# Notes to the financial statements

For the financial year ended 31 March 2019

## Note 1
## Summary of significant accounting policies

### (i) Basis of preparation

The principal accounting policies adopted in the preparation of this Financial Report are set out below. These policies have been consistently applied to all the financial years presented and are applicable to both the Consolidated Entity (Macquarie Group Limited and its subsidiaries) as well as to the Company (Macquarie Group Limited), unless otherwise stated.

This Financial Report is a General Purpose Financial Report which has been prepared in accordance with *Australian Accounting Standards and the Corporations Act 2001* (Cth). Macquarie Group Limited is a for-profit Company for the purposes of preparing financial statements.

### Compliance with IFRS as issued by the IASB

Compliance with Australian Accounting Standards ensures that the Financial Report complies with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). Consequently, this Financial Report has also been prepared in accordance with and complies with IFRS as issued by the IASB.

### Basis of measurement

This Financial Report has been prepared under the historical cost convention except for the following items:

– financial instruments (including derivatives) required to be measured at fair value through profit or loss (FVTPL), financial assets classified as fair value through other comprehensive income (FVOCI) and financial instruments that are designated as FVTPL (DFVTPL)
– financial assets and liabilities that are otherwise measured on an amortised cost basis but adjusted for changes in fair value attributable to the risk being hedged in qualifying fair value hedge relationships
– non-current assets and disposal groups that have been classified as held for sale and where the disposal group has been written down to its fair value less costs to sell
– liabilities in terms of cash-settled share-based payment obligations
– commodities that are measured at fair value less costs to sell in accordance with the broker-trader exemption
– investment property that is subsequently measured at fair value.

### Presentation changes

#### Statement of financial position

Following the adoption of AASB 9 *Financial Instruments* (AASB 9), and in order to present items on the basis of the nature of the underlying item as opposed to its measurement basis, the Consolidated Entity has made changes to the presentation of certain items in its statement of financial position.

The effect of these presentation changes has been disclosed in the 'Change on initial application of AASB 9' section of this note and as footnotes to the other relevant notes to the financial statements.

#### Income statement

The Consolidated Entity has made certain presentation changes in its income statements and Note 2 *Operating profit before income tax*, in order to align the presentation of items of income and expense with the categories of financial instruments presented in the statements of financial position.

This has had no affect on the measurement of these items and therefore on retained earnings or profit for any period. Comparative information has been represented, for all these presentation changes in the statement of financial position and income statement.

### Critical accounting estimates and significant judgements

The preparation of the Financial Report in conformity with Australian Accounting Standards requires the use of certain critical accounting estimates. It also requires management to exercise judgement in the process of applying the accounting policies. The notes to the financial statements set out areas involving a higher degree of judgement or complexity, or areas where assumptions are significant to the Consolidated Entity and the consolidated Financial Report such as:

– determining the appropriate business model for a group of financial assets and assessing whether the cash flows generated by an asset constitute solely payment of principal and interest (SPPI) (Note 1(viii))
– measurement of Expected Credit Loss (ECL) including the choice of inputs, estimates and assumptions relating to information about past events, current conditions and forecasts of economic conditions (Note 1(xxiii) and 12)
– timing and amount of impairment of interests in associates and joint ventures and investment in subsidiaries (Note 1(ii), 1(xxiii), 14 and 16)
– the impairment of goodwill and other identifiable intangible assets with indefinite useful lives (Note 1(xxiii) and 15)
– fair value of financial assets and financial liabilities including accounting for day 1 profit or loss (Note 37)
– distinguishing between whether assets or a business is acquired under a business combination (Note 1(iii))
– determination of control of subsidiaries and structured entities (Note 1(ii) and 33)
– determination of significant influence over associates and joint control over joint ventures (Note 1(ii))
– recoverability of tax receivables, deferred tax assets and measurement of current and deferred tax liabilities (Note 1(vii), 4 and 17)
– recognition of fees by determining whether multiple services provided in a single contract are distinct and whether incurred expenses can be presented net of any associated revenue (Note 1(v))
– recognition and measurement of provisions related to actual and potential claims, including contingent liabilities, and supplemental income, maintenance liabilities and end of lease compensation (Note 1(v), 10, 21 and 31).

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including reasonable expectations of future events.

# Note 1

## Summary of significant accounting policies continued

### (i) Basis of preparation continued

Given the uncertainty around the timing and method of transition from IBOR to ARRs, the current absence of term structures on new ARRs and the continued reliance on IBORs in pricing long-term financial instruments, management has, consistent with other market participants in the preparation of their financial statements, applied judgement in the current reporting period to determine that certain hedge relationships continue to qualify for hedge accounting. Impacted hedge relationships are those that hedge the variability of cash flows (cash flow hedges) and fixed interest rate risk (fair value hedges) due to changes in IBORs.

The IASB has commenced a project to address accounting issues leading up to IBOR reform and upon transition to ARRs. The IASB has tentatively decided to grant certain mandatory relief to support the continuation of hedge accounting despite the uncertainty arising from IBOR reform. The IASB intends to publish its proposals in May 2019. Management continues to monitor market developments and the activities of standard setters and regulators, has commenced a project to prepare for the introduction of ARRs, and will continue to monitor its judgements regarding hedge accounting.

### (ii) Principles of consolidation

#### Subsidiaries

This consolidated financial report comprises the financial report of the Consolidated Entity. Subsidiaries are all those entities (including structured entities) which the Consolidated Entity controls. The Consolidated Entity controls entities where it has:

(i) power to direct the relevant activities
(ii) exposure, or rights, to significant variable returns
(iii) the ability to utilise power to affect the Consolidated Entity's returns.

The determination of control is based on current facts and circumstances and is continuously assessed. The Consolidated Entity has power over an entity when it has existing substantive rights that provide it with the current ability to direct the entity's relevant activities. Relevant activities are those activities that significantly affect the entity's returns. The Consolidated Entity also considers the entity's purpose and design. If the Consolidated Entity determines that it has power over an entity, the Consolidated Entity then evaluates whether it has exposure or rights to variable returns that, in aggregate, are significant. All variable returns are considered including, but not limited to, returns from debt or equity investments, guarantees, liquidity arrangements, variable fees and certain derivative contracts.

#### Structured entities

Structured Entities (SEs) are those entities that have been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity, such as when voting rights relate to administrative tasks only and the relevant activities of the SE are directed by means of contractual arrangements. When assessing whether the Consolidated Entity controls (and therefore consolidates) a SE, judgement is required as to whether the Consolidated Entity has power over the relevant activities as well as exposure to significant variable returns of the SE.

Where the Consolidated Entity has power over the SE's relevant activities, is exposed to significant variable returns through the residual risk associated with its involvement in SEs and is able to affect its returns, the underlying assets, liabilities, revenues and expenses of these SEs are reported in the consolidated financial statements.

#### Consolidation

The effects of all transactions between entities in the Consolidated Entity are eliminated in full. Unrealised losses are eliminated in the same manner as unrealised gains but only to the extent that there is no evidence of impairment. Non-controlling interests (NCI) in the results and equity of subsidiaries are shown separately in the consolidated income statements, consolidated statements of comprehensive income and consolidated statements of financial position and are determined on the basis of the Consolidated Entity's present ownership interest in the entity.

Where control of an entity was obtained during the financial year, its results are included in the consolidated income statements from the date on which control was obtained. Where control of an entity ceased during the financial year, its results are included for that part of the financial year during which control existed.

The Consolidated Entity determines the dates of obtaining control (i.e. acquisition date) and losing control (i.e. disposal date) of another entity based on an assessment of all pertinent facts and circumstances that affect the ability to direct the relevant activities and the capacity to influence returns of that entity.

Facts and circumstances that have the most impact include the contractual arrangements agreed with the counterparty, the manner in which those arrangements are expected to operate in practice and whether regulatory approval is required (including the nature of such approval). The acquisition or disposal date does not necessarily occur when the transaction is closed or finalised under law.

Subsidiaries held by the Company are carried in its financial statements at cost less impairment.

## Note 1
### Summary of significant accounting policies continued
### (ii) Principles of consolidation continued

#### Interests in associates and joint ventures

Associates and joint ventures are entities over which the Consolidated Entity has significant influence or joint control, but not control. Existing ownership interests (including in-substance existing ownership interests) in associates and joint ventures are accounted for under the equity method. Equity accounting is applied from the date that the Consolidated Entity has significant influence or joint control and ceases when the Consolidated Entity no longer has significant influence or joint control.

The Consolidated Entity determines the dates of obtaining or losing significant influence or joint control of another entity based on an assessment of all pertinent facts and circumstances that affect the ability to significantly influence the financial and operating policies or jointly control the relevant activities of that entity. Facts and circumstances that have the most impact include the contractual arrangements agreed with the counterparty, the manner in which those arrangements are expected to operate in practice, and whether regulatory approval is required (including the nature of such approval). The acquisition or disposal date does not necessarily occur when the transaction is closed or finalised under law.

The equity method of accounting is applied in the consolidated financial report and involves the recognition of the Consolidated Entity's share of its associates' and joint ventures' post-acquisition profits or loss in the consolidated income statement, and the share of the post-acquisition movements in reserves in the consolidated statement of comprehensive income. Equity accounting of losses is restricted to the Consolidated Entity's interests in its associate or joint venture, unless the Consolidated Entity has an obligation or has made payment on behalf of the entity.

Long-term interests in an associate or joint venture, which are in the nature of debt and in-substance form part of the net investment in the associate or joint venture, but to which the equity method is not applied, are accounted for in accordance with the Consolidated Entity's financial instruments accounting policies, before applying the loss allocation and impairment requirements in AASB 128 *Investments in Associates and Joint Ventures*. The Consolidated Entity calculates expected credit loss on these loans in accordance with AASB 9 *Financial Instruments*.

Where there is an indicator of impairment, the carrying amount of the investment is tested for impairment by comparing its recoverable amount with its carrying value. Impairment losses are recognised as impairment charges as part of other operating income and charges. A reversal of a previously recognised impairment loss is recognised only to the extent that the investment's carrying value does not exceed the carrying amount that would have been determined (including consideration of any equity accounted losses), if no impairment loss had been recognised.

Interests in associates and joint ventures are classified as held for sale when the Consolidated Entity determines that the interest will be recovered principally through a sale transaction rather than through continuing use. Equity accounting is suspended when the interest is classified as held for sale.

On disposal of an investment in an associate or a joint venture, the difference between the sales consideration, any retained interest and the carrying value is recognised as a gain or loss in investment income as part of other operating income and charges together with any gains and losses in OCI that related to the associate or joint venture.

***Prior to the adoption of AASB 9, the impairment of long-term interests in the nature of debt and that in-substance formed part of the net investment in the associate or joint venture, were determined in accordance with AASB 128's impairment requirements, as compared to AASB 9's ECL approach.***

#### Changes in ownership interests

When acquiring additional interests of a financial asset (such that it becomes an associate, joint venture or subsidiary) or an investment in an associate or joint venture (such that it becomes a subsidiary), previously held interests are revalued to their current fair value and any gain or loss is immediately recognised in investment income as part other operating income and charges.

Similarly, when selling ownership interests of a subsidiary (such that control is lost), or an investment in an associate or joint venture (such that it becomes a financial asset), retained ownership interests are revalued to their current fair value and any gain or loss is immediately recognised in investment income as part of other operating income and charges. To the extent the sale represents a contribution to an associate or joint venture, retained ownership interests are not revalued.

Changes in the Consolidated Entity's interest in a subsidiary that does not result in the loss of control are accounted for directly within equity. Increases in the Consolidated Entity's ownership of an associate or joint venture are accounted for as an increase in the carrying value of the interest in associate or joint venture. The difference between the reduction in the Consolidated Entity's interest in an associate or joint venture that remains an associate or joint venture and the proceeds received is accounted for as investment income as part of other operating income and charges. A proportionate amount of associated OCI is reclassified to profit or loss, or reclassified within equity, as would otherwise be required on disposal of the underlying position.

### (iii) Business combinations

Business combinations are accounted for using the acquisition method. The consideration exchanged is measured as the aggregate of the acquisition-date fair values of assets transferred, equity instruments issued, and liabilities incurred. Transaction costs of a business combination are recognised directly in the income statement.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at their fair values on the acquisition date. The Consolidated Entity elects, on a transaction-by-transaction basis, to measure either at fair value or at the NCI's proportionate share of the fair values of the identifiable assets and liabilities.

# Note 1

## Summary of significant accounting policies continued

### (viii) Financial instruments continued

### Modification of financial instruments

A financial instrument is modified when its original contractual cash flows are renegotiated or modified. A financial instrument that is renegotiated is derecognised if the existing agreement is cancelled and a new agreement is made on substantially different terms or if the existing terms are modified such that the renegotiated financial instrument is a substantially different financial instrument. Where the modification results in derecognition of the original financial instrument, the new financial instrument is recorded initially at its fair value and the resulting difference is recorded in other income.

For financial instruments measured at amortised cost, and for financial assets measured at fair value through OCI, when the modification does not result in derecognition, a gain or loss is recognised in other income as the difference between the financial instrument's original contractual cash flows and the modified cash flows discounted at the original EIR.

### Classification and subsequent measurement

#### Financial assets

Financial assets are classified based on the business model within which the asset is held and on the basis of the financial asset's contractual cash flow characteristics.

*Business model assessment*

The Consolidated Entity determines the business model at the level that reflects how groups of financial assets are managed. In determining the business model, all relevant evidence that is available at the date of the assessment is used including:

(i) how the performance of the financial assets held within that business model is evaluated and reported to the Consolidated Entity's senior management and senior executives

(ii) the risks that affect the performance of the business model (and the financial assets held within that business model) and, in particular, the way in which those risks are managed

(iii) how managers of the business are compensated (for example, whether the compensation is based on the fair value of the assets managed or on the contractual cash flows collected).

The Consolidated Entity exercises judgement to determine the appropriate level at which to assess its business models and its intention with respect to its financial assets.

*Solely payment of principal and interest (SPPI)*

Key considerations for the SPPI assessment include the timing of the contractual cash flows and the interest component, where interest primarily reflects the time value of money and the credit risk of the principal outstanding.

*Amortised cost*

A financial asset is subsequently measured at amortised cost using the EIR method if the following conditions are met:

(i) the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows

(ii) the contractual terms of the financial asset give rise on specified dates to cash flows that meet the SPPI requirements

(iii) the financial asset has not been designated to be measured at FVTPL (DFVTPL).

Interest income determined in accordance with the EIR is recognised in interest income. Gains and losses arising from the derecognition of financial assets that are measured on an amortised cost basis are recognised in other income as part of other operating income and charges.

*Fair value through other comprehensive income (FVOCI)*

A financial asset is subsequently measured at FVOCI if the following conditions are met:

(i) the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets

(ii) the contractual terms of the financial asset give rise on specified dates to cash flows that meet the SPPI requirements

(iii) the financial asset has not been designated to be measured at FVTPL (DFVTPL).

Subsequent changes in fair value are recognised in OCI, with the exception of interest, which is recognised as part of interest income, ECL, which is recognised as a credit impairment charge in other operating income and charges, and foreign exchange gains and losses, which are recognised in net trading income. When debt financial assets at FVOCI are derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from OCI and recognised in investment income as part of other operating income and charges.

*Fair value through profit or loss*

Financial assets that do not meet the criteria to be measured at amortised cost or FVOCI are measured at FVTPL, with all changes in fair value recognised in investment income as part of other operating income and charges.

For the purposes of the Consolidated Entity's and Company's financial statements, the FVTPL classification consists of the following:

– financial assets that are held for active trading (held for trading or 'HFT'). This classification includes all derivative financial assets
– financial assets that have been designated to be measured at fair value through profit or loss to eliminate or significantly reduce an accounting mismatch (DFVTPL)
– financial assets in a business model whose objective is achieved by managing the financial assets on a fair value basis in order to realise gains and losses as opposed to a business model in which the objective is to collect contractual cash flows or financial assets that fail the SPPI test (FVTPL).

Changes in the fair value of HFT instruments are recognised in net trading income. Changes in the fair value of financial assets that are DFVTPL and FVTPL are recognised as investment income as part of other operating income and charges.

The interest component of financial assets that are classified as HFT, DFVTPL and FVTPL are recognised in interest income.

Equity financial assets are measured at FVTPL.

## Note 1

### Summary of significant accounting policies continued

### (ix) Cash collateral on securities borrowed & lent and repurchase & reverse repurchase agreements continued

The Consolidated Entity uses trade date accounting when recording regular purchases and sales of these assets and liabilities. At the date a purchase transaction is entered into (trade date), the Consolidated Entity recognises the resulting financial asset or liability and any subsequent unrealised profit or loss arising from revaluing that contract to fair value is recognised in the income statement.

Refer Note 1(viii) for the detailed *Financial Instruments* accounting policy.

*Prior to the adoption of AASB 9, reverse repurchase and repurchase agreements were respectively classified as loans and receivables and financial liabilities measured at amortised cost.*

### (x) Trading assets and liabilities

Trading assets (long positions) comprise financial instruments such as debt and equity securities, bank bills and treasury notes purchased with the intent of being actively traded. It also includes bullion and commodities for which the Consolidated Entity has a trading intention. Trading liabilities comprise obligations to deliver assets (short positions) across the same trading categories and which the Consolidated Entity intends to actively trade.

Trading assets and liabilities are classified as HFT. Commodities are measured at fair value less costs to sell in accordance with the broker-trader exception.

The Consolidated Entity uses trade date accounting when recording regular purchases and sales of trading assets and liabilities. At the date a purchase transaction is entered into (trade date), the Consolidated Entity recognises the resulting financial asset or liability and any subsequent unrealised profit or loss arising from revaluing that contract to fair value is recognised in the income statement. When the Consolidated Entity becomes party to a sale contract, and the de-recognition criteria are met, it derecognises the trading asset or liability and recognises a trade receivable or trade payable from trade date until settlement date.

### (xi) Derivative instruments

Derivative instruments entered into by the Consolidated Entity include futures, forwards and forward rate agreements, swaps and options in the interest rate, foreign exchange, commodity and equity markets. These derivative instruments are principally used by the Consolidated Entity for the purposes of risk management of existing financial and non-financial assets and liabilities and entered into for client trading purposes.

All derivatives, including those held for hedging purposes, are classified as HFT. Derivatives are recognised in the statement of financial position as an asset where they have a positive fair value at balance date or as a liability where the fair value at the balance date is negative.

Fair values are obtained from quoted market prices in active markets including recent market transactions, and valuation techniques including discounted cash flow models and option pricing models, as appropriate.

The best evidence of a derivative's fair value at initial recognition is its transaction price, unless its fair value is evidenced by comparison with other observable current market transactions in the same instrument or based on a valuation technique for which variables include only data from observable markets. Where such alternative evidence exists, the Consolidated Entity recognises profit or loss immediately when the derivative is recognised ('day 1 profit or loss'). When significant unobservable inputs are used to determine fair value, the day 1 profit or loss is deferred and is recognised in the income statement over the life of the transaction or when the inputs become observable. The Consolidated Entity applies this day 1 profit or loss policy to all financial instruments measured at fair value.

### Hedge accounting

As part of its ongoing business, the Consolidated Entity is exposed to several financial risks, principally that of interest and foreign exchange rates and commodity price risk (collectively referred to as the hedged risk or exposure). The Consolidated Entity has limited appetite for such risks and has policies and practices in place to ensure that these risks are effectively managed. The Consolidated Entity mitigates these risks through the use of derivative financial instruments and, in the case of foreign currency risk, foreign-denominated debt issued (collectively referred to as hedging instruments). In order to account for the difference in measurement bases or location of the gains and losses between the exposure that is being hedged and the hedging instrument, the Consolidated Entity applies hedge accounting as detailed in the table that follows:

## Note 1
### Summary of significant accounting policies continued

#### (xiv) Loan Assets

This category includes loans and receivables that are not held for trading purposes and typically includes the Consolidated Entity's lending activities to its customers.

Loan assets are initially recognised at fair value adjusted for directly attributable transaction costs on settlement date. Loan assets are subsequently measured in accordance with the Consolidated Entity's accounting policy for financial instruments Note 1(viii).

Certain finance lease receivables are also presented under loan assets. For the detailed policy on financial instruments refer to Note 1(viii).

#### (xv) Property, plant and equipment

Property, plant and equipment are stated at historical cost (which includes, where applicable, directly attributable borrowing costs) less, where applicable, accumulated depreciation and accumulated impairment losses. Historical cost includes expenditure directly attributable to the acquisition of the asset. Property, plant and equipment includes assets leased out under operating leases. Depreciation on aviation assets is calculated on a diminishing balance method and depreciation on all other assets is calculated on a straight-line basis to allocate the difference between cost and residual values over their estimated useful lives at the following annual depreciation rates:

| Property, plant and equipment | Depreciation rates |
|---|---|
| Buildings | 2 to 3.3% |
| Furniture, fittings and leasehold improvements[1] | 10 to 20% |
| Equipment | 33 to 50% |
| Infrastructure assets | 2 to 12% |
| Aviation[2] | 2 to 8% |
| Meters | 5 to 15% |
| Rail cars | 3 to 5% |
| Telecommunications | 33% |
| Other operating lease assets | 2 to 50% |

(1) Where remaining lease terms are less than five years, leasehold improvements are depreciated over the remaining lease term.
(2) Includes aircraft, for which depreciation is calculated on a diminishing-value basis.

Useful lives, residual values and depreciation methods are reviewed annually and reassessed in light of commercial and technological developments. Gains and losses on disposal are determined by comparing the proceeds with the asset's carrying amount and are recognised in other income as part of other operating income and charges.

#### (xvi) Goodwill and other identifiable intangible assets

##### Goodwill

Goodwill is measured as the excess of consideration, recognised NCI, and the fair value of previously held equity interests over the fair value of the identifiable net assets of the entity or business acquired. Goodwill arising from business combinations is included in intangible assets in the statement of financial position.

##### Other acquired identifiable intangible assets

At the time at which the Consolidated Entity determines that it controls an entity, the Consolidated Entity identifies intangible assets that are required to be initially recognised at fair value. An intangible asset is considered to have an indefinite useful life where it is expected to contribute to the Consolidated Entity's net cash inflows indefinitely.

The following intangible assets are typically identified and recognised by the Consolidated Entity:

- Licences and trading rights: generally carried at cost less accumulated impairment loss. Where no contractual or legal limitation exists, these assets are not amortised because they are considered to have an indefinite useful life
- Management rights: carried at cost less accumulated amortisation and accumulated impairment loss. Certain management right intangible assets have indefinite useful lives as the underlying income stream is related to the management of funds that have no defined end date and are expected to operate perpetually. For management rights that have a finite useful life, amortisation is calculated using the straight-line method to allocate the cost of management rights over the estimated useful life usually a period not exceeding 20 years
- Customer and servicing contracts acquired with a finite useful life: carried at cost less accumulated amortisation and accumulated impairment loss. Amortisation is calculated over the period for which the customer relationship is expected to exist
- Customer and servicing contracts with an indefinite useful life: carried at cost less accumulated impairment loss.

Amortisation of intangible assets is recognised in other operating expenses and impairments are recognised in other operating income and charges.

##### Software

Certain internal and external costs directly incurred in acquiring and developing certain computer software programmes are capitalised and amortised over the estimated useful life, usually a period of three to seven years. The capitalised software asset is subject to impairment testing on an annual basis. Amortisation of computer software programmes and impairments, where applicable, is recognised in other operating expenses.

Cost incurred on the maintenance of software is expensed as incurred and recognised in other operating expenses.

#### (xvii) Deposits

Deposits include business banking and mortgage deposits and other balances such as client monies which are initially recognised at fair value less directly attributable transaction costs and are subsequently measured at amortised cost.

## Note 1
### Summary of significant accounting policies continued

#### (xix) Bank borrowings

Bank borrowings includes loans and other payables due to banks and financial institutions. These balances are subsequently measured at amortised cost using the EIR method.

#### (xx) Due to/from related body corporate entities and subsidiaries

Transactions between the Company and its subsidiaries principally arise from granting of loans and funding and are measured at amortised cost and at fair value for FVTPL items.

#### (xxi) Debt issued

Debt issued includes debt securities issued by the Consolidated Entity. These balances are subsequently measured at amortised cost using the EIR method and at fair value for DFVTPL items.

#### (xxii) Loan Capital

Loan capital is debt issued by the Consolidated Entity with terms and conditions that qualify for inclusion as capital under Australian Prudential Regulatory Authority (APRA) Standards. For compound instruments that have both equity and liability features, the liability component is initially measured at fair value plus directly attributable transaction costs (and is thereafter measured at amortised cost using the EIR method), with the residual being accounted for within the Consolidated Entity's equity.

Capital instruments with conversion features, such as Common Equity Capital Trigger Events or Non-Viability Trigger Events, are assessed as to whether they contain embedded derivatives and, where applicable, changes in the fair value of the embedded derivative are recognised as part of net trading income in the income statement to the extent the derivative is not considered closely related to the capital instrument.

#### (xxiii) Impairment

##### Expected credit losses

The ECL requirements apply to financial assets measured at amortised cost and FVOCI, lease receivables, amounts receivable from contracts with customers, loan commitments, certain letters of credit and financial guarantee contracts. The Consolidated Entity applies a three-stage approach to measuring the ECL based on changes in the financial asset's underlying credit risk and includes forward-looking or macro-economic information (FLI). Where ECL is modelled collectively for portfolios of exposures, it is modelled as the product of the probability of default (PD), the loss given default (LGD) and the exposure at default (EAD).

The calculation of ECL requires judgement and the choice of inputs, estimates and assumptions. Refer Note 12 *Expected credit loss* for further information. Outcomes within the next financial period that are different from management's assumptions and estimates could result in changes to the timing and amount of ECL to be recognised.

The ECL is determined with reference to the following stages:

##### (i) Stage I – 12 month ECL

At initial recognition, and for financial assets for which there has not been a significant increase in credit risk (SICR) since initial recognition (or for those financial assets for which the credit risk is considered to be low), ECL is determined based on the PD over the next 12 months and the lifetime losses associated with such PD, adjusted for FLI.

Interest income is determined by applying the financial asset's EIR to the financial asset's gross carrying amount.

##### (ii) Stage II – Lifetime ECL not credit-impaired

When there has been a SICR since initial recognition, the ECL is determined with reference to the financial asset's life-time PD and the lifetime losses associated with that PD, adjusted for FLI. The Consolidated Entity assesses whether there has been a SICR since initial recognition based on qualitative, quantitative, and reasonable and supportable FLI that includes significant management judgement.

Use of more alternative criteria could result in significant changes to the timing and amount of ECL to be recognised. Lifetime ECL is generally determined based upon the contractual maturity of the financial asset. For revolving facilities, the Consolidated Entity exercises judgement based on the behavioural, rather than contractual characteristics of the facility type.

Interest income is determined by applying the financial asset's EIR to the financial asset's gross carrying amount.

##### (iii) Stage III – Lifetime ECL credit-impaired

Financial assets are classified as stage III where they are determined to be credit impaired, which generally matches the APRA definition of default. This includes exposures that are at least 90 days past due and where the obligor is unlikely to pay without recourse against available collateral.

The ECL for credit impaired financial assets is generally measured as the difference between the contractual and expected cash flows from the individual exposure, discounted using the EIR for that exposure. For credit-impaired exposures that are modelled collectively, ECL is measured as the product of the lifetime PD, LGD and EAD, adjusted for FLI.

Interest income is determined by applying the financial asset's EIR to the financial asset's amortised cost carrying value, being the gross carrying value after the ECL provision.

# Note 1

## Summary of significant accounting policies continued

### (xxiii) Impairment continued

#### (iv) Purchased or originated credit-impaired financial assets

Purchased or originated credit-impaired (POCI) financial assets are initially recognised at fair value with interest income subsequently determined using a credit-adjusted EIR. The credit-adjusted EIR is the EIR adjusted for expected credit losses on initial recognition.

The ECL is measured as the product of the lifetime PD, LGD and EAD adjusted for FLI or by discounting the difference between the contractual and expected cash flows from the individual exposure using the credit-adjusted EIR, with increases and decreases in the measured ECL from the date of origination or purchase being recognised in income statement as either an impairment gain or loss.

The loss allowances for ECL are presented in the statement of financial position as follows:

(i) Loan assets, loans to related body corporate entities and subsidiaries, associates and joint ventures measured at amortised cost – as a deduction to the gross carrying amount

(ii) Loan assets, loan to associates and joint ventures, and debt financial investments measured at fair value through OCI – as a reduction in the OCI reserve account under equity. The carrying amount of the asset is not adjusted as it is recognised at fair value

(iii) Lease receivables, contract receivables and other assets measured at amortised cost – as a deduction to the gross carrying amount

(iv) Undrawn credit commitments – as a provision included in other liabilities.

When the Consolidated Entity concludes that there is no reasonable expectation of recovering cash flows from the financial asset, and all possible collateral has been realised, the financial asset is written off, either partially or in full, against the related provision. Recoveries of loans previously written off are recorded based on the cash received.

*Prior to the adoption of AASB 9, credit impairment provisions were recognised on an incurred loss basis. Key differences included:*

- *an impairment loss was recorded where there was objective evidence of impairment as a result of one or more events (loss event) which had an impact on the estimated future cash flows of the financial asset that could be reliably estimated*
- *where the credit risk of an exposure had deteriorated but there was no objective evidence of impairment, no credit impairment was required to be recognised*
- *forward looking or macroeconomic information was not required to be incorporated into the determination of the credit impairment loss*
- *credit impairments were only required to be recognised for on-balance sheet exposures.*

*Credit impairments were calculated on the basis of the difference between the exposure's carrying value and the present value of expected future cash flows, discounted using the original EIR.*

*For available for sale debt securities, where there was objective evidence of impairment and the fair value of the financial asset was less than its initial carrying amount then the cumulative loss was transferred from OCI to the income statement. Impairment losses recognised for debt investment securities classified as available for sale were subsequently reversed through the income statement if the fair value increased and the increase was objectively related to an event after the impairment loss was recognised in the income statement.*

#### Impairment of interests in associates and joint ventures

The Consolidated Entity performs an assessment at each balance date to determine whether there is any objective evidence that its interests in associates and joint ventures are impaired. The main indicators of impairment are significant changes in the market, economic or legal environment and a significant or prolonged decline in fair value below cost.

In making this judgement, the Consolidated Entity evaluates, among other factors, the normal volatility in share price and the period of time for which fair value has been below cost. If there is an indication that an investment in an associate or joint venture may be impaired, then the entire carrying amount of the investment in the associate or joint venture is tested for impairment by comparing the recoverable amount, being the higher of value in use and fair value less costs to sell, with its carrying amount.

Impairment losses recognised in the income statement for investments in associates and joint ventures are subsequently reversed through the income statement if there has been a change in the estimates used to determine the recoverable amount since the impairment loss was recognised.

Fair value less costs to sell is estimated using market based approaches using revenues, earnings and assets under management and multiples based on companies deemed comparable as well as other publicly available information relevant to the business.

Value in use is calculated using pre-tax cashflow projections of operating revenue and expenses. Forecasts are extrapolated using a growth rate and discounted using a discount rate incorporating market risk determinants, adjusted for specific risks related to the cash generating units, if any, and the environment in which it operates.

#### Impairment of investments in subsidiaries

Investments in subsidiaries in the Company's financial statements are reviewed annually for indicators of impairment or more frequently if events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment is recognised for the amount by which the investment's carrying amount exceeds its recoverable amount, being the higher of fair value less costs to sell and value in use. At each reporting date, investments in subsidiaries that have been impaired are reviewed for possible reversal of impairment.

# Note 37

## Fair value of financial assets and financial liabilities

Fair value reflects the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Quoted prices or rates are used to determine fair value where an active market exists. If the market for a financial instrument is not active, fair values are estimated using present value or other valuation techniques, using inputs based on market conditions prevailing at the measurement date.

The values derived from applying these techniques are affected by the choice of valuation model used and the underlying assumptions made regarding inputs such as timing and amounts of future cash flows, discount rates, credit risk, volatility and correlation.

Financial instruments measured at fair value are categorised in their entirety, in accordance with the levels of the fair value hierarchy as outlined below:

| | |
|---|---|
| Level 1 | quoted prices (unadjusted) in active markets for identical assets or liabilities |
| Level 2 | inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices) |
| Level 3 | inputs for the asset or liability that are not based on observable market data (unobservable inputs) |

The appropriate level for an instrument is determined on the basis of the lowest level input that is significant to the fair value measurement.

AASB 13 *Fair Value Measurement* requires use of the price within the bid-offer spread that is most representative of fair value.

Valuation systems will typically generate mid-market prices. The bid-offer adjustment reflects the extent to which bid-offer costs would be incurred if substantially all residual net portfolio market risks were closed using available hedging instruments.

The following methods and significant assumptions have been applied in determining the fair values of financial instruments which are carried at amortised cost:

– the fair values of liquid assets and other instruments maturing within three months are approximate to their carrying amounts. This assumption is applied to liquid assets and the short-term elements of all other financial assets and financial liabilities
– the fair value of demand deposits with no fixed maturity approximates their carrying amount as they are short-term in nature or are payable on demand
– the fair values of variable rate financial instruments, including cash collateral on securities borrowed/cash collateral on securities lent and repurchase agreements over commodities approximates their carrying amounts. Fair values of all loan assets and debt liabilities carried at amortised cost, is determined with reference to changes in credit markets as well as interest rates
– the fair value of fixed rate loan assets and debt investments carried at amortised cost is estimated by reference to current market rates offered on similar loans and the credit worthiness of the borrower
– the fair value of debt issued, and loan capital issued at amortised cost is based on market prices where available. Where market prices are not available the fair value is based on discounted cash flows using rates appropriate to the term and incorporates changes in the Consolidated Entity's own credit spread
– substantially all of the Consolidated Entity's commitments to extend credit are at variable rates. As such, there is no significant exposure to fair value fluctuations resulting from interest rate movements relating to these commitments.

The following methods and significant assumptions have been applied in determining the fair values of financial instruments which are measured at fair value:

– trading portfolio assets and liabilities, derivative financial instruments and other transactions undertaken for trading purposes are measured at fair value by reference to quoted market prices where available (for example listed securities). If quoted market prices are not available, then fair values are estimated on the basis of pricing models or other recognised valuation techniques
– repurchase and reverse repurchase agreements being collateralised financing arrangements, are measured at fair value with reference to the securities which are held or provided as the collateral for the financing
– financial investments at FVOCI and FVTPL are measured at fair value by reference to active quoted market prices where available (for example listed securities). If quoted market prices are not available, then fair values are estimated on the basis of pricing models or other recognised valuation techniques. For FVOCI assets, unrealised gains and losses, excluding impairment write-downs on debt instruments, are recorded in the FVOCI reserve in equity until the asset is sold, collected or otherwise disposed of
– fair values of fixed rate loans classified as at FVTPL and FVOCI and issued debt classified as DFVTPL is estimated by reference to current market rates offered on similar loans and issued debt
– for financial assets carried at fair value, in order to measure counterparty credit risk, a Credit Valuation Adjustment (CVA) is incorporated into the valuation. The CVA is calculated at a counterparty level taking into account all exposures to that counterparty
– for financial liabilities carried at fair value, in order to measure the Consolidated Entity's own credit risk, a Debit Valuation Adjustment (DVA) is incorporated into the valuations
– for uncollateralised derivative positions, the Consolidated Entity has incorporated the market implied funding costs for these uncollateralised derivative positions as a Funding Valuation Adjustment (FVA). FVA is determined by calculating the net expected exposures at a counterparty level and applying the Consolidated Entity's internal Treasury lending rates as an input into the calculation. The approach takes into account the PD of each counterparty, as well as any mandatory break clauses.

# Note 37

## Fair value of financial assets and financial liabilities continued

Where valuation techniques are used to determine fair values, they are validated and periodically reviewed by qualified personnel independent of the area that created them. All models are certified before they are used, and models are calibrated periodically to test that outputs reflect prices from observable current market transactions in the same instrument or other available observable market data.

To the extent possible, models use only observable market data (for example for OTC derivatives), however management is required to make assumptions for certain inputs that are not supported by prices from observable current market transactions in the same instrument such as volatility and correlation.

The fair values calculated for financial instruments which are carried on the statement of financial position at amortised cost are for disclosure purposes only. The methods and assumptions applied to derive these fair values, as described earlier, can require significant judgement by management and therefore may not necessarily be comparable to other financial institutions.