respective business unit respectively. Treasury business units of BOCHK and subsidiaries (as for Group Limit) are required to conduct their business within approved market risk indicators and limits.

(A) VAR

The Group uses the VAR to measure and report general market risks to the RC and senior management on a periodic basis. The Group adopts a uniformed VAR calculation model, using a historical simulation approach and two years of historical market data, to calculate the VAR of the Group and subsidiaries over a one-day holding period with a 99% confidence level, and sets up the VAR limit of the Group and subsidiaries.

The following table sets out the VAR for all general market risk exposure[1] of the Group.

	Year	At 31 December HK$'m	Minimum for the year HK$'m	Maximum for the year HK$'m	Average for the year HK$'m
VAR for all market risk	2016	61.2	29.4	70.5	45.9
	2015	17.8	17.8	38.4	25.4
VAR for foreign exchange risk	2016	57.1	24.3	62.4	35.8
	2015	12.9	8.8	20.3	13.2
VAR for interest rate risk	2016	44.9	15.3	57.4	28.8
	2015	14.7	12.8	37.6	20.7
VAR for equity risk	2016	3.2	0.0	5.7	2.1
	2015	0.0	0.0	0.4	0.2
VAR for commodity risk	2016	1.2	0.0	1.4	0.3
	2015	0.0	0.0	0.2	0.0

Note:
1. Structural FX positions have been excluded.

4. Financial risk management (continued)

4.2 Market risk (continued)

(A) VAR (continued)

Although a valuable guide to market risk, VAR should always be viewed in the context of its limitations. For example:

- the use of historical market data as a proxy for estimating future events may not encompass all potential events, particularly those which are extreme in nature;
- the use of a one-day holding period assumes that all positions can be liquidated or hedged in one day. This may not fully reflect the market risk arising at times of severe illiquidity, when a one-day holding period may be insufficient to liquidate or hedge all positions fully;
- the use of a 99% confidence level, by definition, does not take into account losses that might occur beyond this level of confidence; and
- VAR is calculated on the basis of exposures outstanding at the close of business and therefore does not necessarily reflect intra-day exposures.

The Group recognises these limitations by formulating stress test indicators and limits to assess and manage the market risk uncovered by VAR. The stress testing programme of the market risk includes sensitivity testing on changes in risk factors with various degrees of severity, as well as scenario analysis on historical events including the 1987 Equity Market Crash, 1994 Bond Market Crash, 1997 Asian Financial Crisis, 2001 9-11 event and 2008 Financial Tsunami, etc.

(B) Currency risk

The Group's assets and liabilities are denominated in major currencies, particularly the HK dollar, the US dollar and Renminbi. To ensure the currency risk exposure of the Group is kept to an acceptable level, risk limits (e.g. Position and VAR limit) are used to serve as a monitoring tool. Moreover, the Group seeks to minimise the gap between assets and liabilities in the same currency. Foreign exchange contracts (e.g. FX swaps) are usually used to manage FX risk associated with foreign currency-denominated assets and liabilities.

4. Financial risk management (continued)

4.2 Market risk (continued)

(B) Currency risk (continued)

The following is a summary of the Group's major foreign currency exposures arising from trading, non-trading and structural positions and is prepared with reference to the completion instructions for the HKMA return of foreign currency position. The net options position is calculated based on the basis of delta-weighted positions of all foreign exchange options contracts.

	2016							
	Equivalent in million of HK$							
	US Dollars	Japanese Yen	Euro	Australian Dollars	Pound Sterling	Renminbi	Other foreign currencies	Total foreign currencies
Spot assets	729,472	128,359	40,591	22,537	20,711	260,636	28,637	1,230,943
Spot liabilities	(617,520)	(9,056)	(28,397)	(19,823)	(14,351)	(250,559)	(32,101)	(971,807)
Forward purchases	1,095,599	58,711	56,669	28,125	26,200	579,902	55,743	1,900,949
Forward sales	(1,196,764)	(178,070)	(68,865)	(30,925)	(32,618)	(588,688)	(52,907)	(2,148,837)
Net options position	1,123	1	1	(3)	2	(733)	1	392
Net long/(short) position	11,910	(55)	(1)	(89)	(56)	558	(627)	11,640

	2015							
	Equivalent in million of HK$							
	US Dollars	Japanese Yen	Euro	Australian Dollars	Pound Sterling	Renminbi	Other foreign currencies	Total foreign currencies
Spot assets	666,562	94,198	25,741	22,886	7,829	484,356	10,131	1,311,703
Spot liabilities	(512,219)	(13,853)	(23,822)	(21,357)	(14,534)	(467,809)	(16,722)	(1,070,316)
Forward purchases	1,239,554	53,057	90,200	30,789	43,772	805,959	41,144	2,304,475
Forward sales	(1,380,890)	(133,356)	(92,281)	(32,412)	(36,962)	(822,094)	(34,042)	(2,532,037)
Net options position	1,518	(1)	2	26	(13)	(1,425)	1	108
Net long/(short) position	14,525	45	(160)	(68)	92	(1,013)	512	13,933

4. Financial risk management (continued)

4.2 Market risk (continued)

(B) Currency risk (continued)

	2016				
	Equivalent in million of HK$				
	US Dollars	Renminbi	Malaysian Ringgit	Other foreign currencies	Total foreign currencies
Net structural position	**–**	**791**	**2,175**	**160**	**3,126**

	2015				
	Equivalent in million of HK$				
	US Dollars	Renminbi	Malaysian Ringgit	Other foreign currencies	Total foreign currencies
Net structural position	293	9,355	–	–	9,648

(C) Interest rate risk

Interest rate risk means the risks to a bank's earnings and economic value arising from movements in interest rate and term structures of the bank's asset and liability positions. The Group's interest rate risk exposures are mainly structural. The major types of interest rate risk from structural positions are:

- Repricing risk: mismatches in the maturity or repricing periods of assets and liabilities that may affect net interest income;

- Basis risk: different pricing basis for different transactions resulting that the yield on assets and cost of liabilities may change by different amounts within the same repricing period;

- Yield curve risk: non-parallel shifts in the yield curve that may have an adverse impact on net interest income or economic value; and

- Option risk: exercise of the options embedded in assets, liabilities or off-balance sheet items that can cause a change in the cash flows of assets and liabilities.

4. Financial risk management (continued)

4.2 Market risk (continued)

(C) Interest rate risk (continued)

The Group's risk management framework applies also to interest rate risk management. The ALCO exercises its oversight of interest rate risk in accordance with the "BOCHK Group Banking Book Interest Rate Risk Management Policy" approved by RC. RMD (Interest Rate and Liquidity Risk Management) is responsible for interest rate risk management. With the cooperation of the Asset and Liability Management Division of Financial Management Department and Investment Management, RMD assists the ALCO to perform day-to-day interest rate risk management. Its roles include, but are not limited to, the formulation of management policies, selection of methodologies, setting of risk indicators and limits, assessment of target balance sheet, monitoring of the compliance with policies and limits, and submission of interest rate risk management reports to the senior management and RC, etc.

The Group sets out interest rate risk indicators and limits to identify, measure, monitor and control interest rate risk. The indicators and limits include, but are not limited to, repricing gap limits, basis risk, duration, price value of a basis point ("PVBP"), Greeks, net interest income sensitivity ratio ("NII"), economic value sensitivity ratio ("EV"), etc. The indicators and limits are classified into different levels, which are approved by the CFO and CRO, ALCO, RC accordingly. Risk-taking business units are required to conduct their business within the boundary of the interest rate risk limits. Before launching a new product or business in the banking book, the relevant departments are required to go through a risk assessment process, which includes the assessment of underlying interest rate risk and consideration of the adequacy of current risk monitoring mechanism. Any material impact on interest rate risk noted during the risk assessment process will be submitted to RC for approval.

NII and EV assess the impact of interest rate movement on the Group's net interest income and capital base. They are the Group's key interest rate risk indicators. The former assesses the impact of interest rate movement on net interest income as a percentage to the projected net interest income for the year. The latter assesses the impact of interest rate movement on economic value (i.e. the net present value of cash flows of assets, liabilities and off-balance sheet items discounted using market interest rate) as a percentage to the latest capital base. Limits are set by the RC on these two indicators to monitor and control the Group's banking book interest rate risk.

The Group uses scenario analyses and stress tests to assess the banking book interest rate risk that the Group would face under adverse circumstances. Scenario analyses and stress tests are also used to assess the impact on net interest income and economic value arising from the optionality of savings deposits, the prepayment of mortgage loans and the prepayment of debt securities with embedded options.

4. Financial risk management (continued)

4.2 Market risk (continued)

(C) Interest rate risk (continued)

The Group is principally exposed to HK Dollar, US Dollar and Renminbi in terms of interest rate risk. As at 31 December 2016, if HK Dollar, US Dollar and Renminbi market interest rates had a 100 basis point parallel upward shift of the yield curve in relevant currency with other variables held constant, the sensitivities on net interest income over a twelve-month period and on reserves for the Group would have been as follows:

	Impact on net interest income over the next twelve months at 31 December		Impact on reserves at 31 December	
	2016 HK$'m	2015 HK$'m	**2016 HK$'m**	2015 HK$'m
HK Dollar	**1,572**	985	**(523)**	(488)
US Dollar	**(525)**	(345)	**(8,220)**	(5,332)
Renminbi	**(583)**	(738)	**(747)**	(1,020)

The overall impact on net interest income of the above currencies is positive in 2016, which is mainly because of the increase in HKD non-interest bearing funding. Reserves would have been reduced because of the expected reduction in valuation of available-for-sale securities due to a parallel shift up of 100 basis points in the yield curve. The reduction of reserves is increased compared with 2015 because the size of available-for-sale securities in capital market is increased.

The sensitivities above are for illustration only and are based on several assumptions, including, but not limited to, the change in the correlation between interest rates of relevant currencies, parallel movement of interest rates, the absence of actions that would be taken to mitigate the impact of interest rate risk, the effectiveness of hedge accounting, all positions being assumed to run to maturity, behavioural assumptions of products in which actual repricing date differs from contractual repricing date or products without contractual maturity. The above exposures form only a part of the Group's overall interest rate risk exposures.

4. Financial risk management (continued)

4.2 Market risk (continued)

(C) Interest rate risk (continued)

The tables below summarise the Group's on-balance sheet exposure to interest rate risk as at 31 December. Included in the tables are the assets and liabilities at carrying amounts, categorised by the earlier of contractual repricing date and maturity date.

	2016						
	Up to 1 month HK$'m	1 to 3 months HK$'m	3 to 12 months HK$'m	1 to 5 years HK$'m	Over 5 years HK$'m	Non-interest bearing HK$'m	Total HK$'m
Assets							
Cash and balances with banks and other financial institutions	210,590	–	–	–	–	18,483	229,073
Placements with banks and other financial institutions maturing between one and twelve months	–	28,195	42,197	–	–	–	70,392
Financial assets at fair value through profit or loss	5,510	8,217	13,224	15,326	19,816	5,265	67,358
Derivative financial instruments	–	–	–	–	–	64,314	64,314
Hong Kong SAR Government certificates of indebtedness	–	–	–	–	–	123,390	123,390
Advances and other accounts	779,681	106,980	53,703	39,535	4,807	7,431	992,137
Investment in securities							
– Available-for-sale securities	54,896	119,040	105,886	142,045	104,760	4,409	531,036
– Held-to-maturity securities	779	3,979	17,001	23,982	14,453	–	60,194
– Loans and receivables	–	–	935	–	–	–	935
Interests in associates and joint ventures	–	–	–	–	–	319	319
Investment properties	–	–	–	–	–	18,227	18,227
Properties, plant and equipment	–	–	–	–	–	45,732	45,732
Other assets (including deferred tax assets)	3,383	–	–	–	–	67,998	71,381
Assets held for sale	32,358	6,837	6,394	5,197	4	2,503	53,293
Total assets	1,087,197	273,248	239,340	226,085	143,840	358,071	2,327,781
Liabilities							
Hong Kong SAR currency notes in circulation	–	–	–	–	–	123,390	123,390
Deposits and balances from banks and other financial institutions	151,036	14,210	7,031	394	–	19,742	192,413
Financial liabilities at fair value through profit or loss	3,705	5,578	2,161	1,335	592	–	13,371
Derivative financial instruments	–	–	–	–	–	49,289	49,289
Deposits from customers	1,133,516	183,833	79,008	322	–	107,397	1,504,076
Debt securities and certificates of deposit in issue	–	–	–	1,121	–	–	1,121
Other accounts and provisions (including current and deferred tax liabilities)	15,803	–	–	–	–	45,197	61,000
Insurance contract liabilities	–	–	–	–	–	86,534	86,534
Subordinated liabilities	–	–	–	19,014	–	–	19,014
Liabilities associated with assets held for sale	28,917	7,428	7,145	67	–	3,456	47,013
Total liabilities	1,332,977	211,049	95,345	22,253	592	435,005	2,097,221
Interest sensitivity gap	(245,780)	62,199	143,995	203,832	143,248	(76,934)	230,560

4. Financial risk management (continued)

4.2 Market risk (continued)

(C) Interest rate risk (continued)

	2015						
	Up to 1 month HK$'m	1 to 3 months HK$'m	3 to 12 months HK$'m	1 to 5 years HK$'m	Over 5 years HK$'m	Non-interest bearing HK$'m	Total HK$'m
Assets							
Cash and balances with banks and other financial institutions	199,016	–	–	–	–	35,256	234,272
Placements with banks and other financial institutions maturing between one and twelve months	–	39,148	26,992	–	–	–	66,140
Financial assets at fair value through profit or loss	1,742	6,980	9,223	18,895	16,442	4,495	57,777
Derivative financial instruments	–	–	–	–	–	43,211	43,211
Hong Kong SAR Government certificates of indebtedness	–	–	–	–	–	101,950	101,950
Advances and other accounts	717,440	108,780	62,019	32,770	943	6,919	928,871
Investment in securities							
– Available-for-sale securities	39,481	124,945	86,792	119,560	59,405	2,746	432,929
– Held-to-maturity securities	440	3,481	13,296	43,618	21,008	–	81,843
– Loans and receivables	–	1,005	2,161	–	–	–	3,166
Interests in associates and joint ventures	–	–	–	–	–	376	376
Investment properties	–	–	–	–	–	15,262	15,262
Properties, plant and equipment	–	–	–	–	–	50,517	50,517
Other assets (including deferred tax assets)	3,024	–	–	–	–	63,004	66,028
Assets held for sale	168,400	44,587	49,217	25,704	528	12,037	300,473
Total assets	1,129,543	328,926	249,700	240,547	98,326	335,773	2,382,815
Liabilities							
Hong Kong SAR currency notes in circulation	–	–	–	–	–	101,950	101,950
Deposits and balances from banks and other financial institutions	159,968	29,366	2,343	886	–	16,963	209,526
Financial liabilities at fair value through profit or loss	2,583	4,446	1,968	1,479	466	–	10,942
Derivative financial instruments	–	–	–	–	–	40,074	40,074
Deposits from customers	1,059,319	184,611	81,544	622	–	89,391	1,415,487
Debt securities and certificates of deposit in issue	59	–	5,728	1,189	–	–	6,976
Other accounts and provisions (including current and deferred tax liabilities)	8,884	–	–	–	–	34,939	43,823
Insurance contract liabilities	–	–	–	–	–	82,645	82,645
Subordinated liabilities	–	–	–	19,422	–	–	19,422
Liabilities associated with assets held for sale	149,045	40,917	40,634	5,967	19	15,223	251,805
Total liabilities	1,379,858	259,340	132,217	29,565	485	381,185	2,182,650
Interest sensitivity gap	(250,315)	69,586	117,483	210,982	97,841	(45,412)	200,165

4. Financial risk management (continued)

4.3 Liquidity risk

Liquidity risk is the risk that banks fail to provide sufficient funds to grow assets or pay due obligations, and need to bear an unacceptable loss. The Group maintains sound liquidity risk appetite to provide stable, reliable and adequate sources of cash to meet liquidity needs under normal circumstances or stressed scenarios; and to survive with net positive cumulative cash flow in extreme scenarios, without requesting the HKMA to act as the lender of last resort.

The Group's liquidity risk management objective is to effectively manage the liquidity of on- and off-balance sheet items with reasonable cost based on the liquidity risk appetite to achieve sound operation and sustainable profitability. Deposits from customers are the Group's primary source of funds. To ensure stable and sufficient source of funds are in place, the Group actively attracts new deposits, keeps the core deposit and obtains supplementary funding from the interbank market and by issuing bills in the capital market. According to different term maturities and the results of funding needs estimated from stressed scenarios, the Group adjusts its asset structure (including loans, bonds investment, interbank placement, etc.) to maintain sufficient liquid assets which provides adequate funds in support of normal business needs and ensure its ability to raise funds at a reasonable cost to serve external claims in case of emergency. The Group is committed to diversify the source of funds and the use of funds to avoid excessive concentration of assets and liabilities and prevent triggering liquidity risk due to the break of funding strand when problem occurred in one concentrated funding source. The Group has established intra-group liquidity risk management guideline to manage the liquidity funding among different entities within the Group, and to restrict their reliance of funding on each other. The Group also pays attention to manage liquidity risk created by off-balance sheet activities, such as loan commitments, derivatives, options and other complex structured products. The Group has an overall liquidity risk management strategy to cover the liquidity management of foreign currency assets and liabilities, collateral, intra-day liquidity, intra-group liquidity, the liquidity risk arising from other risks, etc., and has formulated corresponding contingency plan.

The RC is the decision-making authority of liquidity risk management, and assumes the ultimate responsibility of liquidity risk management. As authorised by RC, ALCO exercises its oversight of liquidity risk and ensures the daily operations of the Group are in accordance with risk appetite and policies as set by RC. RMD (Interest Rate and Liquidity Risk Management) is responsible for overseeing the Group's liquidity risk. It cooperates with the Asset and Liability Management Division of Financial Management Department, Investment Management, etc. to assist the ALCO to perform liquidity management functions according to their specific responsibilities.

The Group established liquidity risk management indicators and limits to identify, measure, monitor and control liquidity risk on daily basis. These indicators and limits include, but are not limited to liquidity coverage ratio ("LCR"), loan-to-deposit ratio, Maximum Cumulative Cash Outflow ("MCO") and liquidity cushion. The Group applies cash flow analysis to assess the Group's liquidity condition under normal conditions and also performs a liquidity stress test (including institution specific, general market crisis and combined crisis) and other methods at least on monthly basis to assess the Group's capability to withstand various severe liquidity crises. Also, relevant management information systems such as Assets and Liabilities Management System and Basel Liquidity Ratio Management System are developed to provide data and the preparation for regular management reports to facilitate liquidity risk management duties.

4. Financial risk management (continued)

4.3 Liquidity risk (continued)

In accordance with the requirements of Supervisory Policy Manual LM-2 "Sound Systems and controls for Liquidity Risk Management" issued by the HKMA, the Group has implemented behaviour model and assumptions of cash flow analysis and stress test to enhance the Group's cash flow analysis under both normal and stressed conditions. In cash flow analysis under normal circumstances, assumptions have been made relating to on-balance sheet items (such as deposits from customers) and off-balance sheet items (such as loan commitments). According to various characteristics of the assets, liabilities and off-balance sheet items, the Group forecasts the future cash flow based on contractual maturity date and the assumptions of customer behaviour and balance sheet changes. The Group establishes MCO indicator which predicts the future 30 days maximum cumulative net cash outflow in normal situations based on the above assumptions, to assess if the Group has sufficient financing capacity to meet the cash flow gap in order to achieve the objective of continuing operation. As at 31 December 2016, before taking the cash inflow through the sale of outstanding marketable securities into consideration, BOCHK's 30 day cumulative cash flow was a net cash inflow, amounting to HK$64,212 million (2015: HK$74,742 million) and was in compliance with the internal limit requirements.

In the liquidity stress test, institution specific, general market crisis and combined crisis scenarios have been set up, combined crisis scenario is a combination of institution specific and general market crisis to assess the Group's capability to withstand a more severe liquidity crisis, with a more stringent set of assumptions being adopted. Stress test assumptions include the run-off rate of retail, wholesale and interbank deposits; drawdown rate of loan commitments and trade-related contingent liabilities; delinquency ratio and rollover rate of customer loans; and haircut of interbank placement and marketable securities. As at 31 December 2016, the Group was able to maintain a net cash inflow under the three stressed scenarios, indicating the Group has the ability to meet financing needs under stressed conditions. In addition, the Group has a policy in place to maintain a liquidity cushion which includes high quality or comparable quality marketable securities issued or guaranteed by sovereigns, central banks, public sector entities or multilateral development banks with 0% or 20% risk weight or marketable securities issued by non-financial corporate with a corresponding external credit rating of A- or above to ensure funding needs even under stressed scenarios. As at 31 December 2016, the liquidity cushion (before haircut) of BOCHK was HK$353,048 million (2015: HK$309,969 million). A contingency plan is being established which details the conditions to trigger the plan based on stress test results and early warning indicators, the action plans and relevant procedures and responsibility of relevant departments.

The LCR is calculated in accordance with the Banking (Liquidity) Rules effective from 1 January 2015, the Group, being classified as category 1 authorised institution by the HKMA, is required to calculate LCR on consolidated basis. During the year of 2016, the Group is required to maintain a LCR not less than 70%.

In certain derivative contracts, the counterparties have right to request from the Group additional collateral if they have concerns about the Group's creditworthiness.

The Group's liquidity risk management also covers new products or business developments. Before launching a new product or business, the relevant departments are required to go through a risk assessment process, which includes the assessment of underlying liquidity risk and consideration of the adequacy of the current risk management mechanism. Any material impact on liquidity risk noted during the risk assessment process will be reported to RC for approval.

4. Financial risk management (continued)

4.3 Liquidity risk (continued)

The Group has established a set of uniform liquidity risk management policies which serve as standards and guidance to all the Group's members for liquidity risk management. On the basis of the Group's uniform policy, each of the subsidiaries develops its own liquidity management policies according to its own characteristics, and assumes its own liquidity risk management responsibility. Subsidiaries are required to report their respective liquidity positions on a regular basis to RMD (Interest Rate and Liquidity Risk Management) of BOCHK, which consolidates this information and evaluates group-wide liquidity risk.

(A) Liquidity coverage ratio

	2016	2015
Average value of liquidity coverage ratio		
– First quarter	**112.92%**	101.90%
– Second quarter	**109.70%**	109.89%
– Third quarter	**118.69%**	104.00%
– Fourth quarter	**107.02%**	106.52%

The average value of liquidity coverage ratio is calculated based on the arithmetic mean of the liquidity coverage ratio as at the end of each working day in the quarter and the calculation methodology and instructions set out in the HKMA return of liquidity position.

The liquidity coverage ratio is computed on the consolidated basis which comprises the positions of BOCHK and certain subsidiaries specified by the HKMA in accordance with the Banking (Liquidity) Rules.

The additional information of liquidity coverage ratio disclosures is available under section "Regulatory Disclosures" on the Bank's website at www.bochk.com.

4. Financial risk management (continued)

4.3 Liquidity risk (continued)

(B) Maturity analysis

The tables below analyse the Group's assets and liabilities as at 31 December into relevant maturity groupings based on the remaining period at balance sheet date to the contractual maturity date.

	2016							
	On demand HK$'m	Up to 1 month HK$'m	1 to 3 months HK$'m	3 to 12 months HK$'m	1 to 5 years HK$'m	Over 5 years HK$'m	Indefinite HK$'m	Total HK$'m
Assets								
Cash and balances with banks and other financial institutions	111,852	104,538	–	–	–	–	12,683	229,073
Placements with banks and other financial institutions maturing between one and twelve months	–	–	28,195	42,197	–	–	–	70,392
Financial assets at fair value through profit or loss								
– Held for trading								
– Debt securities	–	1,415	3,723	9,430	13,083	3,417	–	31,068
– Certificates of deposit	–	–	1,140	412	591	–	–	2,143
– Designated at fair value through profit or loss								
– Debt securities	–	109	281	3,339	3,054	16,174	–	22,957
– Certificates of deposit	–	2	–	2	144	–	–	148
– Equity securities and fund	–	–	–	–	–	–	5,265	5,265
– Others	–	4,097	1,680	–	–	–	–	5,777
Derivative financial instruments	14,662	8,962	10,104	21,369	6,533	2,684	–	64,314
Hong Kong SAR Government certificates of indebtedness	123,390	–	–	–	–	–	–	123,390
Advances and other accounts								
– Advances to customers	93,182	22,021	61,767	131,998	437,199	221,785	1,995	969,947
– Trade bills	6	4,863	3,831	7,474	–	–	–	16,174
– Advances to banks and other financial institutions	–	3	1	577	5,435	–	–	6,016
Investment in securities								
– Available-for-sale								
– Debt securities	–	37,484	80,502	79,478	167,246	105,014	–	469,724
– Certificates of deposit	–	2,985	16,078	30,274	7,357	209	–	56,903
– Held-to-maturity								
– Debt securities	–	865	3,958	17,329	23,712	14,311	1	60,176
– Certificates of deposit	–	–	–	–	–	18	–	18
– Loans and receivables – Debt securities	–	–	–	935	–	–	–	935
– Equity securities and fund	–	–	–	–	–	–	4,409	4,409
Interests in associates and joint ventures	–	–	–	–	–	–	319	319
Investment properties	–	–	–	–	–	–	18,227	18,227
Properties, plant and equipment	–	–	–	–	–	–	45,732	45,732
Other assets (including deferred tax assets)	30,971	15,426	585	931	7,620	15,806	42	71,381
Assets held for sale	6,097	6,304	4,791	9,851	18,486	5,684	2,080	53,293
Total assets	380,160	209,074	216,636	355,596	690,460	385,102	90,753	2,327,781
Liabilities								
Hong Kong SAR currency notes in circulation	123,390	–	–	–	–	–	–	123,390
Deposits and balances from banks and other financial institutions	152,288	18,490	14,110	7,031	494	–	–	192,413
Financial liabilities at fair value through profit or loss	–	3,705	5,582	2,238	1,257	589	–	13,371
Derivative financial instruments	10,511	3,390	7,364	20,140	5,218	2,666	–	49,289
Deposits from customers	969,218	271,695	183,833	79,008	322	–	–	1,504,076
Debt securities and certificates of deposit in issue								
– Debt securities	–	–	–	10	1,111	–	–	1,121
Other accounts and provisions (including current and deferred tax liabilities)	36,101	14,056	1,682	2,517	6,644	–	–	61,000
Insurance contract liabilities	26,730	284	476	1,146	13,969	43,929	–	86,534
Subordinated liabilities	–	–	418	–	18,596	–	–	19,014
Liabilities associated with assets held for sale	24,404	7,694	7,467	7,186	262	–	–	47,013
Total liabilities	1,342,642	319,314	220,932	119,276	47,873	47,184	–	2,097,221
Net liquidity gap	(962,482)	(110,240)	(4,296)	236,320	642,587	337,918	90,753	230,560

4. Financial risk management (continued)

4.3 Liquidity risk (continued)

(B) Maturity analysis (continued)

	2015							
	On demand HK$'m	Up to 1 month HK$'m	1 to 3 months HK$'m	3 to 12 months HK$'m	1 to 5 years HK$'m	Over 5 years HK$'m	Indefinite HK$'m	Total HK$'m
Assets								
Cash and balances with banks and other financial institutions	183,179	50,790	–	–	–	–	303	234,272
Placements with banks and other financial institutions maturing between one and twelve months	–	–	39,148	26,992	–	–	–	66,140
Financial assets at fair value through profit or loss								
– Held for trading								
– Debt securities	–	1,020	5,782	6,800	12,708	3,494	–	29,804
– Certificates of deposit	–	190	80	1,810	137	6	–	2,223
– Designated at fair value through profit or loss								
– Debt securities	–	89	307	770	6,498	12,770	–	20,434
– Certificates of deposit	–	372	–	1	268	–	–	641
– Equity securities and fund	–	–	–	–	–	–	4,495	4,495
– Others	–	180	–	–	–	–	–	180
Derivative financial instruments	12,489	2,727	2,711	18,994	5,504	786	–	43,211
Hong Kong SAR Government certificates of indebtedness	101,950	–	–	–	–	–	–	101,950
Advances and other accounts								
– Advances to customers	106,231	27,153	44,763	135,823	362,408	217,069	2,083	895,530
– Trade bills	1	8,269	8,366	15,736	–	–	–	32,372
– Advances to banks and other financial institutions	–	–	1	–	968	–	–	969
Investment in securities								
– Available-for-sale								
– Debt securities	–	19,917	83,105	59,304	137,708	60,283	–	360,317
– Certificates of deposit	–	2,305	23,450	35,571	8,328	212	–	69,866
– Held-to-maturity								
– Debt securities	–	523	3,563	13,620	43,294	20,822	3	81,825
– Certificates of deposit	–	–	–	–	–	18	–	18
– Loans and receivables								
– Debt securities	–	–	1,005	2,161	–	–	–	3,166
– Equity securities	–	–	–	–	–	–	2,746	2,746
Interests in associates and joint ventures	–	–	–	–	–	–	376	376
Investment properties	–	–	–	–	–	–	15,262	15,262
Properties, plant and equipment	–	–	–	–	–	–	50,517	50,517
Other assets (including deferred tax assets)	28,509	11,403	705	4,056	5,333	15,969	53	66,028
Assets held for sale	18,598	52,792	31,823	65,034	85,341	29,495	17,390	300,473
Total assets	450,957	177,730	244,809	386,672	668,495	360,924	93,228	2,382,815
Liabilities								
Hong Kong SAR currency notes in circulation	101,950	–	–	–	–	–	–	101,950
Deposits and balances from banks and other financial institutions	166,308	10,623	29,366	2,343	886	–	–	209,526
Financial liabilities at fair value through profit or loss	–	2,583	4,447	1,970	1,477	465	–	10,942
Derivative financial instruments	8,813	3,360	2,743	18,851	4,525	1,782	–	40,074
Deposits from customers	854,951	293,759	184,611	81,544	622	–	–	1,415,487
Debt securities and certificates of deposit in issue								
– Debt securities	–	59	–	5,739	1,178	–	–	6,976
Other accounts and provisions (including current and deferred tax liabilities)	20,348	11,969	1,479	2,702	7,322	3	–	43,823
Insurance contract liabilities	21,746	788	786	4,154	12,407	42,764	–	82,645
Subordinated liabilities	–	–	418	–	19,004	–	–	19,422
Liabilities associated with assets held for sale	93,390	68,292	40,563	42,451	7,083	26	–	251,805
Total liabilities	1,267,506	391,433	264,413	159,754	54,504	45,040	–	2,182,650
Net liquidity gap	(816,549)	(213,703)	(19,604)	226,918	613,991	315,884	93,228	200,165

4. Financial risk management (continued)

4.3 Liquidity risk (continued)

(B) Maturity analysis (continued)

The above maturity classifications have been prepared in accordance with relevant provisions under the Banking (Disclosure) Rules. The Group has reported assets such as advances and debt securities which have been overdue for not more than one month as "On demand". In the case of an asset that is repayable by different payments or instalments, only that portion of the asset that is actually overdue is reported as overdue. Any part of the asset that is not due is reported according to the residual maturity unless the repayment of the asset is in doubt in which case the amount is reported as "Indefinite". The above assets are stated after deduction of provisions, if any.

The analysis of debt securities by remaining period to maturity is disclosed in order to comply with relevant provisions under the Banking (Disclosure) Rules. The disclosure does not imply that the securities will be held to maturity.

The above analysis in respect of insurance contract liabilities represents the estimated timing of net cash outflows resulting from recognised insurance contract liabilities on the balance sheet as at 31 December.

4. Financial risk management (continued)

4.3 Liquidity risk (continued)

(C) Analysis of undiscounted cash flows by contractual maturities

(a) Non-derivative cash flows

The tables below summarise the cash flows of the Group as at 31 December for non-derivative financial liabilities by remaining contractual maturity.

	2016					
	Up to 1 month HK$'m	1 to 3 months HK$'m	3 to 12 months HK$'m	1 to 5 years HK$'m	Over 5 years HK$'m	Total HK$'m
Financial liabilities						
Hong Kong SAR currency notes in circulation	**123,390**	**–**	**–**	**–**	**–**	**123,390**
Deposits and balances from banks and other financial institutions	**170,783**	**14,155**	**7,085**	**524**	**–**	**192,547**
Financial liabilities at fair value through profit or loss	**3,707**	**5,600**	**2,272**	**1,322**	**625**	**13,526**
Deposits from customers	**1,240,988**	**184,255**	**79,820**	**332**	**–**	**1,505,395**
Debt securities and certificates of deposit in issue	**–**	**–**	**39**	**1,151**	**–**	**1,190**
Subordinated liabilities	**–**	**538**	**538**	**22,077**	**–**	**23,153**
Other financial liabilities	**40,283**	**397**	**459**	**5**	**–**	**41,144**
Financial liabilities associated with assets held for sale	**32,086**	**7,446**	**7,241**	**69**	**–**	**46,842**
Total financial liabilities	**1,611,237**	**212,391**	**97,454**	**25,480**	**625**	**1,947,187**

	2015					
	Up to 1 month HK$'m	1 to 3 months HK$'m	3 to 12 months HK$'m	1 to 5 years HK$'m	Over 5 years HK$'m	Total HK$'m
Financial liabilities						
Hong Kong SAR currency notes in circulation	101,950	–	–	–	–	101,950
Deposits and balances from banks and other financial institutions	176,945	29,429	2,366	941	–	209,681
Financial liabilities at fair value through profit or loss	2,586	4,458	1,991	1,519	483	11,037
Deposits from customers	1,148,853	185,099	82,412	653	–	1,417,017
Debt securities and certificates of deposit in issue	59	–	6,072	1,262	–	7,393
Subordinated liabilities	–	538	538	23,138	–	24,214
Other financial liabilities	27,354	218	715	4	–	28,291
Financial liabilities associated with assets held for sale	161,377	40,421	42,794	6,564	26	251,182
Total financial liabilities	1,619,124	260,163	136,888	34,081	509	2,050,765

4. Financial risk management (continued)

4.3 Liquidity risk (continued)

(C) Analysis of undiscounted cash flows by contractual maturities (continued)

(b) Derivative cash flows

The tables below summarise the cash flows (including assets held for sale and liabilities associated with assets held for sale) of the Group by remaining contractual maturity as at 31 December for derivative financial liabilities that will be settled on a net basis, together with all derivative financial instruments that will be settled on a gross basis regardless of whether the contract is in an asset or liability position. The amounts disclosed in the tables are the contractual undiscounted cash flows, except for certain derivatives which are disclosed at fair value.

The Group's derivative financial instruments that will be settled on a net basis mainly include interest rate swaps whereas derivative financial instruments that will be settled on a gross basis mainly include currency forwards and currency swaps.

	2016					
	Up to 1 month HK$'m	1 to 3 months HK$'m	3 to 12 months HK$'m	1 to 5 years HK$'m	Over 5 years HK$'m	Total HK$'m
Derivative financial liabilities settled on a net basis	(10,810)	(423)	(574)	(2,631)	(1,213)	(15,651)
Derivative financial instruments settled on a gross basis						
Total inflow	658,439	483,050	845,015	100,984	2,005	2,089,493
Total outflow	(650,816)	(480,202)	(844,041)	(100,928)	(2,021)	(2,078,008)

	2015					
	Up to 1 month HK$'m	1 to 3 months HK$'m	3 to 12 months HK$'m	1 to 5 years HK$'m	Over 5 years HK$'m	Total HK$'m
Derivative financial liabilities settled on a net basis	(9,198)	(543)	(860)	(2,072)	(117)	(12,790)
Derivative financial instruments settled on a gross basis						
Total inflow	547,672	344,536	1,321,500	217,775	2,582	2,434,065
Total outflow	(548,293)	(344,586)	(1,321,561)	(217,569)	(2,565)	(2,434,574)

4. Financial risk management (continued)

4.3 Liquidity risk (continued)

(C) Analysis of undiscounted cash flows by contractual maturities (continued)

(c) Off-balance sheet items

Loan commitments

The contractual amounts of the Group's off-balance sheet financial instruments as at 31 December 2016 that the Group commits to extend credit to customers and other facilities amounted to HK$533,322 million (2015: HK$595,987 million). Those loan commitments can be drawn within one year.

Financial guarantees and other financial facilities

Financial guarantees and other financial facilities of the Group as at 31 December 2016 amounting to HK$51,165 million (2015: HK$69,092 million) are maturing no later than one year.

4.4 Insurance risk

The Group is in the business of insuring against the risk of mortality, morbidity, disability, critical illness, accidents and related risks. The Group manages these risks through the application of its underwriting policies and reinsurance arrangements.

The underwriting strategy is intended to set premium pricing at an appropriate level that corresponds with the underlying exposure of the risks underwritten. Screening processes, such as the review of health condition and family medical history, are also included in the Group's underwriting procedures.

Within the insurance process, concentrations of risk may arise where a particular event or series of events could impact heavily on the Group's liabilities. Such concentrations may arise from a single insurance contract or through a small number of related contracts, and relate to circumstances where significant liabilities could arise.

For the in-force insurance contracts, most of the underlying insurance liabilities are related to endowment, universal life, whole life and unit-linked insurance products. For most of the insurance policies issued, the Group has a retention limit on any single life insured. The Group cedes the excess of the insured benefit over the limit to reinsurer under an excess of loss reinsurance arrangement. For some of the insurance liabilities, the Group has entered into reinsurance arrangements that reinsure most of insurance risk.

Uncertainty in the estimation of future benefit payments and premium receipts for long-term insurance contracts arises from the unpredictability of long-term changes in overall levels of mortality, morbidity and persistency. In this regard, the Group has conducted relevant experience studies. The results of such studies are considered in determining the assumptions of insurance liability which include appropriate level of prudential margins.

4. Financial risk management (continued)

4.4 Insurance risk (continued)

(A) Process used to decide on assumptions

In determining the long term business fund liabilities, the Group follows the Insurance Companies (Determination of Long Term Liabilities) Regulation and makes prudent assumptions which include appropriate margins for adverse deviation of the relevant factors. It takes account of all prospective liabilities as determined by the policy terms and conditions for each existing contract, taking credit for premiums payable after the valuation date. The determination of liability is based on current assumptions made as at the valuation date as to mortality rates, and takes into account of various appropriate discount rates, and with due regard to the reasonable expectation of policyholders. A prudent margin for adverse deviations is included in the assumptions.

The assumptions adopted for the insurance liabilities disclosed in this note are summarised as follows:

Mortality and Morbidity
The amount of liability in respect of any category of contract shall, where relevant, be determined on the basis of prudent rates of mortality and morbidity, plus a margin for adverse deviation. The assumptions used for determination of future liabilities are based on population statistics or reinsurance information, adjusted where appropriate to reflect the Group's own experience and relevant reinsurance arrangements.

Interest rates adopted for valuation purpose
Homogeneous life insurance policies are grouped into segments and are matched by specific assets. The duration of liabilities under each segment is calculated for valuation purpose.

Investment guarantee of investment contract with discretionary participating feature
The amount of the liability in respect of the investment guarantee provided by the investment contract with discretionary participation feature is determined by stochastic analysis based on historical economic data to reflect the value-at-risk at 99% confidence level.

Acquisition expense
The acquisition expense assumptions used for determination of future liabilities are based on the Group's own experience.

(B) Change in assumptions

The Group has changed the mortality assumption to reflect the Company's own experience, and the interest rates adopted for valuation purposes to reflect the changes in the market interest rates and the yields of investment portfolio backing the policy liabilities. The valuation interest rate assumptions used for the year end valuation purpose were in the range of 0 % to 3.51% in 2016 (2015: 0% to 3.45%).

4. Financial risk management (continued)

4.4 Insurance risk (continued)

(C) Sensitivity analysis

The following table presents the sensitivity of the long-term business fund liabilities to movements in the key assumptions used in the estimation of insurance liabilities:

Sensitivity analysis – life and annuity insurance contracts:

Scenario	Change in variable	Decrease in profit after tax due to changes in insurance liabilities 2016 HK$'m	2015 HK$'m
Worsening of mortality & morbidity	10%	**(84)**	(75)
Lowering of interest rate	50 basis points	**(800)**	(761)

The above analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated – for example, changes in interest rate and in market values; and changes in lapses and in future mortality.

Sensitivity analysis – Linked long term insurance contracts, Retirement scheme management category III insurance contracts, and Retirement scheme management category I investment contracts with "DPF":

The reserves on Retirement scheme management category III insurance contracts, Retirement scheme management category I investment contracts with "DPF" and non-unitised reserve on Linked long term insurance contracts are insignificant to the whole portfolio, and no sensitivity analysis has been performed. The insurance liabilities for these three components contributed to less than 0.04% of the total insurance liabilities at the balance sheet date.

For unit-linked fund liabilities (unitised reserve), the liabilities are backed by the unit-linked fund asset values.

Among linked long term insurance contracts, there are contracts with minimum guaranteed death benefits that expose the Group to the risk arising from declines in the value of underlying investments. This may increase the Group's net exposure to mortality risk.

4. Financial risk management (continued)

4.5 Capital management

The major objective of the Group's capital management is to maximise total shareholders' return while maintaining a capital adequacy position in relation to the Group's overall risk profile. The ALCO periodically reviews the Group's capital structure and adjusts the capital mix where appropriate to maintain an optimal balance among risk, return and capital adequacy.

The Group has developed and maintained a sound framework of policies and controls on capital management to support the development of the Group's business and to meet the statutory capital adequacy ratio. The ALCO monitors the Group's capital adequacy. The Group has complied with all the statutory capital requirements of the HKMA for the reported periods in respect of banking operation as further elaborated below.

The Group has adopted the foundation internal ratings-based ("FIRB") approach to calculate the credit risk capital charge for the majority of its non-securitisation exposures and the internal ratings-based (securitisation) approach to calculate the credit risk capital charge for its securitisation exposures. A small residual credit exposures which includes the credit exposures of oversea subsidiaries or branches are remained under the standardised (credit risk) ("STC") approach. The Group has adopted the standardised credit valuation adjustment ("CVA") method to calculate the capital charge for the CVA risk of the counterparty.

The Group continues to adopt the internal models ("IMM") approach to calculate the general market risk capital charge for foreign exchange and interest rate exposures and, with the approval from the HKMA, exclude its structural FX positions in the calculation of the market risk capital charge. The Group continues to adopt the standardised (market risk) ("STM") approach to calculate the market risk capital charge for the remaining exposures.

The Group continues to adopt standardised (operational risk) ("STO") approach to calculate the operational risk capital charge.

The Group has continued to adopt an internal capital adequacy assessment process ("ICAAP") to comply with the HKMA's requirements in the Supervisory Policy Manual "Supervisory Review Process" in 2016. Based on the HKMA's guidelines on Pillar II, ICAAP has been initiated to assess the extra capital needed to cover the material risks not captured or not adequately captured under Pillar I, and therefore minimum Common Equity Tier 1 capital ratio, minimum Tier 1 capital ratio and minimum Total capital ratio are determined. Meanwhile, operating ranges for the aforementioned capital ratios have also been established which enable the flexibility for future business growth and efficiency of capital utilisation. The Group considers this ICAAP as an on-going process for capital management and periodically reviews and adjusts its capital structure where appropriate in relation to the overall risk profile.

In addition, the capital plan of the Group is drawn up annually and then submitted to the Board for approval after endorsement of the ALCO. The plan is built up by assessing the implications of various factors upon capital adequacy such as the business strategies, return on equity, risk appetite, credit rating, as well as regulatory requirements. Hence, the future capital requirement is determined and capital sources are identified also. The plan is to ensure the Group maintains adequate capital and appropriate capital structure which align with its business development needs, thereby achieving an optimal balance among risk, return and capital adequacy.

4. Financial risk management (continued)

4.5 Capital management (continued)

(A) Basis of regulatory consolidation

The consolidation basis for regulatory purposes comprises the positions of BOCHK and certain subsidiaries specified by the HKMA in accordance with the Banking (Capital) Rules. For accounting purposes, subsidiaries are consolidated in accordance with HKFRSs and the list of subsidiaries is set out in "Appendix – Subsidiaries of the Company".

The Company, its subsidiaries of BOC Group Life Assurance Company Limited and BOCHK Asset Management (Cayman) Limited (including their subsidiaries), and certain subsidiaries of BOCHK are included within the accounting scope of consolidation but not included within the regulatory scope of consolidation.

The particulars of the above-mentioned subsidiaries of BOCHK are as follows:

Name	2016 Total assets HK$'m	2016 Total equity HK$'m	2015 Total assets HK$'m	2015 Total equity HK$'m
Bank of China (Hong Kong) Nominees Limited	**–**	**–**	–	–
Bank of China (Hong Kong) Trustees Limited	**10**	**10**	9	9
BOC Group Trustee Company Limited	**200**	**200**	200	200
BOCHK Information Technology (Shenzhen) Co., Ltd.	**309**	**204**	220	199
BOCHK Information Technology Services (Shenzhen) Co., Ltd.	**313**	**269**	314	270
BOCI-Prudential Trustee Limited	**457**	**429**	462	432
Che Hsing (Nominees) Limited	**1**	**1**	1	1
China Bridge (Malaysia) Sdn. Bhd.[1]	**27**	**23**	–	–
Chiyu Banking Corporation (Nominees) Limited	**139**	**139**	134	134
Grace Charter Limited	**–**	**(11)**	–	(11)
Kwong Li Nam Investment Agency Limited[2]	**–**	**–**	4	4
Nanyang Commercial Bank (Nominees) Limited[2]	**–**	**–**	1	1
Nanyang Commercial Bank Trustee Limited[2]	**–**	**–**	16	16
Po Sang Financial Investment Services Company Limited	**365**	**346**	363	345
Po Sang Securities and Futures Limited	**603**	**466**	496	454
Seng Sun Development Company, Limited	**41**	**41**	41	41
Sin Chiao Enterprises Corporation, Limited	**6**	**6**	7	7
Sin Hua Trustee Limited	**4**	**4**	5	5
Sino Information Services Company Limited[3]	**–**	**–**	8	8

Notes:
1. The acquisition of China Bridge (Malaysia) Sdn. Bhd. was completed on 17 October 2016.
2. The disposal of Kwong Li Nam Investment Agency Limited, Nanyang Commercial Bank (Nominees) Limited and Nanyang Commercial Bank Trustee Limited was completed on 30 May 2016.
3. Sino Information Services Company Limited was dissolved on 14 February 2017.

4. Financial risk management (continued)

4.5 Capital management (continued)

(A) Basis of regulatory consolidation (continued)

The principal activities of the above subsidiaries are set out in "Appendix – Subsidiaries of the Company".

There were no subsidiaries which are included within the regulatory scope of consolidation but not included within the accounting scope of consolidation as at 31 December 2016 (2015: Nil).

There were also no subsidiaries which are included within both the accounting scope of consolidation and the regulatory scope of consolidation where the methods of consolidation differ as at 31 December 2016 (2015: Nil).

(B) Capital ratio

The capital ratios are analysed as follows:

	2016	2015
CET1 capital ratio	**17.64%**	12.83%
Tier 1 capital ratio	**17.69%**	12.89%
Total capital ratio	**22.35%**	17.86%

4. Financial risk management (continued)

4.5 Capital management (continued)

(B) Capital ratio (continued)

The consolidated capital base after deductions used in the calculation of the above capital ratios is analysed as follows:

	2016 HK$'m	2015 HK$'m
CET1 capital: instruments and reserves		
Directly issued qualifying CET1 capital instruments	**43,043**	43,043
Retained earnings	**129,644**	89,915
Disclosed reserves	**41,446**	49,438
Minority interests arising from CET1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in CET1 capital of the consolidation group)	**722**	733
CET1 capital before regulatory deductions	**214,855**	183,129
CET1 capital: regulatory deductions		
Valuation adjustments	**(78)**	(20)
Deferred tax assets net of deferred tax liabilities	**(77)**	(69)
Gains and losses due to changes in own credit risk on fair valued liabilities	**(202)**	(198)
Cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties)	**(46,443)**	(50,874)
Regulatory reserve for general banking risks	**(9,227)**	(10,879)
Total regulatory deductions to CET1 capital	**(56,027)**	(62,040)
CET1 capital	**158,828**	121,089
AT1 capital: instruments		
AT1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in AT1 capital of the consolidation group)	**458**	561
AT1 capital	**458**	561
Tier 1 capital	**159,286**	121,650

4. Financial risk management (continued)

4.5 Capital management (continued)

(B) Capital ratio (continued)

	2016 HK$'m	2015 HK$'m
Tier 2 capital: instruments and provisions		
Capital instruments subject to phase out arrangements from Tier 2 capital	**15,435**	18,230
Tier 2 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in Tier 2 capital of the consolidation group)	**221**	226
Collective impairment allowances and regulatory reserve for general banking risks eligible for inclusion in Tier 2 capital	**5,371**	5,537
Tier 2 capital before regulatory deductions	**21,027**	23,993
Tier 2 capital: regulatory deductions		
Add back of cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties) eligible for inclusion in Tier 2 capital	**20,899**	22,893
Total regulatory deductions to Tier 2 capital	**20,899**	22,893
Tier 2 capital	**41,926**	46,886
Total capital	**201,212**	168,536

The capital buffer ratios are analysed as follows:

	2016
Capital conservation buffer ratio	**0.625%**
Higher loss absorbency ratio	**0.375%**
Countercyclical capital buffer ratio	**0.484%**

The capital conservation buffer ratio, higher loss absorbency ratio, countercyclical capital buffer ratio ("CCyB ratio") and the applicable JCCyB ratios for Hong Kong and non-Hong Kong jurisdictions for 2015 are 0% in accordance with the Banking (Capital) Rules.

The additional information of capital disclosures is available under section "Regulatory Disclosures" on the Bank's website at www.bochk.com.

4. Financial risk management (continued)

4.5 Capital management (continued)

(C) Leverage ratio

The leverage ratio is analysed as follows:

	2016 HK$'m	2015 HK$'m
Tier 1 capital	**159,286**	121,650
Leverage ratio exposure	**2,155,889**	2,268,203
Leverage ratio	**7.39%**	5.36%

The additional information of leverage ratio disclosures is available under section "Regulatory Disclosures" on the Bank's website at www.bochk.com.

5. Fair values of assets and liabilities

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy as defined in HKFRS 13, "Fair value measurement". The categorisation are determined with reference to the observability and significance of the inputs used in the valuation methods and based on the lowest level input that is significant to the fair value measurement as a whole:

– Level 1: based on quoted prices (unadjusted) in active markets for identical assets or liabilities. This category includes equity securities listed on exchange, debt instruments issued by certain governments, certain exchange-traded derivative contracts and precious metals.

– Level 2: based on valuation techniques for which the lowest level input that is significant to the fair value measurement is observable, either directly or indirectly. This category includes majority of the OTC derivative contracts, debt securities and certificates of deposit with quote from pricing services vendors and issued structured deposits. It also includes precious metals and properties with insignificant adjustments made to observable market inputs.

– Level 3: based on valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable. This category includes equity investment, debt instruments and certain OTC derivative contracts with significant unobservable components. It also includes properties with significant adjustments made to observable market inputs.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

5. Fair values of assets and liabilities (continued)

5.1 Financial instruments measured at fair value

The Group has an established governance structure and controls framework to ensure that fair values are either determined or validated by control units independent of the front offices. Control units have overall responsibility for independent verification of valuation results from front line businesses and all other significant fair value measurements. Specific controls include verification of observable pricing inputs; review and approval for new models and changes to models; calibration and back-testing of models against observed market transactions; analysis and investigation of significant daily valuation movements; review of significant unobservable inputs and valuation adjustments. Significant valuation issues are reported to senior management, Risk Committee and Audit Committee.

Generally, the unit of account for a financial instrument is the individual instrument. HKFRS 13 permits a portfolio exception, through an accounting policy election, to measure the fair value of a portfolio of financial assets and financial liabilities on the basis of the net open risk position when certain criteria are met. The Group applies valuation adjustments at an individual instrument level, consistent with that unit of account. According to its risk management policies and systems to manage derivative financial instruments, the fair value of certain derivative portfolios that meet those criteria is measured on the basis of the price to be received or paid for net open risk. Those portfolio-level adjustments are allocated to the individual assets and liabilities on the basis of the relative size of each of the individual instruments in the portfolio.

The Group uses valuation techniques or broker/dealer quotations to determine the fair value of financial instruments when unable to obtain the open market quotation in active markets.

The main parameters used in valuation techniques for financial instruments held by the Group include bond prices, interest rates, foreign exchange rates, equity and stock prices, commodity prices, volatilities, counterparty credit spreads and others, which are mostly observable and obtainable from open market.

5. Fair values of assets and liabilities (continued)

5.1 Financial instruments measured at fair value (continued)

The technique used to calculate the fair value of the following financial instruments is as below:

Debt securities and certificates of deposit

The fair value of these instruments is determined by obtaining quoted market prices from exchange, dealer or independent pricing service vendors or using discounted cash flow technique. Discounted cash flow model is a valuation technique that measures present value using estimated expected future cash flows from the instruments and then discounts these flows using a discount rate or discount margin that reflects the credit spreads required by the market for instruments with similar risk. These inputs are observable or can be corroborated by observable or unobservable market data.

Asset backed securities

For this class of instruments, external prices are obtained from independent third parties. The valuation of these securities, depending on the nature of transaction, is estimated from market standard cash flow models with input parameter which include spreads to discount rates, default and recovery rates and prepayment rates that may be observable or compiled through matrix pricing for similar issues.

Derivatives

OTC derivative contracts include forward, swap and option contracts on foreign exchange, interest rate, equity, commodity or credit. The fair values of these contracts are mainly measured using valuation techniques such as discounted cash flow models and option pricing models. The inputs can be observable or unobservable market data. Observable inputs include interest rate, foreign exchange rates, equity and stock prices, commodity prices, credit default swap spreads and volatilities. Unobservable inputs such as volatility surface may be used for less commonly traded option products which are embedded in structured deposits. For certain complex derivative contracts, the fair values are determined based on broker/dealer price quotations.

Credit valuation adjustments ("CVA") and debit valuation adjustments ("DVA") are applied to the Group's OTC derivatives. These adjustments reflect market factors movement, expectations of counterparty creditworthiness and the Group's own credit spread respectively. They are mainly determined for each counterparty and are dependent on expected future values of exposures, default probabilities and recovery rates.

Financial liabilities designated at fair value through profit or loss

This class of instruments includes certain deposits received from customers that are embedded with derivatives. The plain vanilla contracts are valued in the similar way described in previous debt securities section. The fair value of structured deposits is derived from the fair value of the underlying deposit by using discounted cash flow analysis taking the Group's own credit risk into account, and the fair value of the embedded derivatives determined as described in the paragraph above on derivatives.

5. Fair values of assets and liabilities (continued)

5.1 Financial instruments measured at fair value (continued)

(A) Fair value hierarchy

	2016			
	Level 1 HK$'m	Level 2 HK$'m	Level 3 HK$'m	Total HK$'m
Financial assets				
Financial assets at fair value through profit or loss (Note 23)				
– Trading assets				
– Debt securities and certificates of deposit	587	32,462	162	33,211
– Equity securities	76	–	–	76
– Others	–	5,777	–	5,777
– Financial assets designated at fair value through profit or loss				
– Debt securities and certificates of deposit	–	20,227	2,878	23,105
– Equity securities	2,008	–	–	2,008
– Fund	3,181	–	–	3,181
Derivative financial instruments (Note 24)	14,658	49,656	–	64,314
Available-for-sale securities (Note 27)				
– Debt securities and certificates of deposit	122,789	402,103	1,735	526,627
– Equity securities	3,304	237	718	4,259
– Fund	150	–	–	150
Financial liabilities				
Financial liabilities at fair value through profit or loss (Note 33)				
– Trading liabilities	–	9,946	–	9,946
– Financial liabilities designated at fair value through profit or loss	–	3,425	–	3,425
Derivative financial instruments (Note 24)	10,775	38,514	–	49,289

5. Fair values of assets and liabilities (continued)

5.1 Financial instruments measured at fair value (continued)

(A) Fair value hierarchy (continued)

	2015			
	Level 1 HK$'m	Level 2 HK$'m	Level 3 HK$'m	Total HK$'m
Financial assets				
Financial assets at fair value through profit or loss (Note 23)				
– Trading assets				
– Debt securities and certificates of deposit	1	32,026	–	32,027
– Equity securities	–	–	–	–
– Others	–	180	–	180
– Financial assets designated at fair value through profit or loss				
– Debt securities and certificates of deposit	75	19,171	1,829	21,075
– Equity securities	1,995	–	–	1,995
– Fund	2,500	–	–	2,500
Derivative financial instruments (Note 24)	12,493	30,718	–	43,211
Available-for-sale securities (Note 27)				
– Debt securities and certificates of deposit	95,982	333,106	1,095	430,183
– Equity securities	2,459	–	287	2,746
– Fund	–	–	–	–
Financial liabilities				
Financial liabilities at fair value through profit or loss (Note 33)				
– Trading liabilities	–	8,371	–	8,371
– Financial liabilities designated at fair value through profit or loss	–	2,571	–	2,571
Derivative financial instruments (Note 24)	8,936	31,138	–	40,074

There were no financial asset and liability transfers between level 1 and level 2 for the Group during the year (2015: Nil).

5. Fair values of assets and liabilities (continued)

5.1 Financial instruments measured at fair value (continued)

(B) Reconciliation of level 3 items

	2016			
	Financial assets			
	Trading assets	Financial assets designated at fair value through profit or loss	Available-for-sale securities	
	Debt securities and certificates of deposit HK$'m	Debt securities and certificates of deposit HK$'m	Debt securities and certificates of deposit HK$'m	Equity securities HK$'m
At 1 January 2016	–	1,829	1,095	287
(Losses)/gains				
– Income statement				
– Net trading loss	(8)	–	–	–
– Net gain on financial instruments designated at fair value through profit or loss	–	20	–	–
– Other comprehensive income				
– Change in fair value of available-for-sale securities	–	–	(40)	17
Purchases	170	1,029	1,265	419
Sales	–	–	–	–
Transfer out of level 3	–	–	–	–
Classified as assets held for sale	–	–	(585)	(5)
At 31 December 2016	162	2,878	1,735	718
Total unrealised (losses)/gains for the year included in income statement for financial assets held as at 31 December 2016				
– Net trading loss	(8)	–	–	–
– Net gain on financial instruments designated at fair value through profit or loss	–	20	–	–
	(8)	20	–	–

5. Fair values of assets and liabilities (continued)

5.1 Financial instruments measured at fair value (continued)

(B) Reconciliation of level 3 items (continued)

	2015		
	Financial assets		
	Financial assets designated at fair value through profit or loss	Available-for-sale securities	
	Debt securities and certificates of deposit HK$'m	Debt securities and certificates of deposit HK$'m	Equity securities HK$'m
At 1 January 2015	1,080	907	267
(Losses)/gains			
– Income statement			
– Net loss on financial instruments designated at fair value through profit or loss	(1)	–	–
– Other comprehensive income			
– Change in fair value of available-for-sale securities	–	2	17
Purchases	901	808	8
Sales	(151)	(78)	–
Transfer out of level 3	–	(544)	–
Classified as assets held for sale	–	–	(5)
At 31 December 2015	1,829	1,095	287
Total unrealised losses for the year included in income statement for financial assets held as at 31 December 2015			
– Net loss on financial instruments designated at fair value through profit or loss	(1)	–	–

5. Fair values of assets and liabilities (continued)

5.1 Financial instruments measured at fair value (continued)

(B) Reconciliation of level 3 items (continued)

As at 31 December 2016 and 2015, financial instruments categorised as level 3 are mainly comprised of debt securities and certificates of deposit and unlisted equity shares.

For certain illiquid debt securities and certificates of deposit, the Group obtains valuation quotations from counterparties which may be based on unobservable inputs with significant impact on the valuation. Therefore, these instruments have been classified by the Group as level 3. The Group has established internal control procedures to control the Group's exposure to such financial instruments.

The fair values of unlisted available-for-sale equity shares are determined with reference to multiples of comparable listed companies, such as average of the price/earning ratios of comparables, or net asset value, if appropriate comparables are not available. The fair value is positively correlated to the price/earning ratios of appropriate comparables or net asset values. Had the net asset value of the underlying equity investments increased/decreased by 5%, the Group's other comprehensive income would have increased/decreased by HK$36 million (2015: HK$14 million).

5.2 Financial instruments not measured at fair value

Fair value estimates are made at a specific point in time based on relevant market information and information about various financial instruments. The following methods and assumptions have been used to estimate the fair value of each class of financial instrument as far as practicable.

Balances with/from banks and other financial institutions and trade bills

Substantially all the financial assets and liabilities mature within one year from the balance sheet date and their carrying value approximates fair value.

Advances to customers and banks and other financial institutions

Substantially all the advances to customers and banks and other financial institutions are on floating rate terms, bear interest at prevailing market interest rates and their carrying value approximates fair value.

Held-to-maturity securities

The fair value of held-to-maturity securities is determined by using the same approach as those debt securities and certificates of deposit and asset backed securities measured at fair value as described in Note 5.1.

5. Fair values of assets and liabilities (continued)

5.2 Financial instruments not measured at fair value (continued)

Loans and receivables

A discounted cash flow model is used based on a current yield curve appropriate for the remaining term to maturity.

Deposits from customers

Substantially all the deposits from customers mature within one year from the balance sheet date and their carrying value approximates fair value.

Debt securities and certificates of deposit in issue

The fair value of these instruments is determined by using the same approach as those debt securities and certificates of deposit measured at fair value as described in Note 5.1.

Subordinated liabilities

Fair value for subordinated notes is based on market prices or broker/dealer price quotations.

The following tables set out the carrying values and fair values of the financial instruments not measured at fair value, except for the above with their carrying values being approximation of fair values.

	2016		2015	
	Carrying value HK$'m	**Fair value HK$'m**	Carrying value HK$'m	Fair value HK$'m
Financial assets				
Held-to-maturity securities (Note 27)	**60,194**	**60,623**	81,843	83,759
Loans and receivables (Note 27)	**935**	**935**	3,166	3,171
Financial liabilities				
Debt securities and certificates of deposit in issue (Note 35)	**1,121**	**1,126**	6,976	7,222
Subordinated liabilities (Note 39)	**19,014**	**21,143**	19,422	21,507

5. Fair values of assets and liabilities (continued)

5.2 Financial instruments not measured at fair value (continued)

The following tables show the fair value hierarchy for financial instruments with fair values disclosed.

	2016			
	Level 1 HK$'m	Level 2 HK$'m	Level 3 HK$'m	Total HK$'m
Financial assets				
Held-to-maturity securities	**498**	**60,125**	**–**	**60,623**
Loans and receivables	**–**	**935**	**–**	**935**
Financial liabilities				
Debt securities and certificates of deposit in issue	**–**	**1,126**	**–**	**1,126**
Subordinated liabilities	**–**	**21,143**	**–**	**21,143**

	2015			
	Level 1 HK$'m	Level 2 HK$'m	Level 3 HK$'m	Total HK$'m
Financial assets				
Held-to-maturity securities	1,133	82,626	–	83,759
Loans and receivables	–	3,171	–	3,171
Financial liabilities				
Debt securities and certificates of deposit in issue	–	7,222	–	7,222
Subordinated liabilities	–	21,507	–	21,507

5. Fair values of assets and liabilities (continued)

5.3 Non-financial instruments measured at fair value

The Group uses valuation techniques or quoted market prices in active market to determine the fair value of non-financial instruments.

Investment properties and premises

The Group's properties can be divided into investment properties and premises. All of the Group's investment properties and premises were revalued as at year end. This year, the valuations were carried out by an independent firm of chartered surveyors, Knight Frank Petty Limited, who have among their staff Fellow and Members of The Hong Kong Institute of Surveyors with recent experience in the locations and categories of properties being valued. The Group's Management had discussions with the surveyors on the valuation methods, valuation assumptions and valuation results when the valuation is performed at each interim and annual reporting date. There has been no change in valuation methods during the year and the methods used are consistent with last year.

(i) Valuation methods and inputs used in Level 2 fair value measurements

The fair value of properties classified as Level 2 is determined using either the market comparison approach by reference to recent sales price of comparable properties or the income capitalisation approach by reference to market rent and capitalisation rate, with appropriate adjustments to reflect the differences between the comparable properties and the subject properties. These adjustments are considered as insignificant to the entire measurement.

The Group's properties are located in Hong Kong, major cities in the PRC and Malaysia where the property markets are considered active and transparent. Sales price, market rent and capitalisation rate of comparable properties are generally observable either directly or indirectly in these markets.

(ii) Information about Level 3 fair value measurements

The fair value of all of the Group's properties classified as Level 3, except for the bank vault, is determined using either the market comparison approach or the income capitalisation approach, adjusted for a premium or a discount specific to the features of the Group's properties compared to the comparable properties.

The fair value of the bank vault is determined using the depreciated replacement cost approach as no direct comparable is available given the specialised nature of the property. The major inputs are the market value of the existing land, the current cost of replacing the property and the depreciation rate. Appropriate adjustments are made to reflect the specialised nature of the property.

5. Fair values of assets and liabilities (continued)

5.3 Non-financial instruments measured at fair value (continued)

Investment properties and premises (continued)

(ii) Information about Level 3 fair value measurements (continued)

The valuation methods and significant unobservable inputs used in the fair value measurement of the Group's properties classified as Level 3 are as follows:

	Valuation method	Significant unobservable inputs	Weighted average	Relationship of unobservable inputs to fair value
Bank vault	Depreciated replacement cost approach	Depreciation rate	2% (2015: 2%) per year	The higher the depreciation rate, the lower the fair value.
		Premium on specialised nature of the property	+15% (2015: +20%) to building cost	The higher the premium, the higher the fair value.
Other properties	Market comparison approach or income capitalisation approach	Premium/(discount) on features of the property compared to comparable properties	-6% (2015: -9%)	The higher the premium, the higher the fair value. The higher the discount, the lower the fair value.

Premium/(discount) on features of a property is determined after taken into account various factors, such as time for market movement, location, accessibility, building age/condition, floor level, size, layout, etc., with reference to the differences in features with comparable properties.

Precious metals

The fair values of precious metals are determined by obtaining quoted market prices in active market or market quote with certain adjustments.

5. Fair values of assets and liabilities (continued)

5.3 Non-financial instruments measured at fair value (continued)

(A) Fair value hierarchy

	2016			
	Level 1 HK$'m	Level 2 HK$'m	Level 3 HK$'m	Total HK$'m
Non-financial assets				
Investment properties (Note 29)	–	862	17,365	18,227
Properties, plant and equipment (Note 30)				
– Premises	–	1,659	41,698	43,357
Other assets (Note 31)				
– Precious metals	4,511	1,122	–	5,633

	2015			
	Level 1 HK$'m	Level 2 HK$'m	Level 3 HK$'m	Total HK$'m
Non-financial assets				
Investment properties (Note 29)	–	627	14,635	15,262
Properties, plant and equipment (Note 30)				
– Premises	–	2,338	45,906	48,244
Other assets (Note 31)				
– Precious metals	2,105	1,569	–	3,674

There were no non-financial asset transfers between level 1 and level 2 for the Group during the year (2015: Nil).

5. Fair values of assets and liabilities (continued)

5.3 Non-financial instruments measured at fair value (continued)

(B) Reconciliation of level 3 items

	2016	
	Non-financial assets	
		Properties, plant and equipment
	Investment properties HK$'m	Premises HK$'m
At 1 January 2016, as previously reported	14,635	45,849
Effect of merger of entity under common control	–	57
At 1 January 2016, as restated	14,635	45,906
Gains/(losses)		
– Income statement		
– Net gain from fair value adjustments on investment properties	427	–
– Net loss from revaluation of premises	–	(9)
– Other comprehensive income		
– Revaluation of premises	–	(70)
Depreciation	–	(1,021)
Additions	6	483
Disposals	–	–
Transfer into level 3	–	778
Transfer out of level 3	(215)	(167)
Reclassification	2,709	(2,709)
Exchange difference	–	(3)
Classified as assets held for sale	(197)	(1,490)
At 31 December 2016	17,365	41,698
Total unrealised gains/(losses) for the year included in income statement for non-financial assets held as at 31 December 2016		
– Net gain from fair value adjustments on investment properties	441	–
– Net loss from revaluation of premises	–	(7)
	441	(7)

5. Fair values of assets and liabilities (continued)

5.3 Non-financial instruments measured at fair value (continued)

(B) Reconciliation of level 3 items (continued)

	2015	
	Non-financial assets	
		Properties, plant and equipment
	Investment properties HK$'m	Premises HK$'m
At 1 January 2015, as previously reported	14,201	49,784
Effect of merger of entity under common control	–	26
At 1 January 2015, as restated	14,201	49,810
Gains/(losses)		
– Income statement		
– Net gain from fair value adjustments on investment properties	789	–
– Net loss from revaluation of premises	–	(136)
– Other comprehensive income		
– Revaluation of premises	–	3,438
Depreciation	–	(1,019)
Additions	43	442
Disposals	–	(363)
Transfer into level 3	199	1,698
Transfer out of level 3	(384)	(1,128)
Reclassification	202	(202)
Exchange difference	(1)	(27)
Classified as assets held for sale	(414)	(6,607)
At 31 December 2015	14,635	45,906
Total unrealised gains/(losses) for the year included in income statement for non-financial assets held as at 31 December 2015		
– Net gain from fair value adjustments on investment properties	753	–
– Net loss from revaluation of premises	–	(137)
	753	(137)

The transfer of properties into and out of level 3 is due to change in the premium/(discount) on features applied between the subject and comparable properties during the year. Premium/(discount) on features is determined with reference to differences in features between the subject properties and the comparable properties recently transacted in the market. As comparable properties that come from recent market transactions may be different in each year, the premium/(discount) on features applied between the subject and comparable properties would change from year to year accordingly. As a result, the significance of adjustments made to observable market inputs may vary and lead to the transfer of properties into and out of level 3.

6. Net interest income

	2016 HK$'m	2015 HK$'m
CONTINUING OPERATIONS		
Interest income		
Due from banks and other financial institutions	**4,473**	8,138
Advances to customers	**20,945**	18,575
Investment in securities and financial assets at fair value through profit or loss	**10,276**	10,569
Others	**196**	210
	35,890	37,492
Interest expense		
Due to banks and other financial institutions	**(1,712)**	(1,896)
Deposits from customers	**(7,612)**	(9,297)
Debt securities and certificates of deposit in issue	**(318)**	(308)
Subordinated liabilities	**(594)**	(441)
Others	**(226)**	(374)
	(10,462)	(12,316)
Net interest income	**25,428**	25,176

Included within interest income is HK$5 million (2015: HK$6 million) of interest with respect to income accrued on advances classified as impaired for the year ended 31 December 2016. Interest income accrued on impaired investment in securities amounted to HK$1 million (2015: HK$3 million).

Included within interest income and interest expense are HK$35,609 million (2015: HK$37,312 million) and HK$10,945 million (2015: HK$12,871 million), before hedging effect, for financial assets and financial liabilities that are not recognised at fair value through profit or loss respectively.

7. Net fee and commission income

	2016 HK$'m	2015 HK$'m
CONTINUING OPERATIONS		
Fee and commission income		
Credit card business	**3,702**	3,726
Loan commissions	**3,500**	3,239
Securities brokerage	**1,954**	3,255
Insurance	**1,630**	1,467
Funds distribution	**735**	901
Bills commissions	**631**	561
Payment services	**593**	561
Trust and custody services	**470**	473
Currency exchange	**336**	302
Safe deposit box	**277**	248
Others	**944**	839
	14,772	15,572
Fee and commission expense		
Credit card business	**(2,841)**	(2,802)
Insurance	**(292)**	(262)
Securities brokerage	**(244)**	(374)
Others	**(854)**	(861)
	(4,231)	(4,299)
Net fee and commission income	**10,541**	11,273
Of which arise from:		
Financial assets or financial liabilities not at fair value through profit or loss		
– Fee and commission income	**3,771**	3,439
– Fee and commission expense	**(34)**	(22)
	3,737	3,417
Trust and other fiduciary activities		
– Fee and commission income	**654**	654
– Fee and commission expense	**(22)**	(25)
	632	629

8. Net trading gain

	2016 HK$'m	2015 HK$'m
CONTINUING OPERATIONS		
Net gain from:		
Foreign exchange and foreign exchange products	**3,618**	2,051
Interest rate instruments and items under fair value hedge	**867**	295
Commodities	**32**	57
Equity and credit derivative instruments	**88**	194
	4,605	2,597

9. Net gain on other financial assets

	2016 HK$'m	2015 HK$'m
CONTINUING OPERATIONS		
Net gain on available-for-sale securities	**999**	1,275
Net gain on held-to-maturity securities	**12**	7
Others	**(5)**	4
	1,006	1,286

10. Other operating income

	2016 HK$'m	2015 HK$'m
CONTINUING OPERATIONS		
Dividend income from investment in securities		
– Listed investments	**87**	90
– Unlisted investments	**45**	32
Gross rental income from investment properties	**494**	450
Less: Outgoings in respect of investment properties	**(72)**	(61)
Others	**260**	299
	814	810

Included in the "Outgoings in respect of investment properties" is HK$6 million (2015: HK$4 million) of direct operating expenses related to investment properties that were not let during the year.

11. Net insurance benefits and claims and movement in liabilities

	2016 HK$'m	2015 HK$'m
CONTINUING OPERATIONS		
Gross insurance benefits and claims and movement in liabilities		
Claims, benefits and surrenders paid	**(15,561)**	(13,010)
Movement in liabilities	**(5,579)**	(10,965)
	(21,140)	(23,975)
Reinsurers' share of benefits and claims and movement in liabilities		
Reinsurers' share of claims, benefits and surrenders paid	**10,925**	5,843
Reinsurers' share of movement in liabilities	**(1,160)**	5,477
	9,765	11,320
Net insurance benefits and claims and movement in liabilities	**(11,375)**	(12,655)

12. Net charge of impairment allowances

	2016 HK$'m	2015 HK$'m
CONTINUING OPERATIONS		
Advances to customers		
Individually assessed		
– New allowances	**(171)**	(505)
– Releases	**140**	93
– Recoveries	**90**	98
Net reversal/(charge) of individually assessed loan impairment allowances	**59**	(314)
Collectively assessed		
– New allowances	**(695)**	(538)
– Releases	**1**	1
– Recoveries	**46**	45
Net charge of collectively assessed loan impairment allowances	**(648)**	(492)
Net charge of loan impairment allowances	**(589)**	(806)
Others	**11**	51
Net charge of impairment allowances	**(578)**	(755)

13. Operating expenses

	2016 HK$'m	2015 HK$'m
CONTINUING OPERATIONS		
Staff costs (including directors' emoluments)		
– Salaries and other costs	**6,374**	6,022
– Pension cost	**413**	398
	6,787	6,420
Premises and equipment expenses (excluding depreciation)		
– Rental of premises	**648**	609
– Information technology	**510**	412
– Others	**399**	391
	1,557	1,412
Depreciation	**1,788**	1,713
Auditor's remuneration		
– Audit services	**26**	20
– Non-audit services	**13**	11
Other operating expenses	**2,042**	2,035
	12,213	11,611

Contingent rent included in the "Rental of premises" amounted to HK$16 million during the year (2015: HK$16 million).

14. Net gain from disposal of/fair value adjustments on investment properties

	2016 HK$'m	2015 HK$'m
CONTINUING OPERATIONS		
Net gain from fair value adjustments on investment properties	**429**	774

15. Net loss from disposal/revaluation of properties, plant and equipment

	2016 HK$'m	2015 HK$'m
CONTINUING OPERATIONS		
Net gain from disposal of premises	**–**	95
Net loss from disposal of equipment, fixtures and fittings	**(7)**	(26)
Net loss from revaluation of premises	**(7)**	(137)
	(14)	(68)

16. Taxation

Taxation in the income statement represents:

	2016 HK$'m	2015 HK$'m
CONTINUING OPERATIONS		
Current tax		
Hong Kong profits tax		
– Current year taxation	**4,586**	4,348
– Over-provision in prior years	**(60)**	(63)
	4,526	4,285
Overseas taxation		
– Current year taxation	**390**	746
– Over-provision in prior years	**–**	(31)
	4,916	5,000
Deferred tax		
Origination and reversal of temporary differences and unused tax credits	**(294)**	(714)
	4,622	4,286

Hong Kong profits tax has been provided at the rate of 16.5% (2015: 16.5%) on the estimated assessable profits arising in Hong Kong during the year. Taxation on overseas profits has been calculated on the estimated assessable profits for the year at the rates of taxation prevailing in the countries in which the Group operates.

The taxation on the Group's profit before taxation that differs from the theoretical amount that would arise using the taxation rate of Hong Kong is as follows:

	2016 HK$'m	2015 HK$'m
CONTINUING OPERATIONS		
Profit before taxation	**29,452**	28,575
Calculated at a taxation rate of 16.5% (2015: 16.5%)	**4,860**	4,715
Effect of different taxation rates in other countries	**19**	22
Income not subject to taxation	**(242)**	(320)
Expenses not deductible for taxation purposes	**43**	110
Tax losses not recognised	**1**	–
Over-provision in prior years	**(60)**	(94)
Foreign withholding tax	**1**	(147)
Taxation charge	**4,622**	4,286
Effective tax rate	**15.7%**	15.0%

17. Dividends

	2016		2015	
	Per share HK$	**Total HK$'m**	Per share HK$	Total HK$'m
Interim dividend paid	**0.545**	**5,762**	0.545	5,762
Special dividend paid	**0.710**	**7,507**	–	–
Proposed final dividend	**0.625**	**6,608**	0.679	7,179
	1.880	**19,877**	1.224	12,941

At a meeting held on 30 August 2016, the Board declared an interim dividend of HK$0.545 per ordinary share for the first half of 2016 amounting to approximately HK$5,762 million and special dividend of HK$0.710 per ordinary share amounting to approximately HK$7,507 million.

At a meeting held on 31 March 2017, the Board proposed to recommend to the Annual General Meeting on 28 June 2017 a final dividend of HK$0.625 per ordinary share for the year ended 31 December 2016 amounting to approximately HK$6,608 million. This proposed final dividend is not reflected as a dividend payable in these financial statements, but will be reflected as an appropriation of retained earnings for the year ending 31 December 2017.

18. Earnings per share for profit attributable to the equity holders of the Company

The calculation of basic earnings per share for the year ended 31 December 2016 is based on the consolidated profit for the year and profit from continuing operations attributable to the equity holders of the Company of approximately HK$55,503 million and HK$24,201 million (2015: HK$26,982 million and HK$23,757 million) respectively and on the ordinary shares in issue of 10,572,780,266 shares (2015: 10,572,780,266 ordinary shares).

There was no dilution of earnings per share as no potential ordinary shares were in issue for the year ended 31 December 2016 (2015: Nil).

19. Retirement benefit costs

Retirement benefits are provided to eligible employees of the Group. In Hong Kong, defined contribution schemes for the Group's employees are ORSO schemes exempted under the MPF Schemes Ordinance and the BOC-Prudential Easy Choice MPF Scheme.

Under the ORSO schemes, employees make monthly contributions to the ORSO schemes equal to 5% of their basic salaries, while the employer makes monthly contributions equal to 5% to 15% of the employees' monthly basic salaries, depending on years of service. The employees are entitled to receive 100% of the employer's contributions upon retirement, early retirement or termination of employment after completing 10 years of service. Employees with 3 to 9 years of service are entitled to receive the employer's contributions at a scale ranging from 30% to 90% upon termination of employment for other reasons other than summary dismissal. All employer's contributions received by employee are subject to MPF Schemes Ordinance.

With the implementation of the MPF Schemes Ordinance on 1 December 2000, the Group also participates in the BOC-Prudential Easy Choice MPF Scheme, of which the trustee is BOCI-Prudential Trustee and the investment manager is BOCI-Prudential Manager, which are related parties of the Company.

19. Retirement benefit costs (continued)

The Group's total contributions made to the ORSO schemes for the year ended 31 December 2016 amounted to approximately HK$354 million (2015: approximately HK$367 million), after a deduction of forfeited contributions of approximately HK$9 million (2015: approximately HK$9 million). For the MPF Scheme, the Group contributed approximately HK$85 million (2015: approximately HK$83 million) for the year ended 31 December 2016.

20. Directors', senior management's and key personnel's emoluments

(a) Directors' and senior management's emoluments

(i) Directors' emoluments

Details of the emoluments paid to or receivable by the directors of the Company in respect of their services rendered for the Company and managing the subsidiaries within the Group during the year are as follows:

	2016			
	Directors' fee HK$'000	Basic salaries, allowances and benefits in kind HK$'000	Bonus HK$'000	Total HK$'000
Executive Directors				
YUE Yi (Chief Executive)	–	6,750	3,953	10,703
LI Jiuzhong	–	4,480	2,311	6,791
	–	11,230	6,264	17,494
Non-executive Directors				
TIAN Guoli	–	–	–	–
CHEN Siqing	–	–	–	–
REN Deqi	–	–	–	–
GAO Yingxin	–	–	–	–
XU Luode	–	–	–	–
CHENG Eva*	300	–	–	300
CHOI Koon Shum* Note 1	199	–	–	199
KOH Beng Seng*	450	–	–	450
TUNG Savio Wai-Hok*	528	–	–	528
SHAN Weijian* Note 2	173	–	–	173
	1,650	–	–	1,650
	1,650	11,230	6,264	19,144

Note 1: Appointed during the year.
Note 2: Retired during the year.

20. Directors', senior management's and key personnel's emoluments (continued)

(a) Directors' and senior management's emoluments (continued)

(i) Directors' emoluments (continued)

	2015			
	Directors' fee HK$'000	Basic salaries, allowances and benefits in kind HK$'000	Bonus HK$'000	Total HK$'000
Executive Directors				
YUE Yi (Chief Executive)	–	5,246	3,107	8,353
HE Guangbei (Chief Executive)	91	1,893	1,123	3,107
GAO Yingxin	67	1,163	656	1,886
LI Jiuzhong	–	3,284	2,222	5,506
	158	11,586	7,108	18,852
Non-executive Directors				
TIAN Guoli	–	–	–	–
CHEN Siqing	–	–	–	–
YUE Yi	–	–	–	–
REN Deqi	–	–	–	–
GAO Yingxin	–	–	–	–
XU Luode	–	–	–	–
LI Zaohang	–	–	–	–
ZHU Shumin	–	–	–	–
CHENG Eva*	300	–	–	300
KOH Beng Seng*	450	–	–	450
TUNG Savio Wai-Hok*	500	–	–	500
SHAN Weijian*	400	–	–	400
	1,650	–	–	1,650
	1,808	11,586	7,108	20,502

* Independent Non-executive Directors

There were no directors waived emoluments for the year ended 31 December 2016 (2015: Nil).

20. Directors', senior management's and key personnel's emoluments (continued)

(a) Directors' and senior management's emoluments (continued)

(ii) Five highest paid individuals

The five individuals whose emoluments were the highest in the Group for the year include two (2015: two) directors whose emoluments are reflected in the analysis presented above. The emoluments payable to the remaining three (2015: three) individuals during the year are as follows:

	2016 HK$'m	2015 HK$'m
Basic salaries and allowances	**11**	11
Bonus	**8**	7
Contributions to pension schemes	**1**	1
	20	19

Emoluments paid to or receivable by individuals during the year with reference to their tenure are within the following bands:

	Number of individuals	
	2016	2015
HK$6,000,001 to HK$6,500,000	**1**	3
HK$6,500,001 to HK$7,000,000	**2**	–

(iii) Senior management's emoluments

Emoluments paid to or receivable by individuals during the year with reference to their tenure as senior management are within the following bands:

	Number of individuals	
	2016	2015
HK$500,001 to HK$1,000,000	**–**	1
HK$1,000,001 to HK$1,500,000	**–**	2
HK$1,500,001 to HK$2,000,000	**–**	3
HK$2,000,001 to HK$2,500,000	**–**	1
HK$3,000,001 to HK$3,500,000	**–**	2
HK$4,500,001 to HK$5,000,000	**1**	–
HK$5,000,001 to HK$5,500,000	**2**	2
HK$5,500,001 to HK$6,000,000	**1**	–
HK$6,000,001 to HK$6,500,000	**–**	1
HK$6,500,001 to HK$7,000,000	**2**	–
HK$8,000,001 to HK$8,500,000	**–**	1
HK$10,500,001 to HK$11,000,000	**1**	–

20. Directors', senior management's and key personnel's emoluments (continued)

(b) Remuneration for Senior Management and Key Personnel under CG-5

Pursuant to CG-5 Guideline on a Sound Remuneration System issued by the HKMA, details of the remuneration for Senior Management and Key Personnel of the Group during the year are as follows:

(i) Remuneration awarded during the year

	2016					
	Senior Management			Key Personnel		
	Non-deferred HK$'m	Deferred HK$'m	Total HK$'m	Non-deferred HK$'m	Deferred HK$'m	Total HK$'m
Fixed remuneration						
Cash	**36**	**–**	**36**	**60**	**–**	**60**
Variable remuneration						
Cash	**13**	**5**	**18**	**29**	**9**	**38**
	49	**5**	**54**	**89**	**9**	**98**

	2015					
	Senior Management			Key Personnel		
	Non-deferred HK$'m	Deferred HK$'m	Total HK$'m	Non-deferred HK$'m	Deferred HK$'m	Total HK$'m
Fixed remuneration						
Cash	34	–	34	55	–	55
Variable remuneration						
Cash	14	3	17	28	10	38
	48	3	51	83	10	93

The remuneration above includes 10 (2015: 15) members of Senior Management and 26 (2015: 23) members of Key Personnel.

20. Directors', senior management's and key personnel's emoluments (continued)

(b) Remuneration for Senior Management and Key Personnel under CG-5 (continued)

(ii) Deferred remuneration

	2016		2015	
	Senior Management HK$'m	**Key Personnel HK$'m**	Senior Management HK$'m	Key Personnel HK$'m
Deferred remuneration				
Vested	**4**	**9**	5	7
Unvested	**9**	**18**	8	18
	13	**27**	13	25
At 1 January	**8**	**18**	10	15
Awarded	**5**	**9**	3	10
Paid out	**(4)**	**(9)**	(5)	(7)
Reduced through performance adjustments	**–**	**–**	–	–
At 31 December	**9**	**18**	8	18

For the purpose of disclosure, Senior Management and Key Personnel mentioned in this section are defined according to the HKMA's Guideline on a Sound Remuneration System.

– Senior Management: The senior executives designated by the Board who are responsible for oversight of the firm-wide strategy or material business lines, including Chief Executive, Deputy Chief Executives, Chief Financial Officer, Chief Risk Officer, Chief Operating Officer, Board Secretary and General Manager of Group Audit.

– Key Personnel: The employees whose individual business activities involve the assumption of material risk which may have significant impact on risk exposure, or whose individual responsibilities are directly and materially linked to the risk management, or those who have direct influence to the profit, including heads of material business lines, heads of major subsidiaries and overseas institutions, head of trading, as well as heads of risk control functions.

21. Cash and balances with banks and other financial institutions

	2016 HK$'m	2015 HK$'m
Cash	**12,709**	7,953
Balances with central banks	**69,082**	110,473
Balances with banks and other financial institutions	**42,744**	65,056
Placements with central banks maturing within one month	**4,075**	2,056
Placements with banks and other financial institutions maturing within one month	**100,463**	48,734
	229,073	234,272

22. Placements with banks and other financial institutions maturing between one and twelve months

	2016 HK$'m	2015 HK$'m
Placements with central banks maturing between one and twelve months	**156**	–
Placements with banks and other financial institutions maturing between one and twelve months	**70,236**	66,140
	70,392	66,140

23. Financial assets at fair value through profit or loss

	Trading assets		Financial assets designated at fair value through profit or loss		Total	
	2016 HK$'m	2015 HK$'m	2016 HK$'m	2015 HK$'m	2016 HK$'m	2015 HK$'m
At fair value						
Treasury bills	**10,448**	9,504	**–**	–	**10,448**	9,504
Other debt securities	**20,620**	20,300	**22,957**	20,434	**43,577**	40,734
	31,068	29,804	**22,957**	20,434	**54,025**	50,238
Certificates of deposit	**2,143**	2,223	**148**	641	**2,291**	2,864
Total debt securities and certificates of deposit	**33,211**	32,027	**23,105**	21,075	**56,316**	53,102
Equity securities	**76**	–	**2,008**	1,995	**2,084**	1,995
Fund	**–**	–	**3,181**	2,500	**3,181**	2,500
Total securities	**33,287**	32,027	**28,294**	25,570	**61,581**	57,597
Others	**5,777**	180	**–**	–	**5,777**	180
	39,064	32,207	**28,294**	25,570	**67,358**	57,777

23. Financial assets at fair value through profit or loss (continued)

Total securities are analysed by place of listing as follows:

	Trading assets		Financial assets designated at fair value through profit or loss	
	2016 HK$'m	2015 HK$'m	**2016 HK$'m**	2015 HK$'m
Debt securities and certificates of deposit				
– Listed in Hong Kong	**10,913**	11,650	**5,861**	5,841
– Listed outside Hong Kong	**4,096**	3,993	**9,953**	8,570
	15,009	15,643	**15,814**	14,411
– Unlisted	**18,202**	16,384	**7,291**	6,664
	33,211	32,027	**23,105**	21,075
Equity securities				
– Listed in Hong Kong	**76**	–	**1,624**	1,436
– Listed outside Hong Kong	**–**	–	**384**	559
	76	–	**2,008**	1,995
Fund				
– Unlisted	**–**	–	**3,181**	2,500
Total securities	**33,287**	32,027	**28,294**	25,570

Total securities are analysed by type of issuer as follows:

	Trading assets		Financial assets designated at fair value through profit or loss	
	2016 HK$'m	2015 HK$'m	**2016 HK$'m**	2015 HK$'m
Sovereigns	**21,473**	18,802	**1,247**	1,529
Public sector entities*	**660**	607	**–**	–
Banks and other financial institutions	**7,720**	6,914	**18,421**	15,447
Corporate entities	**3,434**	5,704	**8,626**	8,594
Total securities	**33,287**	32,027	**28,294**	25,570

* Included trading assets of HK$660 million (2015: HK$607 million) which are eligible to be classified as public sector entities under the Banking (Capital) Rules.

24. Derivative financial instruments and hedge accounting

The Group enters into exchange rate, interest rate, commodity, equity and credit related derivative financial instrument contracts for trading and risk management purposes.

Currency forwards represent commitments to purchase and sell foreign currency on a future date. Interest rate futures are contractual obligations to receive or pay a net amount based on changes in interest rates or buy or sell interest rate financial instruments on a future date at an agreed price in the financial market under the administration of the stock exchange. Forward rate agreements are individually negotiated interest rate futures that call for a cash settlement at a future date for the difference between a contract rate of interest and the current market rate, based on a notional principal amount.

Currency, interest rate and commodity swaps are commitments to exchange one set of cash flows or commodity for another. Swaps result in an exchange of currencies, interest rates (for example, fixed rate for floating rate), or precious metals (for example, silver swaps) or a combination of all these (for example, cross-currency interest rate swaps). Except for certain currency swap contracts, no exchange of principal takes place.

Foreign currency, interest rate, precious metal and equity options are contractual agreements under which the seller (writer) grants the purchaser (holder) the right, but not the obligation, either to buy (a call option) or sell (a put option) at or by a set date or during a set period, a specific amount of the financial instrument at a predetermined price. In consideration for the assumption of foreign exchange and interest rate risk, the seller receives a premium from the purchaser. Options are negotiated over-the-counter between the Group and its counterparty or traded through the stock exchange (for example, exchange-traded stock option).

The contract/notional amounts and fair values of derivative financial instruments held by the Group are set out in the following tables. The contract/notional amounts of these instruments indicate the volume of transactions outstanding at the balance sheet dates and certain of them provide a basis for comparison with the fair values of instruments recognised on the balance sheet. However, they do not necessarily indicate the amounts of future cash flows involved or the current fair values of the instruments and, therefore, do not indicate the Group's exposure to credit or market risks. The derivative financial instruments become favourable (assets) or unfavourable (liabilities) as a result of fluctuations in foreign exchange rates, market interest rates, commodity prices or equity prices relative to their terms. The aggregate fair values of derivative financial instruments can fluctuate significantly from time to time.

24. Derivative financial instruments and hedge accounting (continued)

(a) Derivative financial instruments

The Group trades derivative products (both exchange-traded or OTC) mainly for customer business. The Group strictly follows risk management policies and requirement in providing derivative products to our customers and in trading of derivative products in the interbank market.

Derivatives are also used to manage the interest rate risk of the banking book. A derivative instrument must be included in the approved product list before any transactions for that instrument can be made. There are limits to control the notional amount of exposure arising from derivative transactions, and the maximum tenor of the deal is set. Every derivative transaction must be input into the relevant system for settlement, mark-to-market revaluation, reporting and control.

The following tables summarise the contract/notional amounts of each class of derivative financial instrument (excluding assets held for sale and liabilities associated with assets held for sale) as at 31 December:

	2016			
	Trading HK$'m	Hedging HK$'m	Not qualified for hedge accounting HK$'m	Total HK$'m
Exchange rate contracts				
Spot, forwards and futures	317,796	–	8,434	326,230
Swaps	1,825,313	–	14,067	1,839,380
Foreign currency options				
– Options purchased	19,901	–	–	19,901
– Options written	22,128	–	–	22,128
	2,185,138	–	22,501	2,207,639
Interest rate contracts				
Futures	2,543	–	–	2,543
Swaps	748,737	124,266	2,807	875,810
	751,280	124,266	2,807	878,353
Commodity contracts	26,091	–	–	26,091
Equity contracts	4,628	–	–	4,628
Credit derivative contracts	388	–	–	388
	2,967,525	124,266	25,308	3,117,099

24. Derivative financial instruments and hedge accounting (continued)

(a) Derivative financial instruments (continued)

	2015			
	Trading HK$'m	Hedging HK$'m	Not qualified for hedge accounting HK$'m	Total HK$'m
Exchange rate contracts				
Spot, forwards and futures	321,958	–	4,675	326,633
Swaps	2,063,424	–	15,863	2,079,287
Foreign currency options				
– Options purchased	31,947	–	–	31,947
– Options written	32,821	–	–	32,821
	2,450,150	–	20,538	2,470,688
Interest rate contracts				
Futures	2,700	–	–	2,700
Swaps	397,099	77,144	2,416	476,659
	399,799	77,144	2,416	479,359
Commodity contracts	6,905	–	–	6,905
Equity contracts	3,348	–	–	3,348
Credit derivative contracts	–	–	–	–
	2,860,202	77,144	22,954	2,960,300

Not qualified for hedge accounting: derivative contracts which do not qualify as hedges for accounting purposes but are managed in conjunction with the financial instruments designated at fair value through profit or loss are separately disclosed in compliance with the requirements set out in the Banking (Disclosure) Rules.

24. Derivative financial instruments and hedge accounting (continued)

(a) Derivative financial instruments (continued)

The following tables summarise the fair values of each class of derivative financial instrument (excluding assets held for sale and liabilities associated with assets held for sale) as at 31 December:

	2016							
	Fair value assets				Fair value liabilities			
	Trading HK$'m	Hedging HK$'m	Not qualified for hedge accounting HK$'m	Total HK$'m	Trading HK$'m	Hedging HK$'m	Not qualified for hedge accounting HK$'m	Total HK$'m
Exchange rate contracts								
Spot, forwards and futures	17,612	–	7	17,619	(11,487)	–	(22)	(11,509)
Swaps	38,468	–	1	38,469	(31,237)	–	(68)	(31,305)
Foreign currency options								
– Options purchased	349	–	–	349	–	–	–	–
– Options written	–	–	–	–	(391)	–	–	(391)
	56,429	–	8	56,437	(43,115)	–	(90)	(43,205)
Interest rate contracts								
Futures	1	–	–	1	(8)	–	–	(8)
Swaps	3,755	2,797	3	6,555	(4,249)	(1,065)	(6)	(5,320)
	3,756	2,797	3	6,556	(4,257)	(1,065)	(6)	(5,328)
Commodity contracts	1,240	–	–	1,240	(675)	–	–	(675)
Equity contracts	78	–	–	78	(81)	–	–	(81)
Credit derivative contracts	3	–	–	3	–	–	–	–
	61,506	2,797	11	64,314	(48,128)	(1,065)	(96)	(49,289)

24. Derivative financial instruments and hedge accounting (continued)

(a) Derivative financial instruments (continued)

	2015							
	Fair value assets				Fair value liabilities			
	Trading HK$'m	Hedging HK$'m	Not qualified for hedge accounting HK$'m	Total HK$'m	Trading HK$'m	Hedging HK$'m	Not qualified for hedge accounting HK$'m	Total HK$'m
Exchange rate contracts								
Spot, forwards and futures	15,781	–	20	15,801	(9,689)	–	–	(9,689)
Swaps	22,817	–	87	22,904	(25,870)	–	–	(25,870)
Foreign currency options								
– Options purchased	513	–	–	513	–	–	–	–
– Options written	–	–	–	–	(487)	–	–	(487)
	39,111	–	107	39,218	(36,046)	–	–	(36,046)
Interest rate contracts								
Futures	3	–	–	3	(1)	–	–	(1)
Swaps	1,640	1,877	–	3,517	(2,108)	(1,516)	(27)	(3,651)
	1,643	1,877	–	3,520	(2,109)	(1,516)	(27)	(3,652)
Commodity contracts	392	–	–	392	(294)	–	–	(294)
Equity contracts	81	–	–	81	(82)	–	–	(82)
Credit derivative contracts	–	–	–	–	–	–	–	–
	41,227	1,877	107	43,211	(38,531)	(1,516)	(27)	(40,074)

24. Derivative financial instruments and hedge accounting (continued)

(a) Derivative financial instruments (continued)

The table below gives the credit risk-weighted amounts of the derivative financial instruments (including assets held for sale) and is prepared with reference to the completion instructions for the HKMA return of capital adequacy ratio.

	2016 HK$'m	2015 HK$'m
Exchange rate contracts		
Spot, forwards and futures	**4,050**	2,237
Swaps	**11,277**	10,614
Foreign currency options		
– Options purchased	**329**	361
	15,656	13,212
Interest rate contracts		
Futures	**–**	1
Swaps	**494**	656
	494	657
Commodity contracts	**53**	2
Equity contracts	**191**	181
Credit derivative contracts	**17**	–
	16,411	14,052

The credit risk-weighted amounts are calculated in accordance with the Banking (Capital) Rules. The amounts are dependent upon the status of the counterparty and the maturity characteristics of each type of contract.

The total fair values of derivatives subject to valid bilateral netting agreements for the Group amounted to HK$39,436 million (2015: HK$11,332 million) and the effect of valid bilateral netting agreements amounted to HK$29,477 million (2015: HK$9,682 million).

(b) Hedge accounting

The fair values of derivative financial instruments designated as hedging instruments as at 31 December are as follows:

	2016		2015	
	Assets HK$'m	**Liabilities HK$'m**	Assets HK$'m	Liabilities HK$'m
Fair value hedges	**2,797**	**(1,065)**	1,877	(1,516)

24. Derivative financial instruments and hedge accounting (continued)

(b) Hedge accounting (continued)

The Group uses interest rate swaps to hedge against change in fair value of financial assets and liabilities arising from movements in market interest rates.

Gains or losses on fair value hedges reflected in net trading gain for the year are as follows:

	2016		2015	
	Hedged assets HK$'m	**Hedged liabilities HK$'m**	Hedged assets HK$'m	Hedged liabilities HK$'m
Net gain/(loss)				
– Hedging instruments	**1,962**	**(487)**	(356)	(278)
– Hedged items	**(1,372)**	**483**	622	284
	590	**(4)**	266	6

25. Advances and other accounts

	2016 HK$'m	2015 HK$'m
Personal loans and advances	**291,925**	275,103
Corporate loans and advances	**681,146**	623,510
Advances to customers	**973,071**	898,613
Loan impairment allowances (Note 26)		
– Individually assessed	**(449)**	(578)
– Collectively assessed	**(2,675)**	(2,505)
	969,947	895,530
Trade bills	**16,174**	32,372
Advances to banks and other financial institutions	**6,016**	969
	992,137	928,871

As at 31 December 2016, advances to customers included accrued interest of HK$1,273 million (2015: HK$1,444 million).

As at 31 December 2016, no impairment allowance was made in respect of trade bills and advances to banks and other financial institutions (2015: Nil).

26. Loan impairment allowances

	2016		
	Individually assessed		
	Personal HK$'m	Corporate HK$'m	Total HK$'m
At 1 January 2016, as previously reported	8	556	564
Effect of merger of entity under common control	1	13	14
At 1 January 2016, as restated	9	569	578
Credited to income statement	(4)	(18)	(22)
Loans written off during the year as uncollectible	(3)	(107)	(110)
Recoveries	7	90	97
Unwind of discount on impairment allowances	–	(6)	(6)
Exchange difference	–	(5)	(5)
Classified as assets held for sale	–	(83)	(83)
At 31 December 2016	9	440	449

	2016		
	Collectively assessed		
	Personal HK$'m	Corporate HK$'m	Total HK$'m
At 1 January 2016, as previously reported	274	2,171	2,445
Effect of merger of entity under common control	4	56	60
At 1 January 2016, as restated	278	2,227	2,505
Charged to income statement	393	282	675
Loans written off during the year as uncollectible	(408)	(5)	(413)
Recoveries	46	–	46
Exchange difference	–	1	1
Classified as assets held for sale	(5)	(134)	(139)
At 31 December 2016	304	2,371	2,675

26. Loan impairment allowances (continued)

	2015		
	Individually assessed		
	Personal HK$'m	Corporate HK$'m	Total HK$'m
At 1 January 2015, as previously reported	26	1,070	1,096
Effect of merger of entity under common control	–	2	2
At 1 January 2015, as restated	26	1,072	1,098
Charged to income statement	12	1,254	1,266
Loans written off during the year as uncollectible	(16)	(1,384)	(1,400)
Recoveries	7	123	130
Unwind of discount on impairment allowances	–	(15)	(15)
Exchange difference	(2)	(66)	(68)
Classified as assets held for sale	(18)	(415)	(433)
At 31 December 2015	9	569	578

	2015		
	Collectively assessed		
	Personal HK$'m	Corporate HK$'m	Total HK$'m
At 1 January 2015, as previously reported	360	3,160	3,520
Effect of merger of entity under common control	4	45	49
At 1 January 2015, as restated	364	3,205	3,569
Charged/(credited) to income statement	436	(64)	372
Loans written off during the year as uncollectible	(495)	(3)	(498)
Recoveries	45	–	45
Exchange difference	(8)	(23)	(31)
Classified as assets held for sale	(64)	(888)	(952)
At 31 December 2015	278	2,227	2,505

27. Investment in securities

	2016			
	At fair value	At amortised cost		
	Available-for-sale securities HK$'m	Held-to-maturity securities HK$'m	Loans and receivables HK$'m	Total HK$'m
Treasury bills	**142,263**	**–**	**–**	**142,263**
Other debt securities	**327,461**	**60,176**	**935**	**388,572**
	469,724	**60,176**	**935**	**530,835**
Certificates of deposit	**56,903**	**18**	**–**	**56,921**
Total debt securities and certificates of deposit	**526,627**	**60,194**	**935**	**587,756**
Equity securities	**4,259**	**–**	**–**	**4,259**
Fund	**150**	**–**	**–**	**150**
	531,036	**60,194**	**935**	**592,165**

	2015			
	At fair value	At amortised cost		
	Available-for-sale securities HK$'m	Held-to-maturity securities HK$'m	Loans and receivables HK$'m	Total HK$'m
Treasury bills	124,306	–	–	124,306
Other debt securities	236,011	81,825	3,166	321,002
	360,317	81,825	3,166	445,308
Certificates of deposit	69,866	18	–	69,884
Total debt securities and certificates of deposit	430,183	81,843	3,166	515,192
Equity securities	2,746	–	–	2,746
Fund	–	–	–	–
	432,929	81,843	3,166	517,938

27. Investment in securities (continued)

Investment in securities is analysed by place of listing as follows:

	2016		
	Available-for-sale securities HK$'m	Held-to-maturity securities HK$'m	Loans and receivables HK$'m
Debt securities and certificates of deposit			
– Listed in Hong Kong	**55,218**	**8,214**	**–**
– Listed outside Hong Kong	**168,241**	**24,040**	**–**
	223,459	**32,254**	**–**
– Unlisted	**303,168**	**27,940**	**935**
	526,627	**60,194**	**935**
Equity securities			
– Listed in Hong Kong	**2,906**	**–**	**–**
– Listed outside Hong Kong	**635**	**–**	**–**
– Unlisted	**718**	**–**	**–**
	4,259	**–**	**–**
Fund			
– Unlisted	**150**	**–**	**–**
	531,036	**60,194**	**935**
Market value of listed held-to-maturity securities		**32,483**	

	2015		
	Available-for-sale securities HK$'m	Held-to-maturity securities HK$'m	Loans and receivables HK$'m
Debt securities and certificates of deposit			
– Listed in Hong Kong	39,490	6,974	–
– Listed outside Hong Kong	112,363	32,804	–
	151,853	39,778	–
– Unlisted	278,330	42,065	3,166
	430,183	81,843	3,166
Equity securities			
– Listed in Hong Kong	2,459	–	–
– Listed outside Hong Kong	–	–	–
– Unlisted	287	–	–
	2,746	–	–
Fund	–	–	–
	432,929	81,843	3,166
Market value of listed held-to-maturity securities		40,021	

27. Investment in securities (continued)

Investment in securities is analysed by type of issuer as follows:

	2016		
	Available-for-sale securities HK$'m	Held-to-maturity securities HK$'m	Loans and receivables HK$'m
Sovereigns	**187,059**	**498**	**–**
Public sector entities*	**29,819**	**11,608**	**–**
Banks and other financial institutions	**214,576**	**27,248**	**935**
Corporate entities	**99,582**	**20,840**	**–**
	531,036	**60,194**	**935**

	2015		
	Available-for-sale securities HK$'m	Held-to-maturity securities HK$'m	Loans and receivables HK$'m
Sovereigns	155,327	1,557	–
Public sector entities*	18,498	19,011	–
Banks and other financial institutions	177,429	33,871	3,166
Corporate entities	81,675	27,404	–
	432,929	81,843	3,166

* Included available-for-sale securities of HK$25,171 million (2015: HK$17,491 million) and held-to-maturity securities of HK$4,086 million (2015: HK$4,614 million) which are eligible to be classified as public sector entities under the Banking (Capital) Rules.

27. Investment in securities (continued)

The movements in investment in securities are summarised as follows:

	2016		
	Available-for-sale securities HK$'m	Held-to-maturity securities HK$'m	Loans and receivables HK$'m
At 1 January 2016, as previously reported	**432,929**	**81,126**	**3,166**
Effect of merger of entity under common control	**–**	**717**	**–**
At 1 January 2016, as restated	**432,929**	**81,843**	**3,166**
Additions	**759,064**	**9,679**	**2,230**
Disposals, redemptions and maturity	**(641,226)**	**(29,031)**	**(4,080)**
Amortisation	**(260)**	**(163)**	**21**
Change in fair value	**(1,471)**	**–**	**–**
Net reversal of impairment allowances	**–**	**–**	**–**
Reclassification	**1,437**	**(1,437)**	**–**
Exchange difference	**(6,581)**	**(697)**	**129**
Classified as assets held for sale	**(12,856)**	**–**	**(531)**
At 31 December 2016	**531,036**	**60,194**	**935**

	2015		
	Available-for-sale securities HK$'m	Held-to-maturity securities HK$'m	Loans and receivables HK$'m
At 1 January 2015, as previously reported	357,110	76,848	4,868
Effect of merger of entity under common control	–	826	–
At 1 January 2015, as restated	357,110	77,674	4,868
Additions	702,242	14,351	9,557
Disposals, redemptions and maturity	(558,836)	(15,089)	(9,839)
Amortisation	(608)	220	(15)
Change in fair value	(244)	–	–
Net reversal of impairment allowances	–	1	–
Reclassification	(8,967)	8,967	–
Exchange difference	(5,713)	(1,815)	(819)
Classified as assets held for sale	(52,055)	(2,466)	(586)
At 31 December 2015	432,929	81,843	3,166

27. Investment in securities (continued)

The Group reclassified certain debt securities with fair value of HK$1,828 million (2015: HK$8,967 million) out of available-for-sale category into held-to-maturity category during the year. The Group had the intention and ability to hold these reclassified debt securities until maturity at the date of reclassification.

In order to align with the Group's asset liability matching, certain debt securities with amortised cost of HK$3,265 million (2015: Nil) were reclassified out of held-to-maturity category into available-for-sale category during the year.

28. Interests in associates and joint ventures

	2016 HK$'m	2015 HK$'m
At 1 January	**376**	324
Share of results	**96**	72
Share of tax	**(22)**	(18)
Dividend received	**(2)**	(2)
Derecognition	**(129)**	–
At 31 December	**319**	376

The particulars of the Group's associates and joint ventures, all of which are unlisted, are as follows:

Name	Place of incorporation and operation	Issued share capital/ registered capital	Interest held	Principal activities
Associates:				
BOC Services Company Limited	PRC	Registered capital RMB50,000,000	45%	Credit card back-end service support
Joint Ventures:				
Joint Electronic Teller Services Limited	Hong Kong	Ordinary shares HK$10,025,300	19.96%	Operation of a private inter-bank message switching network in respect of ATM services

As interest held has been changed on 27 October 2016, BOC Expresspay Company Limited is no longer an associate of the Group.

	Associates		Joint ventures	
	2016 HK$'m	2015 HK$'m	**2016 HK$'m**	2015 HK$'m
Interests in associates/joint ventures	**256**	315	**63**	61
Share of profit/total comprehensive income for the year of associates/joint ventures	**69**	51	**5**	3

29. Investment properties

	2016 HK$'m	2015 HK$'m
At 1 January	**15,262**	14,559
Additions	**6**	47
Fair value gains	**415**	826
Reclassification from properties, plant and equipment (Note 30)	**2,748**	245
Exchange difference	**–**	(1)
Classified as assets held for sale	**(204)**	(414)
At 31 December	**18,227**	15,262

The carrying value of investment properties is analysed based on the remaining terms of the leases as follows:

	2016 HK$'m	2015 HK$'m
Held in Hong Kong		
On long-term lease (over 50 years)	**4,153**	3,724
On medium-term lease (10 to 50 years)	**13,799**	11,312
Held outside Hong Kong		
On long-term lease (over 50 years)	**59**	–
On medium-term lease (10 to 50 years)	**194**	207
On short-term lease (less than 10 years)	**22**	19
	18,227	15,262

As at 31 December 2016, investment properties were included in the balance sheet at valuation carried out at 31 December 2016 on the basis of their fair value by an independent firm of chartered surveyors, Knight Frank Petty Limited. The fair value represents the price that would be received to sell each investment property in an orderly transaction with market participants at the measurement date.

30. Properties, plant and equipment

	Premises HK$'m	Equipment, fixtures and fittings HK$'m	Total HK$'m
Net book value at 1 January 2016, as previously reported	**48,187**	**2,246**	**50,433**
Effect of merger of entity under common control	**57**	**27**	**84**
Net book value at 1 January 2016, as restated	**48,244**	**2,273**	**50,517**
Additions	**560**	**914**	**1,474**
Disposals	**(1)**	**(8)**	**(9)**
Revaluation	**(144)**	**–**	**(144)**
Depreciation for the year	**(1,060)**	**(754)**	**(1,814)**
Reclassification to investment properties (Note 29)	**(2,748)**	**–**	**(2,748)**
Exchange difference	**(4)**	**(6)**	**(10)**
Classified as assets held for sale	**(1,490)**	**(44)**	**(1,534)**
Net book value at 31 December 2016	**43,357**	**2,375**	**45,732**
At 31 December 2016			
Cost or valuation	**43,357**	**8,193**	**51,550**
Accumulated depreciation and impairment	**–**	**(5,818)**	**(5,818)**
Net book value at 31 December 2016	**43,357**	**2,375**	**45,732**
The analysis of cost or valuation of the above assets is as follows:			
At 31 December 2016			
At cost	**–**	**8,193**	**8,193**
At valuation	**43,357**	**–**	**43,357**
	43,357	**8,193**	**51,550**
Net book value at 1 January 2015, as previously reported	52,639	2,568	55,207
Effect of merger of entity under common control	26	17	43
Net book value at 1 January 2015, as restated	52,665	2,585	55,250
Additions	456	786	1,242
Disposals	(371)	(27)	(398)
Revaluation	3,516	–	3,516
Depreciation for the year	(1,072)	(778)	(1,850)
Reclassification to investment properties (Note 29)	(245)	–	(245)
Exchange difference	(27)	(11)	(38)
Classified as assets held for sale	(6,678)	(282)	(6,960)
Net book value at 31 December 2015	48,244	2,273	50,517
At 31 December 2015			
Cost or valuation	48,244	7,658	55,902
Accumulated depreciation and impairment	–	(5,385)	(5,385)
Net book value at 31 December 2015	48,244	2,273	50,517
The analysis of cost or valuation of the above assets is as follows:			
At 31 December 2015			
At cost	–	7,658	7,658
At valuation	48,244	–	48,244
	48,244	7,658	55,902

30. Properties, plant and equipment (continued)

The carrying value of premises is analysed based on the remaining terms of the leases as follows:

	2016 HK$'m	2015 HK$'m
Held in Hong Kong		
On long-term lease (over 50 years)	**13,821**	15,934
On medium-term lease (10 to 50 years)	**29,212**	31,963
Held outside Hong Kong		
On long-term lease (over 50 years)	**4**	94
On medium-term lease (10 to 50 years)	**256**	196
On short-term lease (less than 10 years)	**64**	57
	43,357	48,244

As at 31 December 2016, premises were included in the balance sheet at valuation carried out at 31 December 2016 on the basis of their fair value by an independent firm of chartered surveyors, Knight Frank Petty Limited. The fair value represents the price that would be received to sell each premises in an orderly transaction with market participants at the measurement date.

As a result of the above-mentioned revaluations, changes in value of the premises were recognised in the premises revaluation reserve, the income statement and non-controlling interests as follows:

	2016 HK$'m	2015 HK$'m
(Decrease)/increase in valuation (charged)/credited to premises revaluation reserve	**(123)**	3,621
Decrease in valuation charged to income statement	**(9)**	(136)
(Decrease)/increase in valuation (charged)/credited to non-controlling interests	**(12)**	31
	(144)	3,516

As at 31 December 2016, the net book value of premises that would have been included in the Group's balance sheet had the premises been carried at cost less accumulated depreciation and impairment losses was HK$7,117 million (2015: HK$8,027 million).

31. Other assets

	2016 HK$'m	2015 HK$'m
Repossessed assets	**38**	44
Precious metals	**5,633**	3,674
Reinsurance assets	**38,605**	38,514
Accounts receivable and prepayments	**27,032**	23,733
	71,308	65,965

32. Hong Kong SAR currency notes in circulation

The Hong Kong SAR currency notes in circulation are secured by deposit of funds in respect of which the Hong Kong SAR Government certificates of indebtedness are held.

33. Financial liabilities at fair value through profit or loss

	2016 HK$'m	2015 HK$'m
Trading liabilities		
– Short positions in Exchange Fund Bills and Notes	**9,946**	8,371
Financial liabilities designated at fair value through profit or loss		
– Structured deposits (Note 34)	**3,425**	2,571
	13,371	10,942

The carrying amount of financial liabilities designated at fair value through profit or loss as at 31 December 2016 was less than the amount that the Group would be contractually required to pay at maturity to the holders by HK$9 million (2015: HK$5 million). The amount of change in the fair values of financial liabilities at fair value through profit or loss, during the year and cumulatively, attributable to changes in own credit risk was insignificant.

34. Deposits from customers

	2016 HK$'m	2015 HK$'m
Current, savings and other deposit accounts (per balance sheet)	**1,504,076**	1,415,487
Structured deposits reported as financial liabilities at fair value through profit or loss (Note 33)	**3,425**	2,571
	1,507,501	1,418,058
Analysed by:		
Demand deposits and current accounts		
– Corporate	**126,671**	101,736
– Personal	**45,756**	34,189
	172,427	135,925
Savings deposits		
– Corporate	**319,129**	304,593
– Personal	**477,442**	413,426
	796,571	718,019
Time, call and notice deposits		
– Corporate	**359,791**	349,577
– Personal	**178,712**	214,537
	538,503	564,114
	1,507,501	1,418,058

35. Debt securities and certificates of deposit in issue

	2016 HK$'m	2015 HK$'m
Debt securities, at amortised cost		
– Senior notes under the Medium Term Note Programme	**–**	5,728
– Other debt securities	**1,121**	1,248
	1,121	6,976

36. Other accounts and provisions

	2016 HK$'m	2015 HK$'m
Other accounts payable	**52,155**	34,314
Provisions	**242**	268
	52,397	34,582

37. Deferred taxation

Deferred tax is recognised in respect of the temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements and unused tax credits in accordance with HKAS 12 "Income Taxes".

The major components of deferred tax (assets)/liabilities recorded in the balance sheet, and the movements during the year are as follows:

	2016					
	Accelerated tax depreciation HK$'m	**Property revaluation HK$'m**	**Losses HK$'m**	**Impairment allowances HK$'m**	**Others HK$'m**	**Total HK$'m**
At 1 January 2016, as previously reported	**596**	**7,192**	**–**	**(459)**	**(930)**	**6,399**
Effect of merger of entity under common control	**1**	**–**	**–**	**–**	**(6)**	**(5)**
At 1 January 2016, as restated	**597**	**7,192**	**–**	**(459)**	**(936)**	**6,394**
Charged/(credited) to income statement	**29**	**(206)**	**–**	**(63)**	**(65)**	**(305)**
Credited to other comprehensive income	**–**	**(311)**	**–**	**–**	**(164)**	**(475)**
Exchange difference	**–**	**–**	**–**	**2**	**–**	**2**
Classified as assets held for sale and liabilities associated with assets held for sale	**(14)**	**(208)**	**–**	**90**	**33**	**(99)**
At 31 December 2016	**612**	**6,467**	**–**	**(430)**	**(1,132)**	**5,517**

	2015					
	Accelerated tax depreciation HK$'m	Property revaluation HK$'m	Losses HK$'m	Impairment allowances HK$'m	Others HK$'m	Total HK$'m
At 1 January 2015, as previously reported	607	7,858	–	(645)	94	7,914
Effect of merger of entity under common control	1	–	–	–	(7)	(6)
At 1 January 2015, as restated	608	7,858	–	(645)	87	7,908
Charged/(credited) to income statement	7	(112)	(35)	40	(701)	(801)
Charged/(credited) to other comprehensive income	–	483	–	–	(416)	67
Exchange difference	–	(3)	2	9	–	8
Classified as assets held for sale and liabilities associated with assets held for sale	(18)	(1,034)	33	137	94	(788)
At 31 December 2015	597	7,192	–	(459)	(936)	6,394

37. Deferred taxation (continued)

Deferred tax assets and liabilities are offset on an individual entity basis when there is a legal right to set off current tax assets against current tax liabilities and when the deferred taxation relates to the same authority. The following amounts, determined after appropriate offsetting, are shown in the balance sheet:

	2016 HK$'m	2015 HK$'m
Deferred tax assets	**(73)**	(63)
Deferred tax liabilities	**5,590**	6,457
	5,517	6,394

	2016 HK$'m	2015 HK$'m
Deferred tax assets to be recovered after more than twelve months	**(10)**	(58)
Deferred tax liabilities to be settled after more than twelve months	**6,605**	7,284
	6,595	7,226

As at 31 December 2016, the Group has not recognised deferred tax assets in respect of tax losses amounting to HK$13 million (2015: HK$8 million). Of the amount, HK$9 million (2015: HK$8 million) for the Group has no expiry date and HK$4 million (2015: Nil) for the Group is scheduled to expire within six years under the current tax legislation in different countries.

38. Insurance contract liabilities

	2016 HK$'m	2015 HK$'m
At 1 January	**82,645**	73,796
Benefits paid	**(14,935)**	(12,807)
Claims incurred and movement in liabilities	**18,824**	21,656
At 31 December	**86,534**	82,645

The insurance contract liabilities that are covered by reinsurance arrangements amounted to HK$33,471 million (2015: HK$36,071 million) and the associated reinsurance assets of HK$38,605 million (2015: HK$38,514 million) are included in "Other assets" (Note 31).

39. Subordinated liabilities

	2016 HK$'m	2015 HK$'m
Subordinated notes, at amortised cost with fair value hedge adjustment		
USD2,500m*	**19,014**	19,422

In 2010, BOCHK issued listed subordinated notes with an aggregate amount of USD2,500 million.

Amounts qualified as Tier 2 capital instruments for regulatory purposes are shown in Note 4.5(B).

* Interest rate at 5.55% per annum payable semi-annually, due February 2020.

40. Discontinued operations and assets held for sale

(a) Disposal of NCB

According to the announcement made on 14 July 2015, BOC obtained the in-principle approval from the Ministry of Finance of the People's Republic of China (the "Ministry of Finance") for the undertaking of the disposal of 100% interest in NCB held by BOCHK in accordance with the relevant regulations of the Administrative Measures for the Transfer of State-owned Assets of Financial Enterprises (No. 54 Decree of the Ministry of Finance), by way of public bidding via the Beijing Financial Assets Exchange on 15 July 2015.

On 18 December 2015, BOCHK (as seller) entered into a sale and purchase agreement with Cinda Financial Holdings Co., Limited (as buyer) and China Cinda (HK) Holdings Company Limited (as buyer's guarantor) in relation to the sale and purchase of all the issued shares of NCB. The completion of the disposal was conditional upon the satisfaction of the conditions precedent set out in the sale and purchase agreement.

All the conditions precedent set out in the sale and purchase agreement were satisfied, and completion of the disposal took place on 30 May 2016 in accordance with the terms and conditions of the sale and purchase agreement. Upon completion, NCB ceased to be a subsidiary of BOCHK.

(b) Proposed disposal of Chiyu

On 22 December 2016, BOCHK (as seller) entered into a sale and purchase agreement with Xiamen International Investment Limited and the Committee of Jimei Schools (each as a buyer) in relation to the proposed disposal of a total of 2,114,773 ordinary shares of Chiyu (the "Proposed Disposal"). The completion of the Proposed Disposal is conditional upon the satisfaction of all the conditions precedent set out in the sale and purchase agreement. Upon completion of the Proposed Disposal, BOCHK will cease to hold any share in Chiyu and Chiyu will cease to be a subsidiary of BOCHK.

The comparative amounts of consolidated income statement have been restated as if the discontinued operations had been discontinued at the beginning of year 2015.

40. Discontinued operations and assets held for sale (continued)

The results of discontinued operations for the year are as follows:

DISCONTINUED OPERATIONS	2016 HK$'m	2015 HK$'m
Interest income	**4,030**	9,635
Interest expense	**(1,398)**	(4,068)
Net interest income	**2,632**	5,567
Fee and commission income	**769**	1,453
Fee and commission expense	**(13)**	(50)
Net fee and commission income	**756**	1,403
Net trading gain	**40**	105
Net loss on financial instruments designated at fair value through profit or loss	**(8)**	(23)
Net gain on other financial assets	**108**	279
Other operating income	**9**	20
Net operating income before impairment allowances	**3,537**	7,351
Net charge of impairment allowances	**(420)**	(832)
Net operating income	**3,117**	6,519
Operating expenses	**(1,275)**	(2,630)
Operating profit	**1,842**	3,889
Net (loss)/gain from disposal of/fair value adjustments on investment properties	**(14)**	52
Net (loss)/gain from disposal/revaluation of properties, plant and equipment	**(2)**	2
Profit before taxation	**1,826**	3,943
Taxation	**(289)**	(551)
Profit after taxation	**1,537**	3,392
Gain on disposal of discontinued operations	**29,956**	–
Profit from discontinued operations	**31,493**	3,392
Profit attributable to:		
Equity holders of the Company	**31,302**	3,225
Non-controlling interests	**191**	167
	31,493	3,392
	HK$	HK$
Earnings per share for profit attributable to the equity holders of the Company		
Basic and diluted		
– profit from discontinued operations	**2.9606**	0.3050

40. Discontinued operations and assets held for sale (continued)

The net cash flows incurred by discontinued operations are as follows:

	2016 HK$'m	2015 HK$'m
Operating activities	**(17,543)**	5,132
Investing activities	**(67)**	(110)
Financing activities	**–**	(985)
Net cash (outflow)/inflow incurred by discontinued operations	**(17,610)**	4,037

The gain on disposal of discontinued operations is analysed as follows:

	2016 HK$'m
Total consideration	**68,000**
Net assets disposed	**(38,048)**
Cumulative translation reserve and reserve for fair value changes of available-for-sale securities reclassified to income statement	**370**
Transaction costs incurred in connection with the disposal	**(366)**
Gain on disposal of discontinued operations	**29,956**

40. Discontinued operations and assets held for sale (continued)

The net assets of NCB at the date of disposal are as follows:

	At the date of disposal HK$'m
Cash and balances with banks and other financial institutions	45,126
Placements with banks and other financial institutions maturing between one and twelve months	6,394
Financial assets at fair value through profit or loss	5,560
Derivative financial instruments	517
Advances and other accounts	168,185
Investment in securities	56,934
Investment properties	354
Properties, plant and equipment	7,049
Current tax assets	64
Deferred tax assets	71
Other assets	2,745
Deposits and balances from banks and other financial institutions	(18,495)
Financial liabilities at fair value through profit or loss	(4,579)
Derivative financial instruments	(229)
Deposits from customers	(215,253)
Other accounts and provisions	(15,346)
Current tax liabilities	(236)
Deferred tax liabilities	(813)
Net assets disposed	**38,048**

The net cash inflow from disposal of discontinued operations is analysed as follows:

	2016 HK$'m
Total consideration received, satisfied by cash	68,000
Transaction costs incurred in connection with the disposal	(366)
Cash and cash equivalents disposed	(40,642)
Net cash inflow from disposal of discontinued operations	**26,992**

40. Discontinued operations and assets held for sale (continued)

The major classes of assets held for sale and liabilities associated with assets held for sale are as follows:

	2016 HK$'m	2015 HK$'m
ASSETS HELD FOR SALE		
Cash and balances with banks and other financial institutions	**5,233**	53,124
Placements with banks and other financial institutions maturing between one and twelve months	**1,038**	7,057
Financial assets at fair value through profit or loss	**654**	7,263
Derivative financial instruments	**98**	653
Advances and other accounts	**30,844**	168,924
Investment in securities	**13,387**	55,107
Investment properties	**204**	414
Properties, plant and equipment	**1,534**	6,960
Current tax assets	**–**	47
Deferred tax assets	**61**	11
Other assets	**240**	913
Total assets held for sale	**53,293**	300,473
LIABILITIES ASSOCIATED WITH ASSETS HELD FOR SALE		
Deposits and balances from banks and other financial institutions	**977**	18,040
Financial liabilities at fair value through profit or loss	**–**	4,576
Derivative financial instruments	**12**	284
Deposits from customers	**45,370**	215,311
Other accounts and provisions	**438**	12,607
Current tax liabilities	**56**	188
Deferred tax liabilities	**160**	799
Total liabilities associated with assets held for sale	**47,013**	251,805
	6,280	48,668

The cumulative income recognised in other comprehensive income relating to assets held for sale is as follows:

	2016 HK$'m	2015 HK$'m
Cumulative income recognised in other comprehensive income	**1,014**	5,963

41. Share capital

	2016 HK$'m	2015 HK$'m
Issued and fully paid:		
10,572,780,266 ordinary shares	**52,864**	52,864

42. Notes to consolidated cash flow statement

(a) Reconciliation of operating profit to operating cash outflow before taxation

	2016 HK$'m	2015 HK$'m
Operating profit		
– from continuing operations	**28,963**	27,815
– from discontinued operations	**1,842**	3,889
	30,805	31,704
Depreciation	**1,814**	1,850
Net charge of impairment allowances	**998**	1,587
Unwind of discount on impairment allowances	**(9)**	(15)
Advances written off net of recoveries	**(457)**	(1,723)
Change in subordinated liabilities	**68**	155
Change in balances with banks and other financial institutions with original maturity over three months	**(16,262)**	1,618
Change in placements with banks and other financial institutions with original maturity over three months	**(20,479)**	(21,799)
Change in financial assets at fair value through profit or loss	**(9,294)**	(10,128)
Change in derivative financial instruments	**(11,893)**	9,060
Change in advances and other accounts	**(93,910)**	(73,646)
Change in investment in securities	**(80,982)**	(131,090)
Change in other assets	**(7,427)**	(14,917)
Change in deposits and balances from banks and other financial institutions	**(15,681)**	(16,155)
Change in financial liabilities at fair value through profit or loss	**2,432**	3,258
Change in deposits from customers	**133,901**	141,556
Change in debt securities and certificates of deposit in issue	**(5,855)**	(4,925)
Change in other accounts and provisions	**20,992**	(4,759)
Change in insurance contract liabilities	**3,889**	8,849
Effect of changes in exchange rates	**(1,336)**	10,563
Operating cash outflow before taxation	**(68,686)**	(68,957)
Cash flows from operating activities included		
– interest received	**40,697**	50,077
– interest paid	**11,302**	16,868
– dividend received	**135**	126

42. Notes to consolidated cash flow statement (continued)

(b) Analysis of the balances of cash and cash equivalents

	2016 HK$'m	2015 HK$'m
Cash and balances with banks and other financial institutions with original maturity within three months	**216,857**	275,672
Placements with banks and other financial institutions with original maturity within three months	**6,844**	24,174
Treasury bills with original maturity within three months	**15,892**	12,359
Certificates of deposit with original maturity within three months	**1,367**	890
	240,960	313,095

43. Contingent liabilities and commitments

The following is a summary of the contractual amounts of each significant class of contingent liability and commitment and the aggregate credit risk-weighted amount and is prepared with reference to the completion instructions for the HKMA return of capital adequacy ratio.

	2016 HK$'m	2015 HK$'m
Direct credit substitutes	**6,247**	24,360
Transaction-related contingencies	**12,649**	7,600
Trade-related contingencies	**32,269**	31,713
Asset sales with recourse	**–**	5,419
Commitments that are unconditionally cancellable without prior notice	**388,739**	471,092
Other commitments with an original maturity of		
– up to one year	**12,095**	10,519
– over one year	**132,488**	114,376
	584,487	665,079
Credit risk-weighted amount	**60,730**	74,880

The credit risk-weighted amount is calculated in accordance with the Banking (Capital) Rules. The amount is dependent upon the status of the counterparty and the maturity characteristics of each type of contract.

44. Capital commitments

The Group has the following outstanding capital commitments not provided for in the financial statements:

	2016 HK$'m	2015 HK$'m
Authorised and contracted for but not provided for	**404**	223
Authorised but not contracted for	**11**	16
	415	239

The above capital commitments mainly relate to commitments to purchase computer equipment and software, and to renovate the Group's premises.

45. Operating lease commitments

(a) As lessee

The Group has commitments to make the following future minimum lease payments under non-cancellable operating leases:

	2016 HK$'m	2015 HK$'m
Land and buildings		
– Not later than one year	**630**	787
– Later than one year but not later than five years	**750**	1,394
– Later than five years	**4**	112
	1,384	2,293

Certain non-cancellable operating leases included in the table above were subject to renegotiation and rent adjustment with reference to market rates prevailing at specified agreed dates or according to the special conditions as stipulated in the leases.

(b) As lessor

The Group has contracted with tenants for the following future minimum lease receivables under non-cancellable operating leases:

	2016 HK$'m	2015 HK$'m
Land and buildings		
– Not later than one year	**396**	421
– Later than one year but not later than five years	**392**	330
	788	751

The Group leases its investment properties under operating lease arrangements, with leases typically for a period from one to three years. The terms of the leases generally require the tenants to pay security deposits and provide for rent adjustments according to the prevailing market conditions at the expiration of the lease.

46. Litigation

The Group has been served a number of claims and counterclaims by various independent parties. These claims and counterclaims are in relation to the normal commercial activities of the Group.

No material provision was made against these claims and counterclaims because the directors believe that the Group has meritorious defences against the claimants or the amounts involved in these claims are not expected to be material.

47. Segmental reporting

The Group manages the business mainly from a business segment perspective and over 90% of the Group's revenues, profits before tax and assets are derived from Hong Kong. Currently, four operating segments are identified: Personal Banking, Corporate Banking, Treasury and Insurance. The classification of the Group's operating segments is based on customer segment and product type, which is aligned with the RPC (relationship, product and channel) management model of the Group.

Both Personal Banking and Corporate Banking provide general banking services including various deposit products, overdrafts, loans, credit cards, trade related products and other credit facilities, investment and insurance products, and foreign currency and derivative products. Personal Banking mainly serves retail customers and small enterprises, while Corporate Banking mainly deals with corporate customers. Treasury manages the funding and liquidity, and the interest rate and foreign exchange positions of the Group in addition to proprietary trades. The Insurance segment represents business mainly relating to life insurance products, including individual life insurance and group life insurance products. "Others" mainly represents the Group's holdings of premises, investment properties, equity investments and interests in associates and joint ventures.

Measurement of segment assets, liabilities, income, expenses, results and capital expenditure is based on the Group's accounting policies. The segment information includes items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Inter-segment funding is charged according to the internal funds transfer pricing mechanism of the Group, which is primarily based on market rates with the consideration of specific features of the product.

As the Group derives a majority of revenue from interest and the senior management relies primarily on net interest income in managing the business, interest income and expense for all reportable segments are presented on a net basis. Under the same consideration, insurance premium income and insurance benefits and claims are also presented on a net basis.

47. Segmental reporting (continued)

	Personal Banking HK$'m	Corporate Banking HK$'m	Treasury HK$'m	Insurance HK$'m	Others HK$'m	Subtotal HK$'m	Eliminations HK$'m	Consolidated HK$'m
Year ended 31 December 2016								
CONTINUING OPERATIONS								
Net interest income/(expense)								
– External	3,462	10,566	9,017	2,379	4	25,428	–	25,428
– Inter-segment	4,984	(49)	(4,241)	(12)	(682)	–	–	–
	8,446	10,517	4,776	2,367	(678)	25,428	–	25,428
Net fee and commission income/(expense)	5,587	4,851	108	(415)	691	10,822	(281)	10,541
Net insurance premium income	–	–	–	10,651	–	10,651	(17)	10,634
Net trading gain/(loss)	668	153	4,085	(332)	3	4,577	28	4,605
Net (loss)/gain on financial instruments designated at fair value through profit or loss	–	–	(1)	97	–	96	5	101
Net (loss)/gain on other financial assets	–	(5)	623	388	–	1,006	–	1,006
Other operating income	29	2	8	216	1,818	2,073	(1,259)	814
Total operating income	14,730	15,518	9,599	12,972	1,834	54,653	(1,524)	53,129
Net insurance benefits and claims and movement in liabilities	–	–	–	(11,375)	–	(11,375)	–	(11,375)
Net operating income before impairment allowances	14,730	15,518	9,599	1,597	1,834	43,278	(1,524)	41,754
Net (charge)/reversal of impairment allowances	(417)	(183)	22	–	–	(578)	–	(578)
Net operating income	14,313	15,335	9,621	1,597	1,834	42,700	(1,524)	41,176
Operating expenses	(6,770)	(2,715)	(1,069)	(367)	(2,816)	(13,737)	1,524	(12,213)
Operating profit/(loss)	7,543	12,620	8,552	1,230	(982)	28,963	–	28,963
Net gain from disposal of/fair value adjustments on investment properties	–	–	–	–	429	429	–	429
Net loss from disposal/revaluation of properties, plant and equipment	(5)	(6)	–	–	(3)	(14)	–	(14)
Share of profits less losses after tax of associates and joint ventures	–	–	–	–	74	74	–	74
Profit/(loss) before taxation	7,538	12,614	8,552	1,230	(482)	29,452	–	29,452
At 31 December 2016								
ASSETS								
Segment assets	318,053	698,314	1,090,598	111,186	67,948	2,286,099	(11,930)	2,274,169
Interests in associates and joint ventures	–	–	–	–	319	319	–	319
Assets held for sale	9,299	23,999	19,142	–	1,660	54,100	(807)	53,293
	327,352	722,313	1,109,740	111,186	69,927	2,340,518	(12,737)	2,327,781
LIABILITIES								
Segment liabilities	794,434	734,585	416,653	103,783	13,283	2,062,738	(12,530)	2,050,208
Liabilities associated with assets held for sale	35,820	10,823	288	–	289	47,220	(207)	47,013
	830,254	745,408	416,941	103,783	13,572	2,109,958	(12,737)	2,097,221
Year ended 31 December 2016								
CONTINUING OPERATIONS								
Other information								
Capital expenditure	26	3	–	18	1,393	1,440	–	1,440
Depreciation	380	148	72	13	1,175	1,788	–	1,788
Amortisation of securities	–	–	(398)	(8)	–	(406)	–	(406)

47. Segmental reporting (continued)

	Personal Banking HK$'m	Corporate Banking HK$'m	Treasury HK$'m	Insurance HK$'m	Others HK$'m	Subtotal HK$'m	Eliminations HK$'m	Consolidated HK$'m
Year ended 31 December 2015								
CONTINUING OPERATIONS								
Net interest income/(expense)								
– External	2,687	7,706	12,549	2,228	6	25,176	–	25,176
– Inter-segment	5,251	1,339	(6,009)	8	(589)	–	–	–
	7,938	9,045	6,540	2,236	(583)	25,176	–	25,176
Net fee and commission income/(expense)	6,579	4,483	78	(169)	549	11,520	(247)	11,273
Net insurance premium income	–	–	–	12,462	–	12,462	(17)	12,445
Net trading gain/(loss)	640	198	1,762	(20)	1	2,581	16	2,597
Net loss on financial instruments designated at fair value through profit or loss	–	–	(6)	(745)	–	(751)	–	(751)
Net gain on other financial assets	642	4	489	151	–	1,286	–	1,286
Other operating income	46	6	13	33	1,728	1,826	(1,016)	810
Total operating income	15,845	13,736	8,876	13,948	1,695	54,100	(1,264)	52,836
Net insurance benefits and claims and movement in liabilities	–	–	–	(12,655)	–	(12,655)	–	(12,655)
Net operating income before impairment allowances	15,845	13,736	8,876	1,293	1,695	41,445	(1,264)	40,181
Net (charge)/reversal of impairment allowances	(300)	(516)	61	–	–	(755)	–	(755)
Net operating income	15,545	13,220	8,937	1,293	1,695	40,690	(1,264)	39,426
Operating expenses	(6,460)	(2,466)	(1,090)	(356)	(2,503)	(12,875)	1,264	(11,611)
Operating profit/(loss)	9,085	10,754	7,847	937	(808)	27,815	–	27,815
Net gain from disposal of/fair value adjustments on investment properties	–	–	–	–	774	774	–	774
Net loss from disposal/revaluation of properties, plant and equipment	(15)	(2)	(1)	(5)	(45)	(68)	–	(68)
Share of profits less losses after tax of associates and joint ventures	–	–	–	–	54	54	–	54
Profit/(loss) before taxation	9,070	10,752	7,846	932	(25)	28,575	–	28,575
At 31 December 2015								
ASSETS								
Segment assets	303,185	648,296	988,335	98,282	68,548	2,106,646	(24,680)	2,081,966
Interests in associates and joint ventures	–	–	–	–	376	376	–	376
Assets held for sale	39,480	134,506	123,419	–	7,541	304,946	(4,473)	300,473
	342,665	782,802	1,111,754	98,282	76,465	2,411,968	(29,153)	2,382,815
LIABILITIES								
Segment liabilities	755,625	684,283	400,517	91,593	11,879	1,943,897	(13,052)	1,930,845
Liabilities associated with assets held for sale	91,705	138,603	35,993	–	1,605	267,906	(16,101)	251,805
	847,330	822,886	436,510	91,593	13,484	2,211,803	(29,153)	2,182,650
Year ended 31 December 2015								
CONTINUING OPERATIONS								
Other information								
Capital expenditure	34	5	–	28	1,107	1,174	–	1,174
Depreciation	366	147	70	11	1,119	1,713	–	1,713
Amortisation of securities	–	–	(170)	(86)	–	(256)	–	(256)

48. Assets pledged as security

As at 31 December 2016, the liabilities of the Group amounting to HK$10,686 million (2015: HK$11,650 million) were secured by assets deposited with central depositories to facilitate settlement operations. In addition, the liabilities of the Group amounting to HK$19,260 million (2015: HK$9,111 million) were secured by debt securities and bills related to sale and repurchase arrangements. The amount of assets pledged by the Group to secure these liabilities was HK$30,903 million (2015: HK$22,594 million) mainly included in "Trading assets", "Investment in securities" and "Trade bills".

49. Offsetting financial instruments

The following tables present details of the Group's financial instruments subject to offsetting, enforceable master netting arrangements and similar agreements.

	2016					
				Related amounts not set off in the balance sheet		
	Gross amounts of recognised financial assets HK$'m	Gross amounts of recognised financial liabilities set off in the balance sheet HK$'m	Net amounts of financial assets presented in the balance sheet HK$'m	Financial instruments HK$'m	Cash collateral received HK$'m	Net amount HK$'m
Assets						
Derivative financial instruments	63,869	–	63,869	(36,951)	(6,795)	20,123
Reverse repurchase agreements	5,949	–	5,949	(5,949)	–	–
Securities borrowing agreements	1,000	–	1,000	(1,000)	–	–
Other assets	15,931	(9,044)	6,887	–	–	6,887
	86,749	(9,044)	77,705	(43,900)	(6,795)	27,010

	2016					
				Related amounts not set off in the balance sheet		
	Gross amounts of recognised financial liabilities HK$'m	Gross amounts of recognised financial assets set off in the balance sheet HK$'m	Net amounts of financial liabilities presented in the balance sheet HK$'m	Financial instruments HK$'m	Cash collateral pledged HK$'m	Net amount HK$'m
Liabilities						
Derivative financial instruments	48,972	–	48,972	(36,951)	(4,446)	7,575
Repurchase agreements	19,260	–	19,260	(19,260)	–	–
Other liabilities	9,693	(9,044)	649	–	–	649
	77,925	(9,044)	68,881	(56,211)	(4,446)	8,224

49. Offsetting financial instruments (continued)

	2015					
				Related amounts not set off in the balance sheet		
	Gross amounts of recognised financial assets HK$'m	Gross amounts of recognised financial liabilities set off in the balance sheet HK$'m	Net amounts of financial assets presented in the balance sheet HK$'m	Financial instruments HK$'m	Cash collateral received HK$'m	Net amount HK$'m
Assets						
Derivative financial instruments	30,223	–	30,223	(14,915)	(945)	14,363
Reverse repurchase agreements	1,016	–	1,016	(1,016)	–	–
Securities borrowing agreements	–	–	–	–	–	–
Other assets	11,110	(8,277)	2,833	–	–	2,833
	42,349	(8,277)	34,072	(15,931)	(945)	17,196

	2015					
				Related amounts not set off in the balance sheet		
	Gross amounts of recognised financial liabilities HK$'m	Gross amounts of recognised financial assets set off in the balance sheet HK$'m	Net amounts of financial liabilities presented in the balance sheet HK$'m	Financial instruments HK$'m	Cash collateral pledged HK$'m	Net amount HK$'m
Liabilities						
Derivative financial instruments	31,173	–	31,173	(14,915)	(8,972)	7,286
Repurchase agreements	5,557	–	5,557	(5,557)	–	–
Other liabilities	9,179	(8,277)	902	–	–	902
	45,909	(8,277)	37,632	(20,472)	(8,972)	8,188

For master netting agreements of OTC derivative, sale and repurchase and securities lending and borrowing transactions entered into by the Group, related amounts with the same counterparty can be offset if an event of default or other predetermined events occur.

50. Transfers of financial assets

The transferred financial assets of the Group below that do not qualify for derecognition are debt securities held by counterparties as collateral under sale and repurchase agreements.

	2016		2015	
	Carrying amount of transferred assets HK$'m	**Carrying amount of associated liabilities HK$'m**	Carrying amount of transferred assets HK$'m	Carrying amount of associated liabilities HK$'m
Repurchase agreements	**20,080**	**19,260**	5,841	5,557

51. Loans to directors

Particulars of loans made to directors of the Company pursuant to section 383 of the Hong Kong Companies Ordinance and Part 3 of the Companies (Disclosure of Information about Benefits of Directors) Regulation are as follows:

	2016 HK$'m	2015 HK$'m
Aggregate amount of relevant transactions outstanding at year end	**874**	2,206
Maximum aggregate amount of relevant transactions outstanding during the year	**2,243**	2,857

52. Significant related party transactions

The Group is subject to the control of the State Council of the PRC Government through China Investment Corporation ("CIC"), its wholly-owned subsidiary Central Huijin Investment Ltd. ("Central Huijin"), and BOC in which Central Huijin has controlling equity interests.

52. Significant related party transactions (continued)

(a) Transactions with the parent companies and the other companies controlled by the parent companies

General information of the parent companies:

The Group is controlled by BOC. Central Huijin is the controlling entity of BOC, and it is a wholly-owned subsidiary of CIC which is a wholly state-owned company engaging in foreign currency investment management.

Central Huijin has controlling equity interests in certain other entities in the PRC.

The Group enters into banking and other transactions with these entities in the normal course of business which include loans, investment securities, money market and reinsurance transactions.

The majority of transactions with BOC arise from money market activities. As at 31 December 2016, the related aggregate amounts due from and to BOC of the Group were HK$106,281 million (2015: HK$102,324 million) and HK$58,654 million (2015: HK$55,448 million) respectively. The aggregate amounts of income and expenses of the Group arising from these transactions with BOC for the year ended 31 December 2016 were HK$1,436 million (2015: HK$3,303 million) and HK$306 million (2015: HK$474 million) respectively. The related party transactions above constitute connected transactions as defined in Chapter 14A of the Listing Rules but under exemption from its disclosure requirement.

The transaction with BOC disclosed in Note 57 also constitutes connected transactions as defined in Chapter 14A of the Listing Rules and announcements had been made by the Group on 30 June 2016 and 17 October 2016.

Transactions with other companies controlled by BOC are not considered material.

(b) Transactions with government authorities, agencies, affiliates and other state controlled entities

The Group is subject to the control of the State Council of the PRC Government through CIC and Central Huijin, which also directly or indirectly controls a significant number of entities through its government authorities, agencies, affiliates and other state controlled entities. The Group enters into banking transactions with government authorities, agencies, affiliates and other state controlled entities in the normal course of business at commercial terms.

These transactions include, but are not limited to, the following:

– lending, provision of credits and guarantees, and deposit taking;
– inter-bank balance taking and placing;
– sales, purchases, underwriting and redemption of bonds issued by other state controlled entities;
– rendering of foreign exchange, remittance and investment related services;
– provision of fiduciary activities; and
– purchase of utilities, transport, telecommunication and postage services.

52. Significant related party transactions (continued)

(c) Summary of transactions entered into during the ordinary course of business with associates, joint ventures and other related parties

The aggregate income/expenses and balances arising from related party transactions with associates, joint ventures and other related parties of the Group are summarised as follows:

	2016 HK$'m	2015 HK$'m
Income statement items		
Associates		
– Other operating expenses	**70**	65
Joint ventures		
– Other operating expenses	**–**	1
Other related parties		
– Administrative services fees received/receivable	**9**	9
Balance sheet item		
Associates		
– Other accounts and provisions	**3**	–

The related party transactions in respect of the other operating expenses arising from associates above constitute connected transactions as defined in Chapter 14A of the Listing Rules and the required disclosures are provided in "Connected transactions" on pages 308 to 309.

(d) Key management personnel

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including directors and senior management. The Group accepts deposits from and grants loans and credit facilities to key management personnel in the ordinary course of business. During both the current and prior years, no material transaction was conducted with key management personnel of the Company and its holding companies, as well as parties related to them.

The compensation of key management personnel for the year ended 31 December is detailed as follows:

	2016 HK$'m	2015 HK$'m
Salaries and other short-term employee benefits	**46**	47
Post-employment benefits	**–**	1
	46	48

53. International claims

The below analysis is prepared with reference to the completion instructions for the HKMA return of international banking statistics. International claims are exposures to counterparties on which the ultimate risk lies based on the locations of the counterparties after taking into account the transfer of risk, and represent the sum of cross-border claims in all currencies and local claims in foreign currencies. For a claim guaranteed by a party situated in a country different from the counterparty, the risk will be transferred to the country of the guarantor. For a claim on an overseas branch of a bank whose head office is located in another country, the risk will be transferred to the country where its head office is located.

Claims on individual countries or areas, after risk transfer, amounting to 10% or more of the aggregate international claims of the Group are shown as follows:

	2016				
			Non-bank private sector		
	Banks HK$'m	**Official sector HK$'m**	**Non-bank financial institutions HK$'m**	**Non-financial private sector HK$'m**	**Total HK$'m**
Mainland of China	**317,073**	**83,649**	**19,218**	**130,223**	**550,163**
Hong Kong	**4,557**	**3,516**	**16,287**	**271,107**	**295,467**

	2015				
			Non-bank private sector		
	Banks HK$'m	Official sector HK$'m	Non-bank financial institutions HK$'m	Non-financial private sector HK$'m	Total HK$'m
Mainland of China	329,425	110,765	8,795	157,064	606,049
Hong Kong	7,916	25	10,379	286,594	304,914

54. Non-bank Mainland exposures

The analysis of non-bank Mainland exposures is based on the categories of non-bank counterparties and the types of direct exposures with reference to the completion instructions for the HKMA return of Mainland activities, which includes the Mainland exposures extended by BOCHK and its local banking subsidiaries.

		2016		
	Items in the HKMA return	On-balance sheet exposure HK$'m	Off-balance sheet exposure HK$'m	Total exposure HK$'m
Central government, central government-owned entities and their subsidiaries and joint ventures	1	**247,107**	**47,259**	**294,366**
Local governments, local government-owned entities and their subsidiaries and joint ventures	2	**65,980**	**10,126**	**76,106**
PRC nationals residing in Mainland or other entities incorporated in Mainland and their subsidiaries and joint ventures	3	**51,955**	**11,584**	**63,539**
Other entities of central government not reported in item 1 above	4	**26,874**	**1,812**	**28,686**
Other entities of local governments not reported in item 2 above	5	**–**	**–**	**–**
PRC nationals residing outside Mainland or entities incorporated outside Mainland where the credit is granted for use in Mainland	6	**60,043**	**11,796**	**71,839**
Other counterparties where the exposures are considered to be non-bank Mainland exposures	7	**4,144**	**199**	**4,343**
Total	8	**456,103**	**82,776**	**538,879**
Total assets after provision	9	**2,176,247**		
On-balance sheet exposures as percentage of total assets	10	**20.96%**		

54. Non-bank Mainland exposures (continued)

	Items in the HKMA return	2015		
		On-balance sheet exposure HK$'m	Off-balance sheet exposure HK$'m	Total exposure HK$'m
Central government, central government-owned entities and their subsidiaries and joint ventures	1	269,836	26,994	296,830
Local governments, local government-owned entities and their subsidiaries and joint ventures	2	84,329	15,508	99,837
PRC nationals residing in Mainland or other entities incorporated in Mainland and their subsidiaries and joint ventures	3	85,364	37,350	122,714
Other entities of central government not reported in item 1 above	4	16,899	157	17,056
Other entities of local governments not reported in item 2 above	5	83	–	83
PRC nationals residing outside Mainland or entities incorporated outside Mainland where the credit is granted for use in Mainland	6	59,033	15,253	74,286
Other counterparties where the exposures are considered to be non-bank Mainland exposures	7	7,272	–	7,272
Total	8	522,816	95,262	618,078
Total assets after provision	9	2,282,058		
On-balance sheet exposures as percentage of total assets	10	22.91%		

55. Balance sheet and statement of changes in equity

(a) Balance sheet

As at 31 December	2016 HK$'m	2015 HK$'m
ASSETS		
Bank balances with a subsidiary	**62**	149
Investment in securities	**2,532**	2,459
Investment in subsidiaries	**55,089**	55,089
Amounts due from a subsidiary	**3,659**	3,616
Other assets	**–**	1
Total assets	**61,342**	61,314
LIABILITIES		
Amounts due to a subsidiary	**1**	2
Total liabilities	**1**	2
EQUITY		
Share capital	**52,864**	52,864
Reserves	**8,477**	8,448
Total equity	**61,341**	61,312
Total liabilities and equity	**61,342**	61,314

Approved by the Board of Directors on 31 March 2017 and signed on behalf of the Board by:

TIAN Guoli
Director

YUE Yi
Director

55. Balance sheet and statement of changes in equity (continued)

(b) Statement of changes in equity

		Reserves		
	Share capital HK$'m	Reserve for fair value changes of available-for-sale securities HK$'m	Retained earnings HK$'m	Total equity HK$'m
At 1 January 2015	52,864	1,408	6,507	60,779
Profit for the year	–	–	12,580	12,580
Other comprehensive income:				
Available-for-sale securities	–	(205)	–	(205)
Total comprehensive income	–	(205)	12,580	12,375
Dividends	–	–	(11,842)	(11,842)
At 31 December 2015	52,864	1,203	7,245	61,312
At 1 January 2016	**52,864**	**1,203**	**7,245**	**61,312**
Profit for the year	**–**	**–**	**20,404**	**20,404**
Other comprehensive income:				
Available-for-sale securities	**–**	**73**	**–**	**73**
Total comprehensive income	**–**	**73**	**20,404**	**20,477**
Dividends	**–**	**–**	**(20,448)**	**(20,448)**
At 31 December 2016	**52,864**	**1,276**	**7,201**	**61,341**

56. Principal subsidiaries

The particulars of all direct and indirect subsidiaries of the Company are set out in "Appendix – Subsidiaries of the Company". The following is a list of principal subsidiaries as at 31 December 2016:

Name	Place of incorporation and operation	Issued share capital	Interest held	Principal activities
Bank of China (Hong Kong) Limited	Hong Kong	Ordinary shares HK$43,042,840,858	*100%	Banking business
BOC Group Life Assurance Company Limited	Hong Kong	Ordinary shares HK$3,538,000,000	*51%	Life insurance business
Chiyu Banking Corporation Limited	Hong Kong	Ordinary shares HK$300,000,000	70.49%	Banking business
BOC Credit Card (International) Limited	Hong Kong	Ordinary shares HK$480,000,000	100%	Credit card services
Po Sang Securities and Futures Limited	Hong Kong	Ordinary shares HK$335,000,000	100%	Securities and futures brokerage

* Shares held directly by the Company

The particulars of a subsidiary with significant non-controlling interests are as follows:

BOC Group Life Assurance Company Limited

	2016	2015
Proportion of ownership interests and voting rights held by non-controlling interests	**49%**	49%

	2016 HK$'m	2015 HK$'m
Profit attributable to non-controlling interests	**510**	406
Accumulated non-controlling interests	**3,627**	3,278
Summarised financial information:		
– total assets	**111,186**	98,282
– total liabilities	**103,783**	91,593
– profit for the year	**1,041**	829
– total comprehensive income for the year	**754**	743

57. Application of merger accounting

On 17 October 2016, BOCHK acquired the entire issued share capital of BOC Malaysia for a total consideration of HK$4,076 million in cash. BOC Malaysia and BOCHK are both under the common control of BOC before and after the combination. The Group has applied the merger accounting method in accordance with the Accounting Guideline 5 "Merger Accounting for Common Control Combinations" issued by the HKICPA in the preparation of financial statements. The comparative amounts for the year 2015 have been restated accordingly as if the combination had occurred at the beginning of year 2015.

The statements of the adjustments to the consolidated equity as at 31 December are as follows:

	2016			
	Before combination HK$'m	**Entity under common control HK$'m**	**Adjustment HK$'m**	**After combination HK$'m**
Share capital	**52,864**	**1,789**	**(1,789)**	**52,864**
Merger reserve	**–**	**–**	**(2,287)**	**(2,287)**
Retained earnings and other reserves	**173,618**	**458**	**–**	**174,076**
	226,482	**2,247**	**(4,076)**	**224,653**
Non-controlling interests	**5,907**	**–**	**–**	**5,907**
	232,389	**2,247**	**(4,076)**	**230,560**

	2015			
	Before combination HK$'m	Entity under common control HK$'m	Adjustment HK$'m	After combination HK$'m
Share capital	52,864	1,789	(1,789)	52,864
Merger reserve	–	–	1,789	1,789
Retained earnings and other reserves	139,714	383	–	140,097
	192,578	2,172	–	194,750
Non-controlling interests	5,415	–	–	5,415
	197,993	2,172	–	200,165

58. Ultimate holding company

The Group is subject to the control of the State Council of the PRC Government through China Investment Corporation, its wholly-owned subsidiary Central Huijin Investment Ltd. ("Central Huijin"), and BOC in which Central Huijin has controlling equity interests.

59. Comparative amounts

As explained in Note 40, the proposed disposal of Chiyu was classified as a discontinued operation in the year. Comparative amounts relating to the discontinued operation have been restated in the consolidated income statement and relevant notes in accordance with HKFRS 5, "Non-current Assets Held for Sale and Discontinued Operations".

In addition, in respect of the acquisition of BOC Malaysia from BOC, as explained in Note 57, the Group has applied merger accounting method for the business combination under common control. Comparative amounts in the financial statements have been restated as if the combination had occurred at the beginning of year 2015.

60. Events after the balance sheet date

On 9 January 2017, completion of the acquisition of the entire issued share capital of Bank of China (Thai) Public Company Limited ("BOC Thailand") by BOCHK (the "Thailand Acquisition") took place in accordance with the terms and conditions of the sale and purchase agreement in relation to the Thailand Acquisition entered into with BOC. Upon completion, BOC Thailand became a subsidiary of BOCHK, and the assets, liabilities and financial results of BOC Thailand will be consolidated into the financial accounts of BOCHK.

On 28 February 2017, BOCHK entered into Asset Purchase Agreements with BOC in relation to the acquisition of the Indonesia Business and the Cambodia Business, respectively. The completion of each proposed acquisition is subject to the satisfaction of the conditions precedent stated in the respective Asset Purchase Agreement. Upon completion, all the assets and liabilities arising in connection with the Indonesia Business and Cambodia Business will be transferred to and assumed by BOCHK. For further information on the acquisitions, please refer to the announcement made by the Group on 28 February 2017.

In relation to the Proposed Disposal of Chiyu as mentioned in Note 40, all the conditions precedent set out in the sale and purchase agreement were satisfied, and completion of the disposal took place on 27 March 2017 in accordance with the terms and conditions of the sale and purchase agreement. Upon completion, Chiyu ceased to be a subsidiary of BOCHK. For details, please refer to the announcements made by the Group on 22 December 2016 and 24 March 2017.

61. Approval of financial statements

The financial statements were approved and authorised for issue by the Board of Directors on 31 March 2017.