

September 2021 TPP21-10

# Policy and Guidelines Paper Accounting for Financial Instruments



# Preface

This policy is applicable to all entities that are reporting GSF agencies within the meaning of section 7.3 of the *Government Sector Finance Act 2018*, and to the accountable authorities for those reporting GSF agencies. For the avoidance of doubt, this policy does not apply to universities and their controlled entities, or to their accountable authorities.

This Policy provides guidance to agencies in applying AASB 9 *Financial Instruments* and AASB 132 *Financial Instruments: Presentation*, including:

- o likely classification of financial instruments
- o impairment of financial assets, and
- hedge accounting.

This Policy applies to financial years beginning on or after 1 July 2021. It supersedes the previous Treasury Policy and Guidelines Paper of the same name (TPP 19-05 *Accounting for Financial Instruments*).

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For

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October 2022

Note

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This publication can be accessed from the Treasury's website www.treasury.nsw.gov.au/.

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# 1. Executive Summary

# 1.1 Background

This Policy:

- Requires that financial instruments within the scope of AASB 9 are classified, recognised and measured in accordance with the relevant AASB 9 categories.
- Summarises the likely classification of typical financial instruments held by agencies. However, agencies will need to confirm this categorisation for their own circumstances.
- Requires agencies to obtain written approval from NSW Treasury to use the following options to classify financial instruments and requires agencies to demonstrate the basis and reasons for the classification or designation option:
  - fair value through profit or loss designation option, and
  - fair value through other comprehensive income designation option for equity instruments.
- Requires agencies to obtain written approval from NSW Treasury for any reclassification of financial assets to other categories.
- o Requires agencies to apply the following options for impairment:
  - use the simplified method for trade receivables and contract assets with a significant financing component, and lease receivables
  - adopt the practical expedient to use a provision matrix to calculate an impairment allowance.
- Use the operational simplification that assumes credit risk has not increased significantly for low credit risk assets.
- Provides guidance regarding derivatives, interest free and low interest loans, financial guarantee contracts, impairment and hedge accounting.

# 1.2 Purpose of this Policy

The purpose of this Treasury Policy Paper is to provide guidance and outline NSW Treasury's requirements for applying AASB 9 *Financial Instruments* and AASB 132 *Financial Instruments: Presentation* by agencies, including:

- general requirements for the classification, recognition and measurement of financial instruments in accordance with AASB 9 and AASB 132 (sections 2 to 6)
- o restrictions on the use of the following categories of financial instruments:
  - fair value designation option (sections 3.4.3 and 4.1);
  - fair value through other comprehensive income of equity instruments designation option (section 3.3)
- o guidance and requirements regarding accounting for:
  - impairment for expected losses (section 7)
  - hedge accounting (section 8).

# **1.3 Application**

This Treasury Policy Paper policy is applicable to all entities that are reporting GSF agencies within the meaning of section 7.3 of the *Government Sector Finance Act 2018*, and to the accountable

authorities for those reporting GSF agencies. For the avoidance of doubt, this policy does not apply to universities and their controlled entities, or to their accountable authorities.

This Policy applies to financial years beginning on or after 1 July 2021 and supersedes the previous Treasury Policy and Guidelines Paper of the same name (TPP 19-05).

The Government Sector Finance Act 2018

The *Government Sector Finance Act 2018* (GSF Act) was enacted in November 2018, and Parts of the GSF Act commenced on 1 December 2018. Financial reporting provisions commenced on 1 July 2021. Financial reports prepared on or after 1 July 2021 will be required to comply with Part 7 of the GSF Act. For more information, please refer to NSW Treasury's GSF Act website.

# 2. General Requirements

AASB 9 *Financial Instruments* (AASB 9) is effective for agencies from FY 2018-19 and replaces AASB 139 *Financial Instruments: Recognition and Measurement* (AASB 139).

# 2.1 References

- o AASB 7 Financial Instruments: Disclosures
- o AASB 9 Financial Instruments
- o AASB 13 Fair Value Measurement
- o AASB 101 Presentation of Financial Statements
- o AASB 132 Financial Instruments: Presentation

# 2.2 Scope

AASB 9 and this Policy shall be applied by all agencies to all types of financial instruments except [AASB 9.2.1]:

- interests in subsidiaries, associates and joint ventures, unless permitted by AASB 10
   Consolidated Financial Statements, AASB 127 Separate Financial Statements or AASB 128
   Investments in Associates and Joint Ventures to be accounted for under AASB 9. Agencies should also apply AASB 9 to derivatives on an interest in a subsidiary, associate or joint venture unless the derivative meets the definition of an equity instrument of the entity in AASB 132
   Financial Instruments: Presentation (AASB 132)
- rights and obligations under leases to which AASB 16 *Leases* (AASB 16) applies. They are only within scope of AASB 9 to the following extent:
  - lease receivables and lease liabilities are subject to the derecognition provisions
  - lease receivables are subject to the 'expected credit loss' requirements, and
  - the relevant provisions that apply to derivatives embedded within leases
- o insurance and similar contracts
- loan commitments that cannot be settled net. However, an issuer of a loan commitment shall apply the impairment requirements of AASB 9. Also, all loan commitments are subject to the derecognition requirements of AASB 9
- equity instruments that are issued by the reporting entity and meet the definition of equity instruments
- o financial instruments, contracts and obligations under share-based payment transactions
- o employers' rights and obligations under employee benefit plans

- o reimbursement rights in respect of provisions
- any forward contract between an acquirer and a selling shareholder to buy or sell an acquiree that will result in a business combination, and
- rights and obligations within the scope of AASB 15 *Revenue from Contracts with Customers* (AASB 15) that are financial instruments, except for those that AASB 15 specifies are accounted for in accordance with AASB 9.

# 2.2.1 Statutory receivables

The AASB 9 initial recognition and measurement requirements for financial assets also apply to noncontractual receivables arising from statutory requirements as if those receivables are financial instruments. In other words, non-contractual arrangements that arise as a result of statutory requirements imposed by governments, such as income taxes or levies, are within the scope of AASB 9. . [AASB 9.Aus2.1.1].

# 2.3 Initial recognition

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. *[AASB 132.11].* 

An agency should recognise a financial asset or a financial liability when, and only when, the agency becomes a party to the contractual provisions of the instrument. [AASB 9.3.1.1].

To determine when the agency becomes a party to the contractual provisions of the instrument, it is important to consider (AASB9.B3.1.2):

- Whether the agency has a legal right to receive cash (financial asset) or a legal obligation to pay cash (financial liability); or
- Whether at least one of the parties has performed under the agreement.

#### Exception for statutory receivables

The exception is for receivables arising from statutory requirements of a not-for-profit entity. The nature of such receivables is assessed to be, in substance, similar to a contractual receivable. This is because the statutory requirements provide a not-for-profit entity with a right to receive cash or another financial asset from the payee. *[AASB 9.C4]*.

Therefore, the State recognises and measures a statutory receivable as if it were a financial asset, when statutory requirements establish a right for the State to receive cash or another financial asset. Such a right arises on the occurrence of a past event. *[AASB 9.C5].* 

A past event relating to taxes occurs as specified for each tax levied under the relevant taxation law. In some instances, however, assets arising from taxable events cannot be measured reliably until after the taxing entity's financial statements are authorised for issue. This may occur, for example, if a tax base is volatile and reliable estimation is not possible. Consequently, in those cases, the assets would be recognised in a period subsequent to the occurrence of the taxable event, which may be several reporting periods after the taxable event. *[, AASB 9.C6-C7].* 

#### Regular way transactions

Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace [AASB 9 Appendix A]. Many financial markets provide a mechanism whereby all transactions in financial instruments entered into on a particular date are settled by delivery a fixed number of days after that date. The date on which the agreement is entered into is called the 'trade date' and the date on which it is settled by delivery of the assets that the subject of the agreement is called the 'settlement date'. [AASB 9.B3.1.5, B3.1.6].

This Policy requires that all regular way purchases or sales of financial assets should be recognised and derecognised, as applicable, on a **trade date basis**.

Policy Requirement under TC20-08 *Mandate of Options and Major Policy Decisions under Australian Accounting Standards* 

TC20-08 mandates that all regular way purchases or sales of financial assets should be recognised and derecognised, as applicable, on a **trade date basis**.

#### 2.3.1 Practical Considerations – when to recognise borrowings

The purpose of this guidance is to provide practical steps to ensure consistent accounting for loans / borrowings between two NSW Government agencies.

#### What the accounting standards require

An agency should recognise a financial asset or a financial liability when, and only when, the agency becomes a party to the contractual provisions of the instrument. [AASB 9.3.1.1].

To determine when the agency becomes a party to the contractual provisions of the instrument, it is important to consider (AASB9.B3.1.2):

- Whether the agency has a legal right to receive cash (financial asset) or a legal obligation to pay cash (financial liability); or
- o Whether at least one of the parties has performed under the agreement

#### **Practical Considerations**

Where the financial liability of one NSW government agency is a financial asset of another NSW government agency, agencies should work together to ensure that the financial asset and financial liability are recognised in the same financial year to avoid asymmetry in recognition of the two sides of the same transaction.

NSW government agencies usually borrow from TCorp. To ensure that the recognition date of financial assets and liabilities is consistent, agencies should follow these practical steps

- Avoid entering transactions near year-end which could potentially result in the transaction spanning different financial years.
- Where the transaction does span different financial years, parties to the contract should come to an agreement on the performance obligations under the contract and when those performance obligations are considered to be performed.

For further information or clarification, please contact NSW Treasury's Accounting Policy Team (accpol@treasury.nsw.gov.au).

#### 2.4 Initial measurement

All financial instruments are initially measured at fair value plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs. [AASB 9.5.1.1]. The one exception is for trade receivables that do not contain a significant financing component as defined by AASB 15 (when applicable). These are measured at the transaction price (e.g. invoice amount excluding costs collected on behalf of third parties such as sales tax).

Determining whether a significant financing component exists involves considering things like the difference between the cash price of the underlying good or service and the transaction price in the contract, the term of the receivable and prevailing interest rates.

#### Policy mandate under TC20-08

As a practical expedient under AASB 15.63 (when applicable), agencies should presume that a trade receivable does not have a significant financing component if the expected term is less than one year.

# 2.4.1 Interest-free and low-interest long-term loans

For interest-free or low-interest long-term loans, the fair value will not equal the transaction price (i.e. the fair value of the consideration given or received, see also AASB 13). This is because part of the consideration given or received is a benefit to the borrower. Instead, the fair value can be estimated as the present value of all future cash flows, discounted using the prevailing market rate of interest for a similar instrument (similar as to currency, term, type of interest rate, and other factors) with a similar credit rating. In the NSW public sector context, the market rate of interest is represented by the NSW TCorp bond rate, for the relevant term of the loan.

Any additional amount lent is an expense or revenue (generally classified as grant revenue or expense) unless it qualifies for recognition as some other type of asset / liability (e.g. investment in subsidiary or associate).

Agencies will need to review the terms and conditions of each loan to determine the appropriate accounting treatment. For example, a loan that is repayable on demand is recognised at face value (i.e. with no discounting), as the face value approximates fair value. Alternatively, where there is no obligation to repay the loan, it is likely instead to be, in-substance, a grant that should be recognised as revenue / expense.

Where an interest free or low interest loan is provided or made between two NSW public sector agencies (e.g. between the Crown<sup>1</sup> and an agency), the appropriate accounting treatment must be determined at initial recognition and agreed in conjunction with the counterparty. This is particularly important if the timing of the future cash flows is uncertain and where the fair value must be determined based on the best estimate of future cash flows.

# 3. Financial assets — Classification and measurement

# 3.1 Overview of the new classification model for financial assets

Under AASB 9, financial assets are measured subsequent to initial recognition as follows:

- o amortised cost
- o fair value through other comprehensive income (FVOCI), or
- fair value through profit or loss (FVPL).

The classification is based on both the entity's business model for managing the financial assets and the contractual characteristics of the financial assets. The diagram below summarises the three main categories and how certain characteristics determine the applicable category.

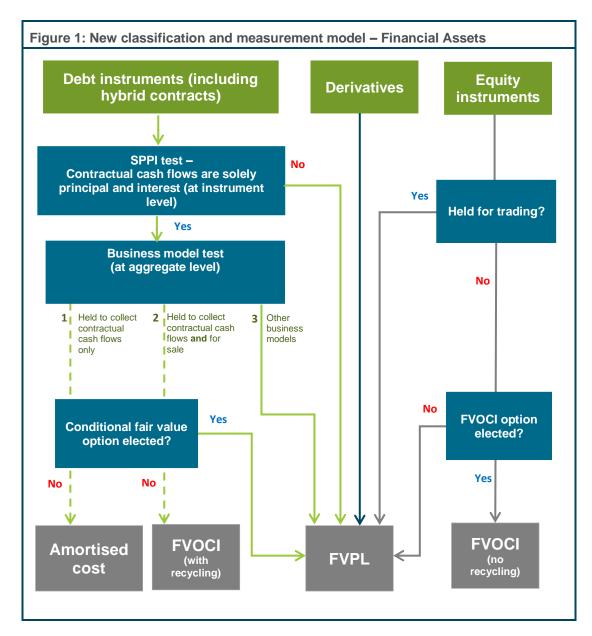
# 3.2 Classification — Individual or Groups of Assets

While the cash flow characteristics test must be applied to each individual financial instrument, classification is determined based on groups of assets.

<sup>&</sup>lt;sup>1</sup> The Crown in the right of the State of New South Wales (the Crown) may provide loans to agencies. These loans are administered by Treasury on behalf of the Crown.

This is because AASB 9 requires classification to be based on the entity's business model. Classification is determined at the degree of aggregation at which each group of assets is managed to achieve a particular business objective. Therefore, management's intention for an individual financial asset does not determine its classification. Conversely, classification is not necessarily at the entity level, because an entity may hold groups of assets for different objectives. [AASB 9.B4.1.2].

The synopsis below illustrates the thought process on which the classification of financial assets is based.



Under the AASB 9 model, FVPL is a residual category. Financial assets are classified as FVPL if they do not meet the criteria for FVOCI or amortised cost.

# 3.3 Investments in equity instruments

Equity instruments are those that meet the definition of 'equity' from the **issuer's** perspective, as defined in AASB 132; i.e. any contract that evidences a residual interest in the assets of an entity after deducting all its liabilities. [AASB 132.11]. For example, ordinary shares of corporate entities are classified as equity by the issuing corporation and as such, they are identified as investments in equity instruments by the investing agency.

Some puttable instruments (i.e. mutual fund units, real estate investment trusts (REIT) units), are classified as equity by the issuer as a special exception under AASB 132. However, they do not qualify as equity instruments from the holder's perspective (i.e. agency holding the investment) under AASB 9 because their equity classification under AASB 132 is by exception rather than by definition.

Investments in equity instruments are normally measured at FVPL as these investments will fail the cash flow characteristics test (refer Section 3.4.1), because their cash flows do not represent solely

payments of principal and interest (SPPI). However, an **irrevocable** election to FVOCI is available on initial recognition, *on an instrument-by-instrument basis*. This option applies to instruments that are neither held for trading nor contingent consideration in a business combination. *[AASB 9.5.7.5]*.

The election to FVOCI is only expected to be used in limited circumstances, as this is designed for equity investments that are held for strategic reasons or benefits. These might include investments held for non-contractual benefits rather than primarily for increases in the value of an investment. For example, where there is a requirement to hold such an investment if an agency provides a specific public service.

Agencies should review the purpose of their equity investments and determine the appropriateness of electing to designate at FVOCI.

This option to classify as FVOCI is not available to puttable instruments classified as equity by the issuer because their equity classification under AASB 132 is by exception rather than by definition, as stated above.

If the FVOCI election is made:

- all fair value changes, excluding dividends that are a return on investment, will be included in other comprehensive income (OCI), and
- there is no recycling from OCI to profit or loss (e.g. on sale of an equity investment).

AASB 7 para 11A requires that, where an agency designates investments in equity instruments at FVOCI, it must disclose which investments in equity instruments have been designated with their corresponding fair value and the reasons for using this presentation alternative.

#### Policy Requirement under TC20-08

In limited circumstances where an agency wishes to designate equity instruments as FVOCI, a written approval must be obtained from NSW Treasury after documenting the reasons for such designation.

# 3.3.1 Cost as the basis for estimating fair value

As described above, **all investments in equity instruments must be measured at fair value.** However, in limited circumstances, cost may be an appropriate estimate of fair value. That may be the case if insufficient more recent information is available to measure fair value, or if there is a wide range of possible fair value measurements and cost represents the best estimate of fair value within that range. *[AASB 9.B5.2.3]*. Indicators that cost might not be representative of fair value are set out in AASB 9 para B5.2.4. The IASB has also issued <u>Educational material on IFRS 13 Fair Value</u> <u>Measurement</u> that provides guidance on measuring fair value for unquoted equity instruments with the scope of IFRS 9 *Financial Instruments*.

It should be noted that cost is never the best estimate of fair value for investments in *quoted* equity instruments (or contracts on quoted equity instruments). *[AASB 9.B5.2.6].* 

Agencies shall use all information about the performance and operations of the investee that becomes available after the date of initial recognition. To the extent that any such relevant factors exist, they may indicate that cost might not be representative of fair value. In such cases, agencies must measure fair value. [AASB 9.B5.2.5].

It is expected to be very rare for an NSW government agency to use cost as a basis of estimating fair value for their investments in equity instruments. An agency should consult NSW Treasury if it wishes to use cost as an estimate of fair value for their investments in equity instruments.

# 3.4 Investments in debt instruments

Classification and measurement of debt instruments (e.g. trade receivables and investments in bonds) under AASB 9 are determined by:

- $\circ$   $\;$  an entity's business model for managing financial assets, and
- o their contractual cash flow characteristics: solely payments of principal and interest (SPPI).

The application of these conditions (the SPPI test and business model assessment) is covered in more detail at section 2.4.1 and 2.4.2 below, respectively.

# 3.4.1 Contractual cash flow characteristics – SPPI test

The contractual cash flows characteristics of a financial asset are derived from whether the cash flows are solely payments for principal and interest. This is the SPPI test. In other words, cash flows that are consistent with a basic lending arrangement. This test is met when the contractual terms of the financial asset give rise, on specified dates, to cash flows that are solely payments of principal and interest. *[AASB 9.4.1.2(b) and 4.1.2A(b)]*. The meanings of 'principal' and 'interest' are explained in AASB 9 paras 4.1.3(a) and 4.1.3(b) respectively.

#### Meaning of principal and interest

Principal	Principal is the fair value of the financial asset at initial recognition. [AASB 9.4.1.3(a)]. The principal amount may change over the life of the financial asset (e.g. if there are repayments of principal). [AASB 9.B4.1.7B].
	From the above definition, it is important to note that the principal is not the amount due under the contractual terms, but rather the fair value of the financial asset at initial recognition.
Interest	<ul> <li>Interest is the consideration for [AASB 9.4.1.3(b)]:</li> <li>time value of money</li> <li>credit risk associated with the principal outstanding at a particular time</li> <li>other basic lending risks (e.g. liquidity risk) and costs (e.g. administrative costs), and</li> <li>profit margin that is consistent with a basic lending arrangement</li> </ul>

profit margin that is consistent with a basic lending arrangement.

#### Key factors relevant in applying the SPPI test

Factor	Description
Time value of money	<ul> <li>Time value of money is the element of interest that provides consideration for the passage of time, but not for any other risks or costs associated with the financial asset. [AASB 9.B4.1.9A].</li> <li>For example, a fixed rate bond or loan clearly provides the holder with consideration for the time value of money, whereas an equity investment does not (as the cash flows are not usually specified).</li> <li>This determination involves judgement and consideration of</li> </ul>
	relevant factors such as the period for which the interest rate is set and the currency in which the financial asset is denominated.
	<ul> <li>AASB 9 discusses the concept of 'modified time value of money' where the relationship between the passage of time and the interest rate may be imperfect, e.g. an asset's interest rate resets every month to a one-year rate rather than the one month rate. [AASB 9.B4.1.9B].</li> <li>This introduces a variability in cash flows that is not consistent with a basic lending arrangement. In such circumstances, the entity must consider whether the modification is significant by</li> </ul>
	performing a qualitative or quantitative assessment. If significant, the SPPI test is not met. [AASB 9.B4.1.9C-D].

Factor	Description
Non-genuine or de minimis features	<ul> <li>Non-genuine or de minimis terms should be disregarded in applying the SPPI test as they are either insignificant and/or occur only in rare circumstances. <i>[AASB 9.B4.1.18]</i>.</li> <li>Payment terms are not genuine if they affect the contractual cash flows only on the occurrence of an event that is extremely rare, highly abnormal and very unlikely to occur. That said, it is uncommon for a contract term to be 'not genuine'.</li> <li>De minimis or insignificant payment terms would also not impact classification. Payment terms are de minimis only if it is de minimis in each reporting period and cumulatively over the life of the financial asset.</li> </ul>
Rights in the event of bankruptcy	<ul> <li>A financial asset will not fail the SPPI test just because it is subordinated to other instruments issued by the debtor or can only be paid after the claims of secured creditors have been met in the event of a liquidation. Such a subordinated financial asset <u>may meet the SPPI test</u> if <i>[AASB 9.B4.1.19]</i>:</li> <li>the debtor's non-payment is a breach of contract, and</li> <li>the holder of the financial asset has a contractual right to unpaid principal and interest in the event of the debtor's bankruptcy.</li> </ul>
Option to prepay or	Prepayment:
extend term	A financial asset which would otherwise meet the SPPI test but for the effect of a prepayment option, <u>still meets the test</u> if [AASB 9.B4.1.12]:
	<ul> <li>the asset is acquired or originated at a premium or discount</li> <li>the prepayment is a substantial part of unpaid principal and accrued interest, which may include reasonable additional compensation for the early contract termination, and</li> <li>the fair value of the prepayment feature is insignificant (usually because it is unlikely that a prepayment will occur) when the entity initially recognises the financial asset.</li> </ul>
	<ul> <li>Extension [AASB 9.B4.1.11(c)]:</li> <li>The SPPI test is met if the extension results in contractual cash flows (during the extension period) that are solely payments of principal and interest.</li> <li>Payments may include a reasonable additional compensation for the extension.</li> </ul>
Exposure to risks or volatility unrelated to a basic lending arrangement	Financial assets with such features <u>fail the SPPI test</u> because these features do not represent the significant elements of 'interest'. Examples include exposure to changes in equity prices or commodity prices. <i>[AASB 9.B4.1.7A]</i> .
Leverage	Leverage is a contractual cash flow characteristic of some financial assets. [AASB 9.B4.1.9].
	Leverage increases the variability of the contractual cash flows and therefore these financial instruments does not contain the economic characteristics of interest, <u>and fails the SPPI test</u> . Examples include stand-alone options, forward and swap contracts.
	Hence derivatives always fail the SPPI test and are classified as FVPL.

Factor	Description
Non-recourse arrangements	Some financial assets with contractual cash flows described as principal and interest may still not pass the SPPI test. This <u>may</u> be the case if <i>[AASB 9.B4.1.15-17]</i> :
	<ul> <li>the financial asset creates an exposure to specific assets or cash flows of the borrower, instead of an exposure to the borrower's overall credit risk. In other words, the financial assets are investments in specific assets or cash flows wherein the underlying contractual cash flows do not pass the SPPI test, e.g. contingent consideration receivable, whose cash flows are dependent on traffic levels. Such terms are inconsistent with a basic lending agreement as they create significant variability and do not have the economic characteristics of interest</li> <li>the creditor's claim is limited to specified assets (or their cash flows) of the debtor.</li> </ul>
	If the terms give rise to any other cash flows or otherwise limit the cash flows, the financial asset does not meet the SPPI test.
	The fact that a financial asset is non-recourse does not in itself necessarily preclude it from meeting the SPPI test. <i>[AASB 9.B4.1.17]</i> . For such arrangements, the lender/creditor must 'look through' to the underlying assets or cash flows in making this determination.
Other contingent payment features	The entity may need to assess the nature of any contingent event (i.e. the trigger) that would change the timing or amount of the contractual cash flows. [AASB 9.B4.1.10].
	Some lending agreements include contingent payment terms which could change the timing or amount of contractual cash flows for reasons other than changes in market rates of interest, prepayments or term extensions.
	In such instances, an entity must assess the nature of the contingent event. Though not a determinative factor, the nature of the contingent event is an indicator whether the contractual cash flows meet the SPPI test.
	For example, a financial instrument whose interest rate is reset if the debtor misses a specific number of payments is likely to meet the SPPI test because the terms are consistent with a basic lending arrangement.
	However, a financial instrument whose interest rate is reset if a specified equity index reaches a particular level is likely to fail the SPPI test because these features do not represent the significant elements of 'interest'.

A debt financial asset that meets the SPPI test will be classified as measured at amortised cost or FVOCI depending on the outcome of the business model test (see Section 3.4.2 below). If the SPPI test is not met, the debt financial asset should be measured at FVPL.

Hybrid (combined) debt instruments that are financial assets with non-closely related embedded derivatives generally fail the SPPI test, and thus would be accounted for at FVPL.

# Agencies should review the examples in the application guidance section of AASB 9 to understand the application of the business model test [AASB 9.B4.1.4, 4C] and SPPI test [AASB 9.B4.1.13-14].

#### Interest-free and low-interest long-term loans receivable

Agencies should review the terms and conditions of their interest-free and low-interest long-term loans receivable to determine if the terms would fail the SPPI test. However, the fact that the loan has been issued with a below market rate or at no interest does not necessarily mean that it fails the SPPI test, because the fair value at initial recognition is considered 'the principal' for the SPPI test.

For interest-free loans, although the loan pays no coupon, an agency still recognises interest revenue at the effective interest rate. The fair value is the basis on which an agency calculates the effective interest rate. The imputed interest is considered compensation for the time value of money, credit risk and other risks and costs under a basic lending arrangement.

### 3.4.2 Business model test

Business model refers to how an entity manages its financial assets in order to generate cash flows. The business model is determined by the entity's key management personnel in the way that assets are managed, and their performance is reported to them. Detailed guidance on the business model can be found at AASB 9 para B4.1.1-B4.1.6.

In AASB 9, classification of financial assets depends on whether the objective of the entity's business model is to generate cash from:

- a) collecting contractual cash flows
- b) collecting contractual cash flows and selling financial assets, or
- c) other.

The business model is determined at a level that reflects how groups of financial assets are managed together to achieve a specific business objective. It is not an instrument-by-instrument analysis, but should be performed at a higher level of aggregation. *[AASB 9.B4.1.2]*.

#### Steps in applying the business model test

- 1. Segregate the debt financial assets into groups or portfolios based on how they are managed.
- 2. Identify the entity's objectives in managing each grouping or portfolio.
- 3. Assess all relevant and objective evidence including:
  - how the business model performance is evaluated and reported to the agency's key management personnel
  - $\circ$   $\;$  risks affecting the performance and how they are managed
  - o how business managers are compensated.
- 4. Based on the objectives, classify each group or portfolio as being "held to collect", "held to collect and sell", or "other business models".

#### Types of business models and appropriate classification

The following table summarises the key features of different business models and the appropriate classification and measurement:

		Classification and
Business model	Key features	measurement
Held-to-collect [AASB 9.B4.1.2C - B4.1.4]	<ul> <li>Objective is to hold assets to collect contractual cash flows.</li> <li>The entity need not hold all the instruments in a group/portfolio until maturity.</li> </ul>	Amortised cost (subject to SPPI test)
	<ul> <li>Business model can be 'held-to-collect' even when sales of financial assets are expected to occur in future.</li> </ul>	

Business model	Key features	Classification and measurement
	<ul> <li>Sales are incidental to the objective of this model. Factors in making this determination:         <ul> <li>historical frequency, timing and value of sales</li> <li>reasons for the sale (e.g. credit deterioration of the financial asset)</li> <li>expectations about future sales activity.</li> </ul> </li> <li>Sales are considered incidental if they are:         <ul> <li>due to an increase in the credit risk of the financial asset</li> <li>infrequent or insignificant individually and in aggregate</li> <li>close to the maturity of the financial asset and the sale proceeds approximate the remaining contractual cash flows.</li> </ul> </li> </ul>	
Held-to-collect and sell [AASB 9.B4.1.4A - B4.1.4C]	<ul> <li>Both collecting contractual cash flows and sales of financial assets are integral to the objective of this business model.</li> <li>Typically involves greater frequency and value of sales than a held-to-collect business model.</li> <li>Examples of this business model:         <ul> <li>Holding financial assets to manage everyday liquidity needs.</li> <li>Holding financial assets to maintain a specific interest yield profile.</li> </ul> </li> <li>Matching financial assets to the duration of the liabilities funded by those assets (e.g. insurance contract liabilities).</li> </ul>	FVOCI (subject to SPPI test)
Other business models [AASB 9.B4.1.5 - B4.1.6]	<ul> <li>The business model is neither of the above</li> <li>Examples include:         <ul> <li>Managing assets on a fair value basis – A portfolio of financial assets that is managed and whose performance is evaluated on a fair value basis based on a documented risk management strategy [AASB 9.4.2.2(b)], e.g. NSW TCorp's financial assets.</li> <li>Trading – A portfolio of financial assets that meets the definition of held for trading. For such portfolios, the collection of contractual cash flows is only incidental to achieving the business model's objective.</li> </ul> </li> </ul>	FVPL

Examples of held-to-collect and held-to-collect-and-sell business models are provided at AASB 9 para B4.1.4 and B4.1.4C.

A financial asset is classified as 'held for trading' if it is [AASB 9 Appendix A]:

- o acquired or incurred principally for the purpose of selling or repurchasing in the near term
- part of a portfolio of identified financial instruments managed together and for which there is evidence of a recent actual pattern of short-term profit taking, or
- a derivative (except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument).

The State's assets that are managed and their performance evaluated on a fair value basis (e.g. TCorp's debt financial assets) should be measured at FVPL by default, because the business model test is neither to collect contractual cash flows, nor both to collect contractual cash flows *and* sell the assets. Even though agencies will collect contractual cash flows while it holds financial assets in the FVPL category, this is only incidental and not integral to achieving the business model's objective.

Therefore, those financial assets formerly designated at FVPL under AASB 139, because they were managed at fair value through profit and loss, no longer require such designation. This is because AASB 9 requires them to be measured at FVPL.

# 3.4.3 Designation of debt instruments at fair value through profit or loss

Notwithstanding the classification criteria in sections 3.4.1 and 3.4.2 above, an agency may irrevocably designate a debt instrument as measured at FVPL on initial recognition if doing so eliminates, or significantly reduces, a measurement or recognition inconsistency (sometimes referred to as an 'accounting mismatch'). *[AASB 9.4.1.5]*.

This Policy requires that an agency should not exercise this fair value designation option, except in very limited circumstances as follows:

- the financial asset satisfies the AASB 9 fair value option criteria, and
- the designation is approved by NSW Treasury.

AASB 7 para B5(aa) requires that, where an entity designates a financial asset at FVPL, it must disclose the criteria for so designating, including how the entity has satisfied the conditions in AASB 9 for such designation.

This information is also important for NSW Treasury to help determine whether or not the fair value option can or should be applied at the whole of government level.

#### Policy Requirement under TC20-08

Prior to using the FVPL designation option on investments in debt financial assets, an agency must obtain written approval from NSW Treasury after documenting the reasons for such designation.

In order to obtain NSW Treasury approval, the agency must provide to NSW Treasury each year the same information required to be disclosed by AASB 7 para B5(aa), demonstrating and identifying the basis on which it satisfies the fair value option criterion.

Where FVPL option is exercised at the agency level, subject to NSW Treasury review, the agency may be required to provide information to NSW Treasury on an amortised cost basis for whole of government consolidation purposes.

# 3.4.4 Subsequent measurement of investments in debt instruments

#### Investments in debt instruments classified at amortised cost

Financial assets classified as amortised cost are subsequently measured using the effective interest method and are subject to the impairment requirements in AASB 9 (see section 7 below). Gains and losses are recognised in net results when the instrument is derecognised or impaired.

#### Debt instruments classified at FVOCI

For investments in debt financial instruments classified at FVOCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognised in net results and calculated in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in OCI. Upon derecognition, the cumulative fair value change recognised in OCI is recycled to net results.

#### Debt instruments at FVPL

All changes in fair value are recognised in profit or loss.

# 3.5 Reclassification of financial assets

Under this Policy, an agency should not reclassify financial assets between categories, except in very limited circumstances as follows:

- the financial asset satisfies the AASB 9 reclassification criteria.
- the reclassification is approved by NSW Treasury.

Under AASB 9, reclassification of financial assets is only possible if an agency changes its business model for managing those financial assets. This is expected to be very infrequent. [*AASB 9.4.4.1*]. AASB 9 paras B4.4.1 and B4.4.3 contain guidance about the circumstances that would and would not constitute a change in business model that would warrant reclassification of the relevant financial assets. Any reclassifications are accounted for prospectively from the reclassification date and any previously recognised gains, losses or interest should not be restated. [*AASB 9.5.6.1*]. The reclassification date is defined as 'the first day of the first reporting period following the change in business model that results in an entity reclassifying financial assets.'

#### **Key Policy Requirement**

As most agencies only prepare a financial report annually, reclassifications will likely be accounted for commencing the following financial year. However, the General Government Sector publishes monthly financial reports. Therefore, agencies must report potential reclassifications to NSW Treasury immediately.

Even if there is a change in business model, an entity would still not be able to reclassify:

- financial assets that have been designated at FVPL or
- equity instruments that have been designated as at FVOCI.

Such designations are irrevocable [AASB 9.4.1.5 and 9.5.7.5].

#### Summary of accounting for financial asset reclassifications

Reclassifications raise a number of questions on how to account for the effect of classification and the asset in future. The answers are covered in AASB 9 paras. 5.6.1 to 5.6.7.

From	То	Requirement
Amortised	FVPL	Measure fair value at reclassification date and recognise any difference
Cost		between fair value and amortised cost in net results.
		[AASB 9.5.6.2].
FVPL	Amortised	Fair value at the reclassification date becomes the new gross carrying
	Cost	amount. [AASB 9.5.6.3]
Amortised	FVOCI	Measure fair value at reclassification date and recognise any
Cost		difference in OCI. [AASB 9.5.6.4]
FVOCI	Amortised	Cumulative gain or loss previously recognised in OCI is removed
	Cost	from equity and applied against the fair value of the financial asset at
		the reclassification date. [AASB 9.5.6.5].
FVPL	FVOCI	Asset continues to be measured at fair value but subsequent gains
		and losses are recognised in OCI rather than net results.
		[AASB 9.5.6.6].
FVOCI	FVPL	Asset continues to be recognised at fair value and the cumulative
		gain or loss previously recognised in OCI is reclassified from equity to
		net results. [AASB 9.5.6.7].

AASB 7 para 12B requires that, where an agency reclassifies any financial asset, it must disclose the date of reclassification, an explanation of the change in business model and a qualitative description of its effect on the agency's financial statements and the amount reclassified into and out of each

category. AASB 7 para 12C requires additional disclosures for financial assets reclassified out of the FVPL category.

#### **Key Policy Requirement**

In limited circumstances where an agency wishes to change its business model and reclassify financial assets between categories, written approval must be obtained from NSW Treasury.

This will require the agency to explain the reasons for the reclassification to NSW Treasury for every year the reclassified assets are outstanding.

# 4. Financial liabilities – Classification and measurement

Financial liabilities are generally classified as subsequently measured at amortised cost using the effective interest method [AASB 9.4.2.1].

The exceptions are where:

- o the financial liabilities are designated at FVPL on initial recognition
- when they meet the definition of held for trading (including derivatives, consistent with held-fortrading financial assets in section 3.4.2 above)
- financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies
- o financial guarantee contracts
- o commitments to provide a loan at a below-market interest rate, and
- o contingent consideration recognised by an acquirer in a business combination.

Except for derivative liabilities that are not accounted for as hedging instruments, financial liabilities held for trading are not expected to be common in the public sector. Financial liabilities held for trading also include [AASB 9.BA.7]:

- obligations to deliver financial assets borrowed by a short seller (i.e. an entity that sells financial assets it has borrowed and does not yet own)
- financial liabilities that are incurred with an intention to repurchase them in the near term, such as quoted debt instruments that the issuer may buy back in the near term depending on changes in its fair value), and
- financial liabilities that are part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent pattern of short-term profit-taking.

A financial liability held for trading will always be measured at FVPL.

Financial liabilities cannot be reclassified [AASB 9.4.4.2].

# 4.1 Designation of financial liabilities at FVPL

Under NSW Treasury's Policy, an agency should not designate financial liabilities at FVPL, except in very limited circumstances as follows:

- o the financial liability satisfies the criteria for designation in AASB 9
- the designation is approved by NSW Treasury.

The criteria in ASSB 9 for when designation of financial liabilities at FVPL is permitted are either [AASB 9.4.2.2]:

- it eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as 'an accounting mismatch';
- a group of financial liabilities or financial assets and financial liabilities 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 entity's key management personnel (as defined in AASB 124 *Related Party Disclosures*), for example, the entity's board of directors and chief executive office; or
- a financial liability contains one or more embedded derivatives that cannot be separated and that meet certain conditions - the entire financial liability is designated at FVPL [AASB 9.4.3.5]

For example, an agency like TCorp manages and evaluates the performance of all of its financial assets and financial liabilities at fair value in accordance with its investment strategy. The information on the financial instruments is reported on a fair value basis to its key management personnel. In this instance, measuring that group at FVPL results in more relevant information.

AASB 7 para B5(a) requires that, where an entity designates a financial liability at FVPL, it must disclose the criteria for so designating, including how the entity has satisfied the particular conditions in AASB 9 for such designation.

Under AASB 9, fair value changes of liabilities designated at FVPL require a split presentation as follows [AASB 9.5.7.7]:

- the fair value changes attributable to changes in the liability's credit risk are recognised in OCI, and
- the remaining changes in the fair value are recognised in profit or loss.

The amounts recognised in OCI are not recycled to profit or loss if the liability is ever repurchased.

A liability's credit risk is a risk that the issuer will fail to perform on the particular liability. This is different from the general credit worthiness of the issuer. *[AASB 9.B5.7.13]*. For example, the credit risk of a collateralised liability of the issuer will be less than the credit risk of an otherwise identical uncollateralised liability.

#### Exceptions to the split presentation

The following are exceptions to the split presentation discussed above:

- the split presentation would create or enlarge an accounting mismatch in profit and loss [AASB 9.5.7.8]; or
- o the liability is a loan commitment or financial guarantee contract [AASB 9.5.7.9].

In the above exceptions, all changes in fair value of the financial liability are recognised in profit or loss.

#### Policy Requirement under TC20-08

Prior to designating financial liabilities as FVPL agencies should obtain written approval from NSW Treasury after documenting the reason for such designation.

In order to obtain NSW Treasury approval, the agency must provide to NSW Treasury each year, the same information required to be disclosed by AASB 7 Appendix B5(a), demonstrating and identifying the basis on which it satisfies the fair value option criterion.

Where the FVPL option is exercised at the agency level, subject to NSW Treasury review, the agency may be required to provide information to NSW Treasury for those financial liabilities on an amortised cost basis for whole of government consolidation purposes.

# 4.2 Modification and revisions of estimated payments of financial liabilities

In the public sector, it may be common to modify a financial liability (with changes to contractual terms) or revise the estimate of payments (without changes to contractual terms) relating to a financial liability.

# 2.3.2 Modification of contractual terms

When the terms of a financial liability measured at amortised cost is modified or re-negotiated (e.g. interest payments are reduced or waived, or repayment terms are extended), an agency needs to consider whether that modification is substantial. If the modification is considered substantial, the original financial liability is derecognised, and a new financial liability is recognised at fair value. A modification to the terms of a financial liability is substantial if the net present value of the cash flows under the modified terms, including any fees paid net of any fees received, is at least 10% different from the net present value of the remaining cash flows of the liability prior to the modification, both discounted at the original effective interest rate. *[AASB 9.B3.3.6].* 

However, even if the difference is less than 10%, consideration needs to be given to whether the modification is substantially different from a qualitative perspective. For example, a modification may also be considered substantial from a qualitative perspective, if there has been a change in currency or there has been addition or removal of pledged collateral, such that there has been a change in the future economic risk profile of the financial liability.

#### Accounting for non-substantial modification of financial liabilities

If a modification is determined to be non-substantial and does not result in derecognition, the amortised cost is adjusted to reflect actual and revised estimated contractual cash flows. The amortised cost of the financial liability is recalculated as the present value of the revised estimated future contractual cash flows (i.e. modified cashflows) discounted at the original effective interest rate. The difference between the original contractual cash flows and the modified cash flows is recognised as a gain or loss immediately in profit or loss. *[AASB 9.B5.4.6]*. Any costs or fees incurred adjust the carrying amount of the modified financial liability and are amortised over its term *[AASB 9.B3.3.6]*. This is a change from previous accounting practice of some agencies where the difference is not recognised immediately in profit or loss but is amortised over the remaining term of the financial liability.

#### Accounting for substantial modification of financial liabilities

If the modification is substantial, then derecognition accounting applies i.e. the original financial liability is derecognised and a new financial liability based on the modified terms is recognised at fair value.

#### Example: Modification of financial liability – Non-substantial modification

On 1 July 20X1, Agency A borrowed \$100,000 from Agency B with interest rate of 10% for 5 years. There are no other fees or costs. The original effective interest rate (EIR) of the liability is 10%.

On 1 July 20X3, it was agreed that the interest rate will be reduced to 8% and the term of the loan is extended for another 2 years. There are no other fees or costs incurred.

There are no other changes to the terms of the borrowing.

This is a modification of a financial liability. Therefore, Agency A assess whether the modification is substantial.

NPV of cash flows under modified terms	\$92,418
NPV of cash flows under original terms	\$100,000
Difference	\$7,582
Difference in percentage	7.6%

The difference between the two present values is less than 10%, and because there are no other qualitative changes to the terms of the borrowing, the modification is non-substantial.

<b>1 July 20X3</b> Financial liability	<b>Debit</b> 7.582	Credit
Gain on modification To recognise the gain on modification of the financial liability		7,582
The effective interact rate for the modified financial lightlity is the original intera	at rate	

The effective interest rate for the modified financial liability is the original interest rate of 10%.

#### Example: Modification of financial liability – Substantial modification

On 1 July 20X1, Agency A borrowed \$100,000 from Agency B with interest rate of 10% for 5 years. There are no other fees or costs. The original effective interest rate (EIR) of the liability is 10%.

On 1 July 20X3, it was agreed that the interest rate will be reduced to 5% and the term of the loan is extended for another 2 years. There are no other fees or costs incurred.

There are no other changes to the terms of the borrowing.

This is a modification of a financial liability. Therefore, Agency A assess whether the modification is substantial.

NPV of cash flows under modified terms	\$81,046
NPV of cash flows under original terms	\$100,000
Difference	\$18,954
Difference in percentage	16%

The difference between the two present values is greater than 10% therefore the modification is substantial. Entity A derecognises the original liability and recognises a new financial liability at fair value. The market interest rate on 1 July 20X3 is 14%, the fair value of the 'new' financial liability is 69,102 [( $5,000/1.14^{1}$ ) + ( $5,000/1.14^{2}$ ) + ( $5,000/1.14^{3}$ ) + ( $5,000/1.14^{4}$ ) + ( $105,000/1.14^{5}$ ).]

1 July 20X3	Debit	Credit
Original financial liability	100,000	
New financial liability		69,102
Gain on modification		30,898
To derecognise the original liability, recognise a new liability and the gain of modification	n	

The effective interest rate for the new financial liability is 14%.

# 2.3.3 Revision of estimates without changes to contractual terms

An example of a revision of estimates without change in contractual terms is where the terms specify that interest payments are determined based on the number of users of a particular facility, and there has been a re-estimate of the number of users of the facility, and therefore a re-estimation of the future interest payments.

Where there has been a revision of estimated of payments without any changes to the contractual terms of the financial liability, this is not a modification, and therefore an agency does not assess whether the change is substantial and does not perform the 10% test (for modification of contractual terms refer to section 2.3.2 above). However, the same accounting applies as non-substantial modification under AASB 9.B5.4.6, i.e. the amortised cost of the financial liability is recalculated as the present value of the revised estimated future contractual cash flows discounted at the original effective interest rate.

Example: Revision of estimate of payments				
On 1 July 20X1, Agency A borrowed \$100,000 fro determined based on the number of users of Age annual users of Agency A's services.				
On 1 July 20X1, Agency A estimates that 50,000 years. The estimated annual interest payment is t therefore 5%.				
1 July 20X1	Debit	Credit		
Financial liability Cash	100,000	100,000		
To recognise financial liability on initial recognition	on	,		
For the year ended 30 June 20X2, Agency A's se 60,000 users had accessed Agency A's services. expects 75,000 users will be using its services ov	Agency A also revises its estimates s			
30 June 20X2	Debit	Credit		
Interest payment	5,000	5,000		
Cash To recognise the interest on financial liability based on the effective interest rate				
	Debit	Credit		
30 June 20X2		Credit		
Profit or loss revision of estimate Cash	1,000	1,000		
To recognise additional cash 'interest' payment	for the year			
PV of cash flows based on revised estimate	\$108,865			
PV of cash flows based on previous estimate	\$100,000			
Difference	\$8,865			
30 June 20X2	Debit	Credit		
Profit or loss revision of estimate Financial liability	8,865	8,865		
To recognise adjustment to the financial liability of payments.	as a result of a revision of estimates	- ,		
For the year ended 30 June 20X3, the number of expected i.e. 75,000.	actual users of Agency A's services v	vere as		
	Debit	Credit		
30 June 20X3 Interest payment	5,443			
Financial liability	2,057	7 500		
Cash To recognise the cash payment, interest for the	financial liability at the original EIR	7,500		
of 5%, and the adjustment to the financial liability				

# 5. Derivatives

A derivative is a financial instrument with the following three characteristics [AASB 9 Appendix A]:

- its value changes in a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract (sometimes called the 'underlying'),
- o it requires no or comparatively little initial net investment, and
- it is to be settled at a future date.

Derivatives are carried as *financial assets* when the fair value is positive and as *financial liabilities* when the fair value is negative.

All derivatives are deemed to be held for trading and are therefore classified as FVPL, unless they are financial guarantee contracts or have been designated and are effective hedging instruments *[AASB 9. Appendix A]*.

Fair value changes from derivatives are recognised in profit or loss unless hedge accounting is elected. If an agency elects to apply hedge accounting by designating the derivative as a hedging instrument in an eligible hedging relationship, some or all gains or losses may be recognised in OCI. Refer to the hedge accounting section on details of when gains or losses for effective hedging instruments are recognised in profit or loss or OCI.

Agencies do not require NSW Treasury's approval for the accounting treatment for derivatives. It is an agency's responsibility to determine whether to use hedge accounting or whether to account for derivatives as 'held for trading'.

### 5.1 Embedded derivatives

Some financial instruments and other contracts combine a derivative and a non-derivative host contract in a single contract (hybrid contract). The derivative part of the contract is referred to as an 'embedded derivative'. Its effect is that some of the contract's cash flows vary in a similar way to a stand-alone derivative. *[AASB 9.4.3.1]*. For example, the principal amount of a bond may vary with changes in a stock market index. In this case, the embedded derivative is an equity derivative on the relevant stock market index.

# 2.3.4 Host contract is a financial asset

If the embedded derivative is embedded in a financial asset host that is within the scope of AASB 9, then the derivative is not assessed separately. Instead, the business model and SPPI criteria are applied to the entire hybrid contract to determine the appropriate measurement category. *[AASB 9.4.3.2]*. The entire contract is likely to fail the SPPI test due to the existence of the embedded derivative, and therefore the entire contract will be classified as FVPL.

#### 2.3.5 Host contract is a financial liability or non-financial asset

When the host contract is a financial liability or a non-financial asset, an agency should identify any embedded derivative, assess whether it is required to be separated from the host contract and, for those that are required to be separated, measure the derivatives at fair value at initial recognition and subsequently at FVPL.

If an embedded derivative is separated, the host contract shall be accounted for in accordance with the appropriate Standards. For example, if the host contract is a lease, it shall be accounted for under AASB 16, when applicable.

An embedded derivative is required to be separated from the host contract and accounted for separately when all of the following conditions are met [AASB 9.4.3.3]:

- the economic substance and risks of the embedded derivative are not closely related to the economic substance and risks of the host contract
- $\circ$  it would otherwise meet the definition of a derivative on a stand-alone basis, and

 the combined instrument is not measured at fair value with changes in fair value recognised in profit or loss.

If any of these conditions are not met, the embedded derivative should not be accounted for separately, i.e. an entity is prohibited from separating an embedded derivative that is closely related to its host contract.

An embedded derivative is not 'closely related' if its economic characteristics and risks are different from those of the rest of the contract. AASB 9 para B4.3.5 and B4.3.8 sets out many examples to help determine when this test is (or is not) met.

If an agency is unable to measure an embedded derivative that is required to be separated from its host, either on acquisition or subsequently, the entire contract is designated at FVPL. [AASB 9.4.3.6].

It is important that agencies review the terms of all financial instruments and contracts to ensure that all material embedded derivatives have been appropriately identified and accounted for separately, when applicable.

# 6. Financial guarantee contracts

# 6.1 Definition

A financial guarantee contract is a type of financial liability. It is defined as:

a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument. *[AASB 9, Appendix A].* 

Financial guarantee contracts may take various legal forms, such as a guarantee, some types of letters of credit, a credit default contract or an insurance contract. The accounting treatment does not depend on their legal form. *[AASB 9.B2.5]*.

Financial guarantee contracts may include:

- o an entity guaranteeing the borrowings of a subsidiary / associate / joint venture; or customers
- other financial guarantees relating to trade debts, overdrafts and other borrowings like loans and certain debt securities.

However, 'financial guarantee contracts' exclude:

- o performance guarantees, as the guarantor is not guaranteeing the payment of a debt
- letters of support between entities under common control, as the parent is usually not required to compensate any third party when the controlled entity defaults, and
- statutory guarantees, as they are granted under statute rather than contract. [AASB 132.AG12]. But, where a statute only provides the power to grant a guarantee (rather than granting the guarantee itself), any guarantee that is granted is regarded by NSW Treasury as a discretionary guarantee (rather than a statutory guarantee) that is potentially subject to AASB 9. For these discretionary guarantees, agencies should contact Treasury to determine the proper accounting treatment.

In NSW, for agencies other than the Crown<sup>2</sup>, financial guarantee contracts are most likely to arise where a financial guarantee relates to debts of parties outside of the NSW public sector. Agencies should review all contracts for any guarantees (where they are the issuer) that may meet the definition of a financial guarantee contract.

For the Crown, financial guarantees may also relate to the debts of NSW public sector agencies. However, most of these guarantees are statutory guarantees under section 6.26 of the *Government Sector Finance Act 2018* (whereby the respective Act grants the guarantee), which are excluded from the scope of AASB 9. [AASB 132.AG12]. Any remaining non-statutory financial guarantees of NSW

<sup>&</sup>lt;sup>2</sup> The Crown in the right of the State of New South Wales (the Crown) may issue guarantees to other agencies. These guarantees are administered by Treasury on behalf of the Crown.

public sector agency debts are likely to be immaterial (after considering the factors below). This is due to the arrangements of government, which in NSW includes the Commercial Policy and Financial Management frameworks. These Frameworks put in place effective performance management, monitoring, capital structure and/or funding arrangements that minimise the risk of default.

Agencies do not require NSW Treasury's approval to determine whether the definition of a 'financial guarantee contract' is satisfied.

# 6.2 Recognition and measurement

# 6.2.1 Initial recognition

As with all other financial instruments, under AASB 9, financial guarantee contracts must initially be recognised by the issuer at fair value plus, in the case of financial guarantees not at 'fair value through profit or loss', directly attributable transaction costs. *[AASB 9.5.1.1]*.

Financial guarantee contracts are classified as FVPL if they meet the definition of held-for-trading or when they are designated at FVPL on initial recognition as discussed above. However, this is not expected to be common in the public sector.

If the financial guarantee contract was issued to an unrelated party on a commercial basis, its fair value at inception is likely to equal the premium received (i.e. amount charged as consideration for granting the guarantee). [AASB 9.B2.5(a)].

If no premium is received (which is often the case in intra-group situations), the fair value must be determined using a method that quantifies the economic benefit of the guarantee to the holder. If issued for an unrelated party, the issuer recognises an expense and a financial liability based on the fair value. If a parent entity (issuer) issues the guarantee for a subsidiary, the parent entity recognises the guarantee as an additional investment to the subsidiary.

The fair value of a financial guarantee contract is calculated as the present value of the difference between the net contractual cash flows required under a debt instrument, and the net contractual cash flows that would have been required *without* the guarantee. The present value is calculated using a risk-free rate of interest.

The following matters should also be considered when determining the fair value of a guarantee:

- o probability of default by the guaranteed party
- o likely loss resulting from default
- the level of gearing (i.e. whether there will be sufficient assets to meet the obligations of creditors at that time) and whether the guaranteed party is solvent and liquid
- the likelihood that the guaranteed party would be inadequately funded to meet its financial obligations
- $\circ$  the stability of the industry / sector the guaranteed party operates in
- o the overall capital management framework within which the guaranteed party operates.

# 6.2.2 Subsequent recognition

After initial recognition, financial guarantee contracts that have not been classified as FVPL are measured at the higher of [AASB 9.4.2.1(c)]:

- i. the amount of the impairment loss allowance, in respect of the debt held by the guaranteed party, determined in accordance with Section 7, and
- ii. the amount initially recognised less, when appropriate, the cumulative amount recognised as income in accordance with the principles of AASB 15.

The estimated loss is now determined using the expected credit losses (ECL) model under AASB 9 as discussed in section 7.4.6 instead of the amount of any provision required under AASB 137 *Provisions, Contingent Liabilities and Contingent Assets.* 

The ECL allowance under AASB 9 will be different to the AASB 137 provision amount. Under AASB 137, a provision is not recognised until an outflow of resources is probable and the amount is

reliably measurable. However, under AASB 9, there is no 'probable' threshold; instead, a minimum of 12 month ECL is required to be recognised at all times. In addition, under AASB 137, the provision amount is based on a best estimate, whereas the AASB 9 ECL allowance is a forward-looking probability weighted measure that must reflect the possibility of a loss occurring (even if very unlikely).

The ECL allowance as discussed above is compared to the carrying amount of the liability, and the higher amount is the basis of measurement of the financial guarantee at the reporting date. The carrying amount is equal to the amount initially recognised less the cumulative amount recognised as income in accordance with the principles of AASB 15, when applicable.

#### Example: Financial guarantee recognition and measurement On 1 July 20X0, the Crown<sup>3</sup> receives a premium of \$1,000 for issuing a financial guarantee for a 5year loan of Entity A. 1 July 20X0 Debit Credit 1,000 Cash Financial guarantee liability 1.000 To recognise the financial guarantee at fair value Treasury, in its administered items, amortises the premium over five years as the performance obligation is satisfied over that time. Therefore, for the year ending 30 June 20X1 it recognises income of \$200. The carrying amount is at 30 June X1 is therefore \$800 (initial amount less income recognised). 30 June 20X1 Debit Credit Financial guarantee liability 200 Income from financial guarantee 200 To recognise income from financial guarantee

On 30 June 20X1, the Crown determines that there has been no significant increase in credit risk and the ECL using the 12-month ECL is \$200. Since the carrying amount of \$800 is higher than the ECL of \$200, the financial guarantee should be measured at the carrying amount of \$800.

# 7. Impairment of financial assets

# 7.1 Introduction and scope

AASB 9 impairment requirements are based on the 'expected credit losses' (ECL) model which replaces the 'incurred losses' approach under AASB 139.

Unlike the incurred loss model, the ECL model is forward-looking and it eliminates the threshold for the recognition of expected credit losses, so that it is no longer necessary for a trigger event to have occurred before credit losses are recognised. Consequently, all financial assets in the scope of the ECL model generally carry a loss allowance – even those that are newly originated or acquired.

Under the incurred loss model, an entity could only consider those losses that arise from past events and current conditions. The effects of possible future credit loss events could not be considered, even when they were expected. The ECL model, on the other hand, requires the holder of the financial asset to take into account more timely and forward-looking information that is available, without expending undue cost or effort.

The following table sets out which financial instruments are in or outside the scope of the AASB 9 impairment requirements.

<sup>&</sup>lt;sup>3</sup> The Crown in the right of the State of New South Wales (the Crown) may issue guarantees to other agencies. These guarantees are administered by Treasury on behalf of the Crown.

	In scope	Out of scope
•	Financial assets that are debt instruments measured at amortised cost or at FVOCI - including loans, trade receivables and debt securities Loan commitments issued that are not measured at FVPL	<ul> <li>Investments in equity instruments*</li> <li>Loan commitments issued that are measured at FVPL</li> <li>Other financial assets measured at FVPL.</li> </ul>
•	Financial guarantee contracts issued that are in the scope of AASB 9 and are not measured at FVPL	
•	Lease receivables in the scope of AASB 16	
•	Contract assets in the scope of AASB 15.	

\* Investments in equity instruments are no longer tested for impairment as under AASB 9, they are accounted for as either FVPL or FVOCI, with no reclassification of any fair value gains or losses to profit or loss at derecognition.

The scope includes loan commitments, not measured at fair value, and financial guarantee contracts that are both financial liabilities. In these instances, impairment is measured against the underlying financial assets of the counterparty, in order to measure that financial liability.

# 7.2 Impairment requirements

# 7.2.1 Overview

An ECL model focuses on the risk that a financial asset will default rather than whether a loss has been incurred. It also aims to reflect the general pattern of deterioration, or improvement, in the credit quality of financial instruments.

AASB 9 establishes a general approach for measuring impairment and a simplified approach for certain financial assets.

#### **General Approach**

Under the general approach, with the exception of purchased or originated credit-impaired financial assets (which are separately considered below), impairment is measured as either:

- **12 month expected credit losses** This is defined as the 'portion of lifetime expected credit losses that represents the expected credit losses that result from default events on a financial instrument that are possible within the 12 months after the reporting date'. [AASB 9.Appendix A].
- **Lifetime expected credit losses** This is defined as the 'expected credit losses that result from all possible default events over the expected life of the instrument'. [AASB 9.Appendix A].

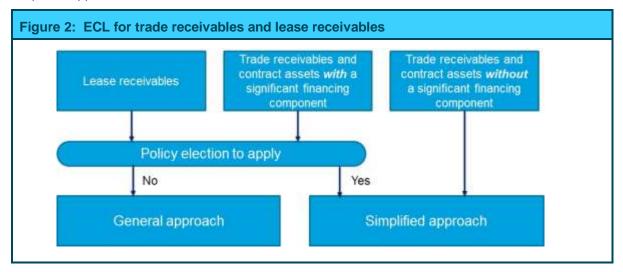
Under the general approach, the measurement basis depends on whether there has been a significant increase in credit risk since initial recognition. ECLs are measured as lifetime ECLs if, at the reporting date, the credit risk on the financial instrument has increased significantly since initial recognition.

#### **Simplified Approach**

AASB 9 allows a simplified approach for trade receivables or contract assets that result from transactions in the scope of AASB 15, and lease receivables that result from transactions in the scope of AASB 16. Under the simplified approach, the loss allowance is always equal to lifetime ECLs.

AASB 9 requires the simplified approach for trade receivables and contract assets that **do not** contain a significant financing component.[AASB 9.5.5.15(a)(i)].

For trade receivables or contract assets that do contain a significant financing component in accordance with AASB 15 and for lease receivables, AASB 9 allows an accounting policy choice to either apply the simplified approach or the general model. This Policy requires agencies to apply the simplified approach for these financial assets.



#### Policy Requirement under TC20-08

TC20-08 mandates the simplified approach for:

- o trade receivables and contract assets with and without a significant financing component
- o finance and operating lease receivables.

The general approach is applied to all financial assets unless the simplified approach is applied, as above, or if the asset is purchased or originated credit-impaired financial assets, as discussed below.

The simplified and general approach are likely to be applied as follows for the financial assets in the public sector:

Simplified approach	General approach
<ul> <li>Trade receivables and contract assets with and without significant financing component</li> <li>Finance and operating lease receivables</li> </ul>	<ul> <li>Advances paid</li> <li>Cash and bank deposits</li> <li>Term deposits</li> <li>Loans receivable</li> <li>Intercompany loans receivables</li> <li>Investments in bonds classified as amortised cost or FVOCI (expected to be rare in the public sector)</li> <li>Financial guarantees</li> <li>Loan commitments</li> </ul>

# 7.3 Simplified approach

The simplified approach does not require the tracking of changes in credit risk, but instead requires the recognition of lifetime ECL **at all times**.

AASB 9 requires agencies to apply the simplified approach to trade receivables and contract assets that do not contain a significant financing component (generally trade receivables and contract assets with a maturity of 12 months or less). This is because where maturities are 12 months or less, the credit loss for 12-month and lifetime ECLs will typically be the same.

As stated above, this Treasury policy requires agencies to also apply the simplified approach to other long-term trade receivables, contract assets and lease receivables.

# 7.3.1 Trade receivables and contract assets

AASB 9 allows an entity to calculate ECLs on trade receivables using a provision matrix. A provision matrix is based on an entity's historical default rates over the expected life of the trade receivables and is adjusted for forward-looking estimates. This policy requires agencies to apply the practical expedient of using a provision matrix for trade receivables.

Most agencies already use a provision matrix to calculate their current impairment losses. Typically, the provision rates will be based on days past due for groupings of various customer segments that have similar loss patterns (e.g. intra government amounts). However, in order to comply with the AASB 9, agencies need to update their historical provision rates with current and forward-looking estimates i.e. GDP, unemployment rates, property prices.

#### Policy Requirement under TC20-08

TC 20-08 mandates agencies to adopt the practical expedient of using a provision matrix for all trade receivables and contract assets.

#### Example: Simplified approach using a provision matrix

Agency A has a portfolio of trade receivables of \$80,000 at the reporting date. None of the receivables includes a significant financing component and Agency A applies the simplified approach. Agency A operates only in NSW and the customer base consists of a large number of individuals. The trade receivables are categorised by common risk characteristics that are representative of the customers' abilities to pay all amounts due in accordance with the contractual terms.

Agency A only has one revenue stream and one customer base. Agency A uses a provision matrix to determine the ECLs for the portfolio. The provision matrix is based on its historical observed loss rates over the expected life of the trade receivables and is adjusted for forward-looking estimates. Agency A has 10 years of available historical data on all trade receivables and collection trends from its customers. The agency's policy is to write off debts after they are over 90 days overdue, when all reasonable recovery efforts have failed, and proper authorisation is obtained for the write off. At each reporting date, the historical observed loss rates are updated and changes in the forward-looking estimates are analysed.

Below is an example of developing a provision matrix from historical data.

Step 1 – Obtain historical data

All debts issued in the past 10 years	50,000,000
Debts collected by due date	44,500,000
Debts collected between 1-30 days past due	2,800,000
Debts collected between 31-60 days past due	1,300,000
Debts collected between 61-90 days past due	850,000
Debts collected after 90 days past due or more	475,000
Uncollected	75,000
Step 2 – Calculate historical loss rates	

		Amount	Loss rate
	Buckets (a)	written off (b)	(c = b / a)
All debts issued	50,000,000	75,000	0.15%
Debts that had become past due	5,500,000	75,000	1.36%

Debts that had become >30 days past due	2,700,000	75,000	2.78%	
Debts that had become >60 days past due	1,400,000	75,000	5.36%	
Debts that had become >90 days past due	550,000	75,000	13.64%	
Debts that were eventually uncollected	75,000			

Step 3 – Determine forward looking adjustment – Agency A used unemployment rate of 5% as forward-looking adjustment

On that basis, Agency A estimates the following provision matrix:

	Current	1-30 days past due	31-60 days past due	61-90 days past due	90 days past due or more	Total
Historical loss rates	0.15%	1.36%	2.78%	5.36%	13.64%	
Forward-looking adjustments (5%)	0.01%	0.07%	0.14%	0.27%	0.68%	
Default rate (A)	0.16%	1.43%	2.92%	5.63%	14.32%	
Gross carrying amount (\$ 000's) (B)	4,500,000	765,000	400,000	180,000	25,000	5,870,000
Lifetime expected credit loss (A x B)	7,088	10,953	11,667	10,125	3,580	43,413

It should be noted that this example, like many in AASB 9, ignores the need to consider explicitly the time value of money, as the effect is considered immaterial.

# 7.3.2 Lease receivables

As mentioned above, AASB 9 allows a policy choice to apply either the general approach or the simplified approach separately to finance and operating lease receivables. However, agencies are required by this Policy to apply the simplified approach for both finance and operating lease receivables.

When measuring ECLs for lease receivables, an agency should:

- use the cash flows that are used in measuring the lease receivables in accordance with AASB 16 [AASB 9.B5.5.34]
- Discount the ECLs using the same discount rate used in the measurement of the lease receivables in accordance with AASB 16 [AASB 9.B5.5.46]

AASB 9 requires impairment to be applied only to those cash flows used to measure the lease receivable. Therefore, for operating leases, this means impairing only the amount due and demandable at the reporting date and there is no need to make a provision against future cash flows not yet recognised in the statement of financial position. As a result, the new impairment requirements will have a greater impact on lessors of leases that are currently classed as finance leases.

Impairment of lease receivables are based on lifetime ECLs of the lease. However, the nature of leases means the lessor's 'loan' is in substance collateralised by the leased asset, and this will reduce the ECLs.

A provision matrix may be applied for operating leases as agencies can use historical data similar to trade receivables. For finance leases, agencies are recommended to measure ECL based on probability of default.

Some agencies have finance lease receivables that include an unguaranteed residual value (URV), that is part of the gross investment in the finance lease, together with the minimum lease payments receivable by the lessor. These agencies should *exclude* the URV from the calculation of ECLs under AASB 9, as only lease receivables/payables and any embedded derivatives are in the scope of AASB 9. This means that the collateral that is taken into account in measuring ECLs should exclude any amounts attributed to the URV that has been recorded on the lessor's statement of financial position.

#### Example: Accounting for impairment of finance lease receivable

Agency A is a lessor in a 5-year lease with Company A which commenced on 1 July 20X0. The lease has been classified as a finance lease with the following details:

- Company A makes lease payments of \$210,000 per annum
- The fair value at inception is \$925,000 and the implicit rate in the lease is 6.8%
- No residual value at the end of the lease.

On 30 June 20X1, Agency A determines that the lifetime ECL based on 5% probability of default (PD) and 20% loss given default (LGD – which is an estimate of the amount of loss if the lessee were to default), discounted at the implicit rate of 6.8% is \$9,250.

	Lease receivable	Interest income	Receivable at yearend	PV of cashflow	PD	LGD	ECL
-			925,000				
0	210,000	48,416	763,416	210,000	5%	20%	2,100
1	210,000	37,474	590,890	196,682	5%	20%	1,967
2	210,000	25,792	406,682	184,208	5%	20%	1,842
3	210,000	13,318	210,000	172,526	5%	20%	1,725
4	210,000	-	-	161,584	5%	20%	1,616
		125,000	=				9,250

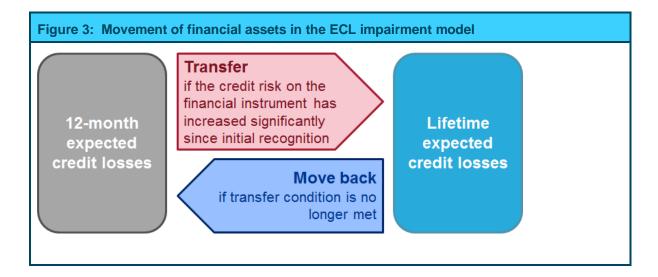
# 7.4 General approach

Under the general approach, the method to calculate an impairment allowance depends on the extent of credit deterioration since the financial instrument was initially recognised.

Essentially, an agency must make the following assessment at each reporting date:

- For credit exposures where there have <u>not been</u> significant increases in credit risk since initial recognition, an entity is required to provide for 12-month ECLs. i.e. the portion of lifetime ECLs that represent the ECLs that result from default events that are possible within the 12-months after the reporting date.
- For credit exposures where there <u>has</u> been significant increases in credit risk since initial recognition on an individual or collective basis, a loss allowance is required for lifetime ECLs. i.e. ECLs that result from all possible default events over the expected life of a financial instrument. Or
- In subsequent reporting periods, if the credit quality of the financial instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the entity reverts to recognising a loss allowance based on 12-month ECLs and vice versa.

The model is therefore symmetrical and assets can move into and out of the lifetime ECLs category as illustrated below.



The changes in the loss allowance balance are recognised in profit or loss as an impairment gain or loss. [AASB 9.5.5.8].

Example: Basis of calculating expected credit losses

On 1 June 2019, Agency A originates a 10-year loan receivable with a gross carrying amount of \$1,000,000. Interest is payable at the end of each year and the principal is due on maturity. There are no transaction costs and the loan contract includes no options (for example, prepayment or call options), premiums or discounts, points paid, or other fees.

At 30 June 2019, Agency A has assessed that there is no significant increase in credit risk and a corresponding 12-month ECL allowance is recognised.

By 30 June 2020, the loan has shown signs of significant deterioration in credit quality and Agency A recognises an allowance based on lifetime ECL.

However, if in the following year, the credit quality of the loan has improved, the allowance is recognised back to a 12-month ECL basis.

# 7.4.1 Determining significant increases in credit risk

Under the general approach, the transition from recognising a 12-month ECL to a lifetime ECL is based on whether there is a significant increase in credit risk over the remaining life of the instrument compared to the credit risk on initial recognition. The focus is on the changes in the risk of a default, and not the changes in the amount of loss.

For example, a highly collateralised financial asset such as a real estate-backed loan. The borrower is expected to be affected by the downturn in its local economy, leading to an assessment there has been a significant increase in credit risk. Therefore, the loan would move to a lifetime ECL, despite the existence of the collateral. However, the ECL loss is small because the lender can recover most of the amount from the collateral.

When determining whether the credit risk on an instrument has increased significantly, agencies should consider reasonable and supportable information available without undue cost or effort. This information should include actual and expected changes in external market indicators, internal factors and borrower-specific information.

A significant increase in credit risk can include:

- Changes in general economic and/or market conditions (e.g. expected increase in unemployment rates, interest rates)
- $\circ$   $\;$  Significant changes in the operating results or financial position of the borrower

- Changes in the amount of financial support available to an entity (e.g. from its parent)
- o Expected or potential breaches of covenants
- Expected delay in payment (Note: Actual payment delay may not arise until after there has been a significant increase in credit risk).

In principle, the assessment of significant increases in credit risk is made on an individual asset basis. However, some factors or indicators might not be available at an instrument level. In this case, agencies should perform the assessment on a collective basis. For example, on a group or sub-group of financial instruments (such as by identifying particular geographical regions or industries that have been most adversely affected by changing economic conditions). *[AASB 9.B5.5.1-B5.5.5]*.

There is a rebuttable presumption that credit risk has increased significantly when payments are more than 30 days past due. However, AASB 9 clarifies that delinquency is a lagging indicator, and that a significant increase in credit risk typically occurs before an asset is past due. Therefore, when more forward-looking information (compared with information about past-due payments) is available without undue cost or effort, it should be considered when determining whether there has been a significant increase in credit risk. An agency cannot rely solely on past due data. *[AASB 9.5.5.11].* 

This rebuttable presumption is not an absolute indicator but is presumed to be the latest point at which lifetime ECLs should be recognised, even when using forward-looking information.

## 7.4.2 Exception for low credit risk assets

As an exception to the requirements in the general approach, AASB 9 provides an option to measure impairment using a 12-month ECL if the instrument has a low credit risk at reporting date. *[AASB 9.5.5.10].* Financial instruments are considered to have low credit risk if:

- o they have a low risk of default
- the borrower is considered, in the short term, to have a strong capacity to meet its obligations, and
- the lender expects, in the longer term, that adverse changes in economic and business conditions might, but will not necessarily, reduce the ability of the borrower to fulfil its obligations. [AASB 9.B5.5.22]

Examples of financial assets that might be considered low credit risk include bonds issued by governments or corporates that have an external BBB credit rating or above (investment grade).

This policy requires agencies to apply this operational simplification as it provides relief for agencies from tracking changes in the credit risk of high-quality financial instruments.

For example, a number of agencies have term deposits with financial institutions whose external credit ratings are considered investment grade that are subsequently measured at amortised cost. For these term deposits, only 12-month ECLs should be recognised.

#### Policy Requirement under TC20-08

Agencies must use the operational simplification for low credit risk financial assets.

## 7.4.3 Credit-impaired financial assets

Credit-impaired financial assets are those that have objective evidence of impairment at the reporting date. This is similar to the point at which an incurred loss would have been recognised under AASB 139.

Indicators that an asset is credit-impaired would include observable data about the following events:

- o significant financial difficulty of the issuer or the borrower
- o actual breach of contract (e.g. default or delinquency in payments)
- o granting of a concession to the borrower due to the borrower's financial difficulty
- o probability the borrower will enter bankruptcy or other financial reorganisation
- the disappearance of an active market for that financial asset because of financial difficulties

• the purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses.

It may not be possible for an entity to identify a single discrete event. Instead, the combined effect of several events may have caused the financial asset to become credit-impaired.

Allowances for assets that are credit impaired are based on lifetime ECLs. Interest income on credit impaired assets is recalculated on their net carrying amount (principal less impairment allowance).

If in a subsequent period the financial asset is no long credit-impaired and the improvement can be related objectively to an event occurring after the credit impairment event, interest income is calculated back to the gross carrying amount (principal only).

Example: Credit impaired financial assets vs. financial assets with significant increase in credit risk

#### Scenario 1 – there is only a significant change in credit risk

Agency S issued a long-term loan receivable to Company A of \$100,000 on 1 July 20X0 with interest of 5% pa payable at 30 June of each year and the principal is payable on 30 June 20X5.

Under the effective interest rate method, Agency S recognises \$5,000 interest per annum.

At 30 June 20X1, Agency S determines there has been a significant change in credit risk in Company A since inception of the loan and calculates a lifetime ECL of \$5,183 based on the assumption that there is a 20% chance of default and a loss of 30% if a default occurs.. The credit-adjusted effective interest rate is 6.51%.

<i>For the year ended 30 June 20X1:</i> Accrued interest receivable – B/S	<b>Debit</b> 5,000	Credit
Interest income – P&L [(\$100,000 x 5%] To record interest accrual for the year	5,000	5,000
As at 30 June 20X1: Impairment gain / loss – P&L Allowance for credit losses – B/S [105,000/(1.05)^4 x 20% x 30%] To record impairment as at reporting date	5,183	5,183
For the year ended 30 June 20X2: Accrued interest receivable – B/S Interest income – P&L [(\$100,000 x 5%] To record interest accrual for the year	5,000	5,000
On 30 June 20X2, Agency S assesses that there is still a significant incrused the same assumption as above (i.e.e, there is a 20% chance of default does occur).		
<i>For the year ended 30 June 20X2:</i> Impairment loss – P&L Allowance for credit losses – B/S [105,000/(1.05)^3 x 20% x 30% - 5,183] <i>To record impairment as at reporting date</i>	259	259
Scenario 2 – Ioan is credit impaired		
Facts are the same as Scenario 1 for Agency T, except Agency T determing aired at 30 June 20X1 due to an impairment event.	nines its loan i	s credit
<i>For the year ended 30 June 20X1:</i> Accrued interest receivable – B/S	<b>Debit</b> 5,000	Credit
Interest income – P&L [(\$100,000 x 5%] To record interest accrual for the year	0,000	5,000

As at 30 June 20X1:		
Impairment gain / loss – P&L	5,183	
Allowance for credit losses – B/S [105,000 / (1.05)^4 x 20% x 30%]		5,183
To record impairment as at reporting date		
For the year ended 30 June 20X2:		
Accrued interest receivable – B/S	5,000	
Allowance for credit losses – B/S [6,173 - 5,000]	1,173	
Interest income – P&L [(\$100,000 – 5,183) x 6.51%]		6,173
To record interest accrual for the year		
On 30 June 20X2, Agency T assesses that this loan is still credit impaire assumption as above at 20% PD and 30% LGD.	ed and used the	same
As at 30 June 20X2:		
Impairment loss – P&L	1,432	
Allowance for credit losses – B/S [105,000/(1.05)^3 x 20% x 30% - (5,183		1,432
– 1,173)]		
To record impairment as at reporting date		

## 7.4.4 Purchased or originated credit-impaired financial assets

Purchased or originated credit-impaired financial assets are treated differently, because these assets are already credit-impaired at initial recognition.

There are two impacts of accounting for purchased or originated credit-impaired financial assets:

- interest revenue is calculated based on the future cash flows adjusted for expected credit losses (credit-adjusted EIR), instead of the contracted future cash flows, and
- the calculated ECL at purchase or origination date is not recorded as a loss allowance. Instead, the initial value of the financial instrument is reduced by the initial ECL.

In other words, there is already evidence of impairment (as defined in AASB 9 Appendix A) at the point of initial recognition (for instance, if it is acquired at a deep discount). This is different to the low-interest or non-interest-bearing loans issued by some agencies where there is still no objective evidence of impairment at origination. Therefore, this is not expected to be common to the public sector.

For purchased or originated credit-impaired financial assets, an agency recognises all changes in lifetime ECL since initial recognition as a loss allowance (excluding the lifetime ECL calculated at origination) with any changes recognised in profit or loss. *[AASB 9.5.5.13]*. Any favourable changes for such assets are an impairment gain even if the resulting expected cash flows of a financial asset exceed the estimated cash flows on initial recognition. *[AASB 9.5.5.14]*.

## Example: Calculation of the credit-adjusted effective interest rate (EIR) and recognition of a loss allowance for a purchased credit-impaired financial asset

On 1 July 2015, Company A issued a seven-year bond maturing on 30 June 2022 with a face value of \$100,000 and a 10% coupon payable annually in arrears. In December 2017 Company A was in significant financial difficulties and was unable to pay the coupon due on 30 June 2018. On 1 July 2018. Agency X estimates that the holder could expect to receive a single payment of \$60,000 on 30 June 2020. It acquires the bond at \$40,000. Agency X determines that the bond is creditimpaired on initial recognition, because of the evidence of significant financial difficulty of Company A and because the debt instrument was purchased at a deep discount.

The contractual cash flows (including the \$10,000 overdue) gives rise to an EIR of 58.9% (the net present value of \$10,000 now and annually thereafter until 2022 and \$100,000 receivable on 30 June 2022 equals \$40,000 when discounted at 58.9%). However, because the bond is creditimpaired, Agency X should calculate the EIR using the estimated cash flows of the bond. In this case, the EIR is 22.5% (the net present value of \$60,000 receivable in two years equals \$40,000 when discounted at 22.5%).

Agency X recognised the fair value of the bond of \$40,000 on initial recognition at 1 July 2018, i.e. the value net of the lifetime ECL calculated at that date.

Scenario 1 All things being equal, interest income of \$8,990 (\$40,000 × 22.5%) would be recognised on the bond during FY 2018-19 and its carrying amount at the end of the year would be \$48,990 (\$40,000 + \$8,990).

Scenario 2 However, if based on reasonable and supportable evidence obtained in June 2019, the cash flow expected to be received on the instrument had increased to \$65,000 (still to be received on 30 June 2020), an adjustment would be made to the asset's amortised cost. Accordingly, its carrying amount would be increased to \$53,072 (\$65,000 discounted over one year at 22.5%) and an impairment gain of \$4,082 would be recognised in profit or loss.

Scenario 3 On the other hand, if based on reasonable and supportable evidence obtained in June 2019, the cash flow expected to be received on the bond had decreased to \$50,000 (still to be received on 30 June 2020), an adjustment would be made to the asset's amortised cost. Accordingly, its carrying amount would be decreased to \$40,825 (\$50,000 discounted over one year at 22.5%) and an impairment loss of \$8,165 would be recognised in profit or loss.

Supporting calculation are below:

Remaining co coupon rate EIR	ontractual ca 10.0% 58.9%	sh flows			
	Principal repayment	Coupon interest	Effective interest	Amortisation of discount	Carrying amount
1/07/2018					40,000
1/07/2018		10,000		(10,000)	30,000
30/06/2019		10,000	17,670	7,670	37,670
30/06/2020		10,000	22,188	12,188	49,858
30/06/2021		10,000	29,367	19,367	69,226
30/06/2022	100,000	10,000	40,774	30,774	-
		50,000	110,000	60,000	-

Scenario 1						
coupon rate	10.0%					
EIR	22.5%					
	Principal repayment	Coupon interest	Effective interest	Amortisation of discount	Carrying amount	
1/07/2018					40,000	
30/06/2019			8,990	8,990	48,990	
30/06/2020	60,000		11,010	11,010	-	
Scenario 2						
	Principal	Coupon	Effective	Amortisation	Carrying	
-	repayment	interest	interest	of discount	amount	Recovery
1/07/2018					43,333	
30/06/2019			9,739	9,739	53,072	4,082 <sup>i</sup>
30/06/2020	65,000		11,928	11,928	-	
Scenario 3						
	Principal	Coupon	Effective	Amortisation	Carrying	Additional
	repayment	interest	interest	of discount	amount	loss
1/07/2018					33,333	
30/06/2019			7,492	7,492	40,825	(8,165) <sup>ii</sup>
30/06/2020	50,000		9,175	9,175	-	. ,
i lana siaa satu				louistion of the lifetime		

i. Impairment recovery is the difference between the adjusted calculation of the lifetime ECL and the initial ECL (53,072 – 48,990).

*II.* Impairment loss is the difference between the adjusted calculation of the lifetime ECL and the initial ECL (40,825 – 48,990)

## 7.4.5 Debt instruments at FVOCI

For debt instruments measured at FVOCI, the ECLs do not reduce the carrying amount in the statement of financial position, which remains at fair value. Instead, an amount equal to the allowance that would arise if the asset had been measured at amortised cost is recognised in other comprehensive income as the 'accumulated impairment amount'. *[AASB 9.5.5.2].* 

This means that in contrast to financial assets at amortised cost, there is no separate allowance. Instead, impairment gains or losses are accounted for as an adjustment to the revaluation reserve accumulated via OCI, with a corresponding charge to profit or loss.

## Example: Accounting for impairment of debt instruments measured at FVOCI

On 10 June 2020, Agency A purchases a bond with a fair value of \$100,000 and interest of 5% over the contractual term of 5 years. It classifies and subsequently measures the debt instrument at FVOCI. Agency A determines that the asset is not purchased or originated credit-impaired at initial recognition.

10 June 2020	Debit	Credit
Financial asset – FVOCI	100,000	
Cash		100,000
To recognise the debt instrument at fair value		

On 30 June 2020 (reporting date), the fair value of the bond has decreased to \$95,000 as a result of changes in market interest rates. Agency A determines that there has not been a significant increase in credit risk since initial recognition and the ECLs should be measured using 12-month ECLs, which amounts to \$3,000. For simplicity, journal entries for accrual of interest revenue are not provided.

30 June 2020	Debit	Credit
Impairment loss (profit or loss)	3,000	
Other comprehensive income <sup>(a)</sup>	2,000	
Financial asset – FVOCI		5,000
To recognise the debt instrument at fair value		

a) The cumulative loss in OCI at the reporting date was \$2,000. That amount consists of the total fair value change of \$5,000 less the change in the accumulated impairment amount of \$3,000.

On 1 July 2020, Agency A decides to sell the debt instrument for \$95,000, which is its fair value at that date.

1 July 2020	Debit	Credit
Cash	95,000	
Financial asset – FVOCI		95,000
Loss (profit or loss)	2,000	
Other comprehensive income		2,000
To derecognise the FVOCI asset and recycle amounts accu	umulated in OCI to profit	or loss

## 7.4.6 Financial guarantee contracts

As mentioned in section 6.2, financial guarantee contracts in the scope of AASB 9 that have not been classified as FVPL are measured at the higher of:

(a) the amount of the impairment loss allowance, in respect of the debt held by the guaranteed party using the ECL model under AASB 9,

and

(b) the carrying amount of the guarantee which is equal to the amount initially recognised less cumulative amortisation.

This section discusses how to measure a financial guarantee based on the impairment loss allowance on the debt held by the guaranteed party.

For a financial guarantee contract, the guarantor (an agency) is required to make payments only in the event of a default by the debtor in accordance with the terms of the instrument that is guaranteed. Therefore, the ECL applied to the debtor's liability is used to estimate the present value of the payments a guarantor (an agency) is expected to pay to reimburse the holder for a credit loss that it incurs, less any amounts that the guarantor expects to receive from the holder, the debtor or any other party.

Where an asset is fully guaranteed, the ECL estimate for the financial guarantee contract will be the same as the estimated cash shortfalls for the asset subject to the guarantee (i.e. the ECL that will be recorded by the holder of the guarantee). [AASB 9.B5.5.32]

Under AASB 9, the general approach applies to financial guarantee contracts not measured at FVPL, meaning using either 12-month or lifetime ECLs, as discussed above. An agency should consider the changes in the risk that the specified debtor will default, in determining whether to apply 12-month or lifetime ECLs.

For financial guarantee contracts, the date of initial recognition in applying the impairment requirement is the date that an agency becomes a party to the financial guarantee. [AASB 9.5.5.6]. The period over which to estimate ECLs, is the expected life up to the maximum contractual period over which an agency has a present contractual obligation to extend credit. [AASB 9.85.5.38].

#### Example: Accounting for impairment of financial guarantees

On 1 July 20X0, the Crown<sup>4</sup> issues a 5-year financial guarantee on a loan by Agency Z, with a nominal value of \$5,000,000 at 5% interest. Agency Z pays the Crown a premium of \$250,000 at contract inception. The loan is fully guaranteed by the Crown and the Crown does not expect any reimbursement from Agency Z. The premium is recognised by Treasury, in its administered items, as revenue on a straight-line basis over the life of the guarantee. As at 30 June 20X3 and 20X4, the Crown assesses that there has been a significant increase in credit risk of the financial guarantee contract. At 30 June 20X5, Agency Z defaults and fails to make payments in accordance with the terms of the loan. The lifetime ECLs estimated as at 30 June 20X1 and 20X2 are \$200,000 and \$300,000, respectively, with a significant increase in 20X3 and 20X4 to \$1,000,000 and \$1,500,000, respectively, and for the guaranteed amount of \$5,250,000, including accrued interest in 2023 when the debtor defaults. The 12-month ECLs are \$50,000 and \$100,000 as at 30 June 20X1 and 20X2.

	30 June 20X1	30 June 20X2	30 June 20X3	30 June 20X4	30 June 20X5
Full premium receivable at inception Initial fair value is \$250,000					
(a) Fair value of premium received, less cumulative income recognised*	\$200,000	\$150.000	\$100.000	\$50.000	-
(b) ECLs	\$50,000 <sup>(i)</sup>	\$100,000 <sup>(i)</sup>	\$1,000,000 <sup>(ii)</sup>	\$1,500,000 <sup>(ii)</sup>	\$5,250,000
Recorded value of guarantee: higher of (a) or (b)	\$200,000	\$150,000	\$1,000,000	\$1,500,000	\$5,250,000

\* Based on the assumption of a straight-line amortisation of premium received, over the life of the financial guarantee.
 (i) No significant increase in credit risk - allowance is based on 12-month ECL.
 (ii) Significant increase in credit risk - allowance is based on lifetime ECL.

(ii) Significant increase in credit risk - allowance is based on lifetime ECL.

Before the significant increase in credit risk in FY 20X1 and 20X2, the measurement of the financial guarantee is based on the fair value, less cumulative income recognised in accordance with AASB 15.

Below are the journal entries for the above transactions:

	Debit	Credit	
<b>1 July 20X0</b> Cash Financial guarantee liability To record receipt of premium for the financial guarantee	250,000	250,000	
<i>30 June 20X1</i> Financial guarantee liability Income (Profit or loss) <i>To record amortisation of premium for the year</i>	50,000	50,000	
<i>30 June 20X2</i> Financial guarantee liability Income (Profit or loss) <i>To record amortisation of premium for the year</i>	50,000	50,000	
<i>30 June 20X3</i> Financial guarantee liability Income (Profit or loss) <i>To record amortisation of premium for the year</i>	50,000	50,000	
Impairment loss (Profit or loss) Financial guarantee liability <i>To record additional liability based on ECL allowance (1,000,0</i>	900,000 100,000)	900,000	
<i>30 June 20X4</i> Financial guarantee liability	50,000		

<sup>4</sup> The Crown in the right of the State of New South Wales (the Crown) may issue guarantees to other agencies. These guarantees are administered by Treasury on behalf of the Crown.

Income (Profit or loss)	50,000	
To record amortisation of premium for the year		
Impairment loss (Profit or loss)	550,000	
Financial guarantee liability	550,000	
To record additional liability based on ECL allowance (1,500	0,000 – (1,000,000 - 50,000))	
30 June 20X5	50.000	
Financial guarantee liability Income (Profit or loss)	50,000 50,000	
To record amortisation of premium for the year	00,000	
Impairment loss (Drofit or loss)	2 800 000	
Impairment loss (Profit or loss) Financial guarantee liability	3,800,000 3.800,000	
To record additional liability based on ECL allowance (5,250	- , ,	
Financial guarantee liability	5,250,000	
Cash	5,250,000	
To record settlement of financial guarantee to the holder		

## 7.4.7 Loan commitments

Loan commitments are firm commitments to provide credit under pre-specified terms and conditions Loan commitments are not brought into account in the statement of financial position unless the commitments can be settled net or are provided at a below-market interest rates. Loan commitments, however, are not expected to be common in the public sector as, except for TCorp, it is rare for agencies to provide loans to other agencies or other entities.

For application of the model to a loan commitment, an agency will consider the risk of a default occurring under the loan to be advanced from the committed amount.

An estimate of ECL on loan commitments should be consistent with expectations of draw-downs on that loan commitment. That is, agencies should consider the expected portion of the loan commitment that will be drawn down within 12 months of the reporting date when estimating 12-month ECL and the expected portion of the loan commitment that will be drawn down over the expected life of the loan commitment when estimating lifetime ECL. The maximum period over which to measure expected credit losses for loan commitments is the contractual period over which the entity is committed to provide credit [AASB 9.5.5.38]. This means that when measuring ECL for loan commitments that can be cancelled with 1 day of notice, the draw down period to consider is only 1 day<sup>5</sup>.

The discount rate used to discount ECL is the EIR for the financial asset that results from the loan commitment. If the EIR cannot be determined, then an entity uses a rate that reflects the current market assessment of the time value of money and the risks that are specific to the cash flows.

In terms of presentation, because the loss allowance would not relate to any balance sheet line item, the expected loss estimate is recognised and presented as a provision.

## 7.5 Interest revenue and impairment

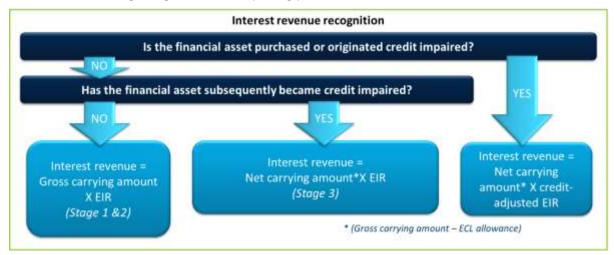
Interest revenue is calculated differently according to the status of the financial asset with regard to credit impairment.

<sup>&</sup>lt;sup>5</sup> An exception applies to financial instruments that include a both a drawn and undraw commitment such as credit cards and overdraft facilities where the financial instruments are managed on a collective basis. For these financial instruments, the contractual ability to demand repayment and cancel the undrawn commitment does not limit the entity's exposure to credit losses to the contractual notice period. However, it is not expected that these instruments would be common in public sector agencies.

For a financial asset that is not a purchased or originated credit-impaired financial asset, and has not become credit-impaired (see 'credit-impaired financial assets' above) since initial recognition, interest revenue is calculated using a 'gross method' of applying the effective interest rate method to the gross carrying amount of the asset (i.e. its carrying amount excluding the loss allowance).

For a financial asset that is not a purchased or originated credit-impaired financial asset but subsequently has become credit-impaired, from the beginning of the next reporting period, interest revenue is calculated using a 'net method' of applying the effective interest rate to the net amortised cost balance (i.e. net of the loss allowance).

If following a period of using the 'net method', the credit risk of the financial instrument improves so that the financial asset is no longer credit-impaired, and the improvement can be related objectively to an event since the net method was applied, the calculation of interest revenue reverts to the 'gross method' from the beginning of the next reporting period.



## 7.6 Impairment – Measurement of ECL

ECL are a probability-weighted estimate of credit losses over the expected life of the financial instrument. Credit losses are the present value of expected cash shortfalls.

An estimate of ECLs is determined by evaluating a range of possible outcomes, rather than being based on a best-or-worst-case scenario. The measurement of ECLs reflects *[AASB 9.5.5.17]*:

- an unbiased evaluation of a range of possible outcomes and their probabilities of occurrence (See section 7.6.1)
- the time value of money (See section Error! Reference source not found.)
- reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions (See section 7.6.3).

## 7.6.1 Probability weighted outcome

An unbiased and probability-weighted amount requires evaluation of a range of possible outcomes. In practice, this may not need to be a complex analysis.

In some cases, relatively simple modelling may be sufficient, without the need for a large number of detailed simulations of scenarios. For example, for a large group of financial instruments with shared risk characteristics, the average credit losses may be a reasonable estimate of the probability-weighted amount. *[AASB 9.B5.5.42]*. The average credit losses may be derived using the loss-rate statistics on the basis of the amount written off over the life of the group of financial assets.

In other instances, this could involve identifying possible scenarios that specify:

- o the amount and timing of the cash flows for particular outcomes, and
- the estimated probability of these outcomes.

When calculating ECLs, an agency is not required to identify every possible scenario but should always reflect at least the following two scenarios. [AASB 9.5.5.18]:

- o possibility that a credit loss occurs, even if this probability is low, and
- o possibility that no credit loss occurs.

For example, an agency can assess that the probability of a default occurring in the next 12-months is 10% and if the default occurs, an agency will only get 50% of the amount back. In this instance, the 12-month ECL rate is 5% ( $10\% \times 50\%$ ).

When there is a non-linear relationship between the different forward-looking scenarios and their associated credit losses and/or changes in the risk of default, using a single forward-looking scenario would not meet the objectives of IFRS 9. In these cases, an agency would need to incorporate more than one forward-looking economic scenario when assessing significant increases in credit risk and measuring ECLs. While agencies are not expected to consider every possible scenario, the scenarios considered should reflect a representative sample of possible outcomes.

## Example: Measuring ECLs – Non-linear impact of forward-looking estimates

On 1 July 20X0, the Crown<sup>6</sup> issues a 5-year loan to Agency X, with a nominal value of \$1,000,000 at 5% interest. The Crown assesses that there has not been a significant increase in credit risk and therefore the loan is in Stage 1 and Treasury, in its administered items, provides for 12-month of ECL for its credit loss provisions. The Crown estimates the following 12-month forward-looking scenarios:

	Unemployment rate (A)	Likelihood of occurring (B)	12-month risk of default (C)	Probability weighted 12- month risk of default (D) = (B) X (C)
Scenario 1	4%	20%	1%	0.2%
Scenario 2	5%	50%	3%	1.5%
Scenario 3	6%	30%	10%	3.0%
12-month risk of default				4.7%

Probability-weighted 12-month risk of default is 4.7%.

In measuring ECL, the Crown estimates credit losses based on the different forward-looking scenarios:

	Unemployment rate (A)	Likelihood of occurring (B)	ECLs for each scenario (C)	Probability weighted ECLs (D) = (B) X (C)
Scenario 1	4%	20%	\$100,000	\$20,000
Scenario 2	5%	50%	\$300,000	\$150,000
Scenario 3	6%	30%	\$700,000	\$210,000
ECLs recognised				\$380,000

The ECL that Treasury recognises, in its administered items, is \$380,000.

The 12-mth ECL is therefore \$380,000 X 4.7% = \$17,860

<sup>&</sup>lt;sup>6</sup> The Crown in the right of the State of New South Wales (the Crown) may issue loans to other agencies. These loans are administered by Treasury on behalf of the Crown.

It would not be appropriate for Treasury to use:

- a single central economic scenario based on the most likely outcome (i.e. scenario 2), because this would not reflect a range of possible outcomes, and
- a single scenario based on a weighted-average unemployment estimate of 5.1%<sup>7</sup>, because there is a non-linear relationship between the different scenarios and their associated credit losses.

## 7.6.2 Discount rates

ECLs should be discounted to the reporting date using the effective interest rate (EIR) determined at initial recognition or an approximation thereof. *[AASB 9.B5.5.44]*. The EIR is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial asset, to the gross carrying amount of a financial asset.

The table below sets out the discount rates to be used for different types of financial instruments [AASB 9.B5.5.44-48]:

Instrument	Discount rate
Purchased or originated credit-impaired financial assets	Credit-adjusted EIR determined at initial recognition (See section 7.4.4)
Lease receivables	Same rate used in measuring lease receivables in accordance with AASB 16
Loan commitments	EIR, or an approximation thereof, that will apply to the financial asset resulting from the loan commitment (See section 7.4.7)
Loan commitments for which the EIR cannot be determined, and Financial guarantee contracts	Rate that reflects the current market assessment of the time value of money and the risks specific to the cash flows (but only if, and to the extent that, the risks are factored by adjusting the discount rate instead of the cash shortfalls being discounted)

## 7.6.3 Reasonable and supportable information

Reasonable and supportable information is information that is reasonably available at the reporting date without undue cost or effort, including information about past events, current conditions and forecasts of future economic conditions [AASB 9.B5.5.49]. The information used should include [AASB 9.B5.5.51]:

- $\circ$   $\;$  factors that are specific to the borrower, and
- general economic conditions and an assessment of both the current as well as the forecast direction of conditions.

The entity is not required to [AASB 9.B5.5.50-51]:

- incorporate forecasts of future conditions over the entire expected life of a financial instrument.
   For periods far in the future, an entity could develop projections by extrapolating the information available for earlier periods, or
- undertake an exhaustive search for information. However, entities should consider all reasonable and supportable information available without undue cost or effort.

<sup>&</sup>lt;sup>7</sup> Sum of column (A) multiplied by column (B) [(4%X20%) +(5%X50%) +(6%X30%)]

## Data sources

Examples of possible data sources include [AASB 9.B5.5.51]:

- o internal historical credit loss experience
- internal ratings
- o credit loss experience of other entities
- external ratings, reports and statistics.

Entities that have no, or insufficient, sources of entity-specific data may use peer group experience for the comparable financial instrument (or groups of financial instruments).

#### **Historical information**

Historical information is a useful base to measure ECL, but may need to be adjusted to reflect current conditions. Estimates of changes in ECL should reflect, and be directionally consistent with, changes in related observable data from period to period. Examples of observable data – unemployment rates, property prices, commodity prices, payment status or other factors that are indicative of credit losses *[AASB 9.B5.5.52]*.

The following example demonstrates measurement of ECL using the parameters as discussed above.

#### Example: ECL based on a probability of default approach

On 1 July 2018, the Crown<sup>8</sup> invests in a corporate bond with a 10-year term issued by Company A, for \$5.0 million and classifies this investment at amortised cost. The interest is paid annually with a coupon and EIR at 5%.

#### Scenario 1 – Assume recognition of 12-month ECLs

On 30 June 2019, the Crown assessed that there is no significant increase in credit risk and makes the following estimates:

- the bond has 12-month probability of default (PD) of 0.5%, and
- the loss given default (LGD) which is an estimate of the amount of loss if the bond were to default is 25% and would occur in 12 months' time if the bond were to default.

The 12-month ECL allowance is 6,250 -the amount of cash flows ( $5,250,000^{a}$ ) multiplied by the PD (0.5%) and by the LGD (25%), and discounting the resulting amount using the EIR for one year (5%).

#### Scenario 2 – Assume recognition of lifetime ECLs

On 30 June 2019, the Crown noted that Company A reportedly has incurred some significant losses during the year and assessed that there has been a significant increase in credit risk. The Crown makes the following estimates:

- o the bond has lifetime PD of 20%, and
- the LGD is 25% and would occur on average in 24 months' time if the bond were to default.

The lifetime ECL allowance is  $238,095 - (5,250,000/1.05^2)^b$  multiplied by the PD (20%) and by the LGD (25%).

- a) Includes the amount of principal and interest receivable in 12-months's time.
- b) Includes the amount of principal and interest receivable in 24-months's time, assuming that the interest in Year 1 is paid in full.

## 7.7 Modifications and write-offs

If a renegotiation or other modification of the contractual cash flows of a financial asset results in derecognition under AASB 9, the revised instrument is treated as a new instrument. The impairment model would then apply to the new instrument as normal.

<sup>&</sup>lt;sup>8</sup> The Crown in the right of the State of New South Wales (the Crown) may issue loans to other agencies. These loans are administered by Treasury on behalf of the Crown.

If a renegotiation or other modification of the contractual cash flows of a financial asset does not result in derecognition, the entity recalculates the gross carrying amount of the financial asset (i.e. the amortised cost amount before adjusting for any loss allowance). This is done by discounting the new expected contractual cash flows (post modification) at the original effective interest rate and recognising any resulting modification gain or loss in profit or loss. From this date, the entity assesses whether the credit risk of the financial instrument has increased significantly since initial recognition of the instrument by comparing the credit risk at the reporting date (under modified terms) to that at initial recognition (under original, unmodified terms).

The Standard requires an entity to directly reduce the gross carrying amount of a financial asset when the entity has no reasonable expectation of recovery. AASB 9 states that a write-off constitutes a derecognition event and may relate to either the asset in its entirety or a portion of it.

In determining whether a modification results in derecognition, the standard does not contain any specific guidance. In an agenda decision<sup>9</sup>, the IFRS Interpretations Committee noted that the guidance for modification of financial liabilities could be applied by analogy. However, this is not a mandatory requirement. Agencies should also give due consideration to other qualitative factors in considering whether a modification of a financial asset results in derecognition. Examples of where a qualitative assessment may indicate a substantial modification include:

- o there has been a change in currency of the loan
- the modified terms are no longer solely payments of principal and interest on the principal outstanding (or vice versa), or
- the original debtor has been replaced by a new debtor.

In some circumstances, it may not be appropriate to apply derecognition accounting even if the present value of the modified and original cash flows is greater than 10% (i.e. the 10% test is breached), for example, where the modified contractual terms are similar to the expected cash flows of the financial asset because the intent of the modification is to seek maximum recovery of the original cash flows.

If the impact of modification is material, agencies are strongly encouraged to consult Treasury.

## 7.8 Presentation of ECLs in the statement of financial position

The presentation of the loss allowance in the statement of financial position depends on the type of the credit risk exposures that are in scope of the impairment requirements. This section explains how presentation applies in these different situations.

Any adjustment to the loss allowance balance due to an increase or decrease of the amount of ECLs recognised in accordance with AASB 9, is reflected in profit or loss in a separate line, if material, as an impairment gain or loss. [AASB 101.82(ba), AASB 9.5.5.8, Appendix A]

#### Financial assets at amortised cost

ECLs on financial assets measured at amortised cost, lease receivables and contract assets are presented as an allowance, i.e., as an integral part of the measurement of those assets in the statement of financial position.

There is no specific requirement in AASB 9 to separately disclose the accumulated impairment allowance on the face of the financial statements. However, it is clear from AASB 9, that the definition of amortised cost of a financial asset refers to after it has been adjusted for any loss allowance. Therefore, the loss allowance would reduce the gross carrying amount in the statement of financial position (which is why an allowance is sometimes referred to as a contra asset account). *[AASB 9 Appendix A]* 

#### Financial assets at fair value through OCI

For financial assets that are mandatorily measured at fair value through other comprehensive income, the accumulated impairment amount is not separately presented in the statement of financial position. However, an entity should disclose the loss allowance in the notes to the financial statements.

<sup>&</sup>lt;sup>9</sup> IFRIC Update September 2012

Rather than presenting ECLs on financial assets measured at FVOCI as an allowance, this amount is presented as the 'accumulated impairment amount' in OCI. This is because financial assets at FVOCI are measured at fair value in the statement of financial position and the accumulated impairment amount cannot reduce the carrying amount of these assets. *[AASB 9.4.1.2A, 5.5.2, Appendix A].* 

#### Loan commitments and financial guarantee contracts

For loan commitments and financial guarantee contracts, an agency should recognise ECL in the statement of financial position as a provision (that is, a liability). [AASB 9 Appendix A]

## 8. Hedge Accounting

## 8.1 Executive Summary

## 8.1.1 Introduction

AASB 9 seeks to more closely align an entity's risk management strategy to the ability to apply hedging accounting. It does this by broadening the scope of the hedge accounting model and simplifying some of the designation requirements compared with AASB 139.

The objective of hedge accounting is to represent, in the financial statements, the effect of management's risk management activities using financial instruments to manage exposures arising from its operations that could affect profit or loss or OCI (in the case of investments in equity instruments for which an entity has elected to present changes in FVOCI). *[AASB 9.6.1.1].* 

In simple terms, hedge accounting is a technique that modifies the normal basis for recognising gains and losses (or revenues and expenses) on hedging instruments and hedged items, so that both are recognised in profit or loss (or OCI) in the same accounting period. This is a matching concept that eliminates or reduces the volatility that otherwise would arise if the hedged item and the hedging instrument were accounted for separately under AASB 9.

Hedging must be applied on an instrument by instrument basis. Hedging risks of a portfolio of financial assets or financial liabilities, commonly known as 'macro hedging', has not yet been addressed by the International Accounting Standards Board (IASB). AASB 139 contains guidance on macro hedging for certain portfolios of interest rate risk only, and those provisions remain available until the completion of the macro hedging section is finalised.

Hedge accounting is optional, and agencies should consider the costs and benefits when deciding whether to apply it or not.

#### Accounting policy choice

AASB 9 provides an accounting policy choice where entities can either continue to apply the hedge accounting requirements of AASB 139 (until the macro hedging guidance has been finalised) or they can adopt the AASB 9 model. This accounting policy choice will apply to all hedge relationships and cannot be made on a hedge-by-hedge basis.

#### Policy Requirement under TC20-08

TC20-08 mandates all NSW agencies to adopt the AASB 9 hedge accounting model and should NOT elect to continue hedge accounting under AASB 139.

# 8.1.2 Key changes from AASB 139 and what that means for NSW Government Agencies

The table below summarises the key changes from AASB 139 that are further discussed in this policy document:

Area	Key changes from AASB 139	Section
Types of	No change	8.9
hedges	Hedge relationships continue to be either cash flow hedges	
Ū	(CFHs), fair value hedges (FVHs) or hedge of a net investment in a	
	foreign operation (also known as net investment hedges (NIH)).	
Hedge	CHANGE	8.2.1
documentation	Hedge documentation is required to be updated for the new hedge	
	accounting requirements. Changes to documentation are	
	qualitative in nature including the incorporation of	
	the hedge ratio and the expected sources of ineffectiveness (since	
	this is not required by AASB 139) and the removal of the	
	retrospective effectiveness test (which is no longer required under	
	AASB 9).	
Qualifying	CHANGE	8.3
hedging items	Two new concepts have been added to qualifying hedge items:	
	<ul> <li>Aggregate exposures (combination of an exposure and an existing derivative), and</li> </ul>	
	• Hedging a component of an exposure.	
Qualifying	No change	8.4
hedging	The most common hedging instruments used by agencies are	
instruments	derivatives which continue to be eligible under AASB 9.	
Effectiveness	CHANGE	8.5.1
testing	The quantitative 80%-125% effectiveness test has been removed.	0.0.1
testing	For instruments which have a strong economic relationship, a	
	qualitative assessment is all that is necessary to be able to apply	
	hedge accounting.	
Measuring	No change	8.5.2
ineffectiveness	Measuring ineffectiveness is still required under AASB 9. Any	
	ineffectiveness continues to be recorded in profit or loss, as and	
	when it occurs.	
Cost of	NEW guidance	8.6
Hedging	AASB 9 introduces the concept of accounting for time value of	
	options, forward points and currency basis associated with certain	
	derivatives through a new cost of hedging reserve	
Rebalancing	NEW guidance	8.7
	AASB 9 introduces the concept of rebalancing the quantities	
	designated where there has been a change in the hedge ratio	
Discontinuentie	specific to a change in the hedged risk.	0.0
Discontinuation	CHANGE	8.8
of hedge	Hedge accounting can no longer voluntarily be discontinued.	
accounting	After designation, an agency can only stop applying hedge accounting when the instrument is sold / expires, the forecast	
	transaction is no longer expected to occur, or it no longer meets an	
	agency's risk management objective.	
	There is no change to the accounting for a discontinuation of a	
	hedge relationship from AASB 139.	
		l

## 8.2 Qualifying criteria for hedge accounting

A hedging relationship qualifies for hedge accounting only if all the following criteria are met [AASB 9.6.4.1]:

- At inception of the hedging relationship, there is a formal designation and documentation of the hedge relationship (refer to section 8.2.1 below)
- The hedge relationship consists only of eligible hedged items and eligible hedging instruments (see sections 8.3 and 8.4, respectively)
- The hedging relationship meets the hedge effectiveness requirements (see Section 8.5 below).

## 8.2.1 Hedge documentation

Formal designation and documentation must be in place at the inception of the hedge relationship. [AASB 9.6.4.1(b)].

That documentation must:

- explain the agency's risk management objective and strategy for undertaking the hedge
- specify the hedging instrument
- specify the hedge item
- specify what risk is being hedged
- specify how the entity will assess whether the hedging relationship meets the hedge effectiveness requirements and the method used for the assessment, including:
  - specifying why there is an economic relationship between the hedging item and instrument
  - identifying whether or not credit risk is expected to dominate fair value changes associated with the hedge relationship
  - specifying the hedge ratio and how this is consistent with risk management strategy (discussed further in Sections 8.5.1 and 8.7 below)
- specify how hedge effectiveness will be measured including the method used
- identify the sources hedge ineffectiveness
- document the accounting treatment for fair value changes associated with cost of hedging, where applicable (discussed further in Section 7.6 below) [AASB 9.6.4.1(b)].

Hedge documentation should be updated from time to time where there are permissible changes in the hedge relationship such as in the event of rebalancing the hedge ratio or when additional sources of ineffectiveness have been identified.

Please contact NSW Treasury if you require assistance with changes to your hedge documentation.

## 8.3 Hedged items

The hedged item represents the exposure that is being mitigated in the hedge relationship.

The types of exposures that meet the qualifying criteria have not changed from AASB 139 and can include:

- a recognised asset or liability
- o an unrecognised firm commitment / highly probable forecast transaction or
- o a net investment in a foreign operation.

While the types of exposures listed above have not changed from AASB 139, we note that AASB 9 expands the scope of hedged items to allow aggregated and component exposures which are explained in detail below.

#### Hedging aggregate exposures and components of exposures

AASB 9 has been expanded to include aggregate exposures as an eligible hedged item. [*AASB* 9.6.3.4]. An aggregate exposure is defined under AASB 9 as a combination of an exposure and a derivative. [*AASB* 9.6.3.2]. AASB 139 did not allow any exposure created from or in connection with a derivative to be designated as the hedged item. An aggregate exposure example is illustrated below:

Example: Aggregate Example:	cposure		
Definition	Original Exposure	Derivative	Aggregate Exposure
A combination of an exposure that could qualify for hedge accounting and a derivative [AASB 9.6.3.4]	USD 10-year, \$100 million fixed 4% coupon bond. (fixed USD interest)	10-year, \$100 million cross currency interest rate swap. Receive fixed 4% USD, pay AUD BBSW (floating)	AUD 10yr, \$100 million floating BBSW exposure.

In the example above the 10 year \$100 million AUD floating interest aggregate exposure would qualify as an eligible hedged item if an agency wanted to fix its interest payments (for all or part of the term of the bond at any stage during the life of the relationship) by taking out an interest rate swap (receive floating BBSW, pay fixed). Under AASB 139, the additional interest rate swap (receive floating BBSW, pay fixed) would have resulted in a de-designation of the original hedge relationship and a re-designation would have been required.

A component of an exposure arises where a hedge risk is comprised of multiple inputs that all sum up to the hedged risk. A typical example are commodities which are made up of the raw material, refining costs, transport costs etc. which in total represent the risk that a company may be exposed to. The example in the table below illustrates this concept.

Example: Hedging a component of an exposure			
Definition	Exposure	Risk component	Derivative
Separately identifiable risk component of an exposure which can be separately measured / valued [AASB 9.6.3.7]	Jet fuel purchases Comprises: floating crude + additives + cost of refining / overheads + profit margins etc	Crude Oil is an established component within jet fuel price fluctuations.	Crude oil futures / swaps etc

In the example above, the crude oil risk component would be able to be a qualifying hedged item despite not being the direct exposure. Judgement is required where the component of an exposure being hedged cannot be separately identified or reliably measurable. In these circumstances, we recommend that the agency consult with NSW Treasury.

AASB 139 did not permit risk components to be standalone hedged items. Instead, under AASB 139 ineffectiveness would arise, because changes in fair value of the crude oil derivative would not perfectly offset changes in the whole exposure (jet fuel purchases), due to possible changes in the other costs included in jet fuel not related to crude oil.

#### Hedging a net exposure

A net exposure is where an agency has a natural offset in a single risk (e.g. foreign exchange risk) across more than one contract or arrangement.

AASB 9 allows the hedging of a group of items that constitute a net exposure provided [AASB 9.6.6.1]:

- o the components are individually, eligible hedged items
- o the items in the group are managed together on a group basis for risk management purposes

- in the case of a cash flow hedge of a group of items whose variabilities in cash flows are not expected to be approximately proportional to the overall variability in cash flows of the group so that offsetting risk positions arise:
  - o it is a hedge of foreign currency risk, and
  - the designation of that net position specifies the reporting period in which the forecast transactions are expected to affect profit or loss, as well as their nature and volume.

However, this creates accounting complexity around allocating gains or losses to the line items in the financial statements, because the gains or losses reflect the net exposure. NSW Treasury recommends that an agency calculate its net exposure, but only designate the hedge relationship against one of the gross exposures. This is illustrated in the example below:

## Example: Hedging a net exposure

Agency Z has foreign exchange exposures arising from revenues in USD (\$10 million) and expenses in USD (\$50 million). If a foreign exchange forward was taken out to hedge Agency Z's net exposure of \$40 million and designated against both revenue and expense exposures, then gains or losses on the derivative need to be split upon settlement of the instrument. i.e. if the derivative results in a loss of \$0.5 million, the question would arise as to which lines in the financial statements would this be attributed to and how would it be calculated if the revenue or expense transactions happen throughout the period of a month?

In order to reduce this additional complexity, NSW Treasury recommends the \$40 million foreign exchange forward is only designated against the larger exposure i.e. expenses, therefore, all the loss on the derivative is allocated to expenses only.

## 8.4 Hedging instruments

The definition of a hedging instrument is unchanged from AASB 139 and includes [AASB 9.6.2.1, 6.2.2]:

- A derivative measured at FVPL, except for written options
- o A non-derivative financial asset or liability measured at FVPL, or
- The foreign currency risk component of a non-derivative financial asset or liability (*This unlikely to apply in the NSW public sector.*).

Typically, we would expect public sector agencies to only be using derivatives as hedging instruments, and these derivatives to involve a third party that is external to the public sector or executed through NSW TCorp. [AASB 9.6.2.3]. If an agency is considering the use of a hedging instrument other than a derivative, please consult first with NSW Treasury.

Typical hedging instruments are: swaps, futures, forwards, options and cross currency interest rate swaps.

Designation of a hedging instrument can occur at any point throughout the instrument's life. However, if a derivative is designated late (i.e. after the derivatives trade date), hedge ineffectiveness may arise due to the derivative's fair value at inception of the hedge relationship not being zero. *[AASB 9.B6.5.28]*.

## 8.5 Assessing the effectiveness of a hedge relationship

AASB 9 para B6.4.1 describes hedge effectiveness as "...the extent to which changes in the fair value or cash flows of the hedging instrument offset changes in the fair value or cash flows of the hedged item."

For example, Agency X is hedging its floating interest rate exposure using a fixed interest rate swap. In this example, a perfectly effective (100%) hedge that results in a fair value change in the derivative of \$50, due to a change in the market expectations of forward interest rates, would have an equal and opposite impact on the expected future interest payments made by an agency.

AASB 9 para B6.4.12 requires that a hedge relationship needs to be assessed at inception and on an ongoing basis at each reporting period or on a significant change in circumstances, whichever comes first for:

- prospective effectiveness (Does my hedge relationship continue to meet the qualifying requirements as set out in Section 8.5.1), and
- measuring ineffectiveness (Measurement of the quantum of the ineffective component of fair value changes in the hedging instrument). [AASB 9.B6.5.4].

### What has changed in AASB 9?

Previously under AASB 139, hedge effectiveness had to be quantitatively tested retrospectively and prospectively, and a range of effectiveness between 80% to 125% should be demonstrated, in order to maintain hedge accounting. AASB 9 does not set quantitative hedge effectiveness parameters. Instead, an agency's hedge relationship must demonstrate that there is an economic relationship between the hedged item and hedging instrument, and that the relationship is consistent with an agency's risk management strategy. The full list of requirements is described in Section 8.5.1 below.

AASB 9 does not change the requirements for quantifying hedge ineffectiveness which is discussed in Section 8.5.2

## 8.5.1 Prospective effectiveness testing

Prospective effectiveness testing is outlined in AASB 9 para 6.4.1(c) and requires assessments to ensure the following:

- (a) there is an economic relationship between the hedged item and hedging instrument
- (b) credit risk does dominate the fair value changes associated with the relationship, and
- (c) there is no imbalance in the hedge ratio, and the ratio is consistent with an agency's risk management strategy.

#### (a) Economic relationship between the hedged item and instrument;

An economic relationship exists when there is an expectation that the value of the hedging instrument and the value of the hedged item would generally move in the opposite direction as a result of having the same or economically related hedged risk. The assessment for effectiveness can be qualitative in nature where the terms of the hedged item are similar to the hedging instrument. *[AASB 9.B6.4.14]*.

#### Example: Economic relationship

Following from the example used in the introduction to Section 8.3, assume that the floating interest rate exposure is BBSW and the receive floating leg on the interest rate swap is also BBSW.

Agency X both pays and receives BBSW and therefore any changes in BBSW on future interest payments would be offset by the BBSW received from the derivative. In this case, there is an economic relationship between the hedged item and instrument.

However, in circumstances where the underlying risk in the hedged instrument does not precisely align with the underlying risk in the hedging item, a quantitative test may be required to determine that there is an economic relationship through regression or correlation analysis. In this case, agencies should consult with NSW Treasury.

This is a key change from AASB 139, which required a quantitative effectiveness test for all hedge relationships and the results had to fall within an 80%-125% effectiveness range.

## (b) Credit risk does not dominate the fair value changes associated with the relationship.

Adjustments to a derivative's fair value are required to take into account the counterparty and an agency's own credit risk. For a hedge relationship to be highly effective, changes in fair value due to credit risk should be immaterial given the exposure being hedged is typically not a credit exposure *[AASB 9.B6.4.7]*.

#### Example – credit risk does not dominate the hedging relationship

Agency X wants to hedge its forecast inventory purchases for commodity price risk. It enters

into a derivative contract with Bank Z to purchase a commodity at a fixed price at a future date. The derivative contract is uncollateralised and therefore Agency X is exposed to Bank Z's credit risk (when the derivative is in an asset position) and Bank Z is exposed to Agency X's credit risk (when the derivative is in a liability position).

For prospective effectiveness testing, Agency X must assess if its own and Bank Z's credit ratings have materially changed since inception or could materially change to the extent that it would represent more than an insignificant portion of the change in fair value of the derivative.

## (c) There is no imbalance in the hedge ratio and the ratio is consistent with the agency's risk management strategy.

The hedge ratio is defined as the relationship between the quantity of the hedging instrument and the quantity of the hedged item in terms of their relative weighting The hedge ratio may not be 1:1 in circumstances where the hedging instrument used to manage the exposure does not have the same underlying reference commodity / interest rate / exchange rate etc. [AASB 9.B6.4.9-10].

NSW Treasury anticipates that the majority of hedge relationships of the sector will have a ratio of 1:1 and that the guidance below in section 8.7 on rebalancing the ratio will therefore only be used in exceptional circumstances. Any agency that has a hedge ratio other than 1:1 is required to consult with NSW Treasury.

#### **Example: Hedge Ratio**

Agency X has a \$1 million floating rate loan (BBSW) but has only taken out a receive floating (BBSW) pay fixed interest rate swap for \$0.6 million. The hedge ratio is determined to be 1:1. This is despite hedging only 60% of the exposure, i.e. every \$1 of interest rate swap is designated against \$1 of a matching exposure.

In other words:

- The hedged item is \$0.6 million of the \$1.0 million loan.
- Matched 1:1 with the \$0.6 million swap.

Agency Z is hedging the forecast purchases of grain that is delivered to a milling facility in Western Sydney. However, the only available hedging instrument is for grain delivered to a port in NSW.

In this example, assume that for every \$1 change in the price of grain delivered to the mill there is a \$0.9 change in the fair value of the derivative. Therefore, the hedge ratio at inception of the hedge relationship would be 1:0.9.

This ratio would then be fixed in order to determine ineffectiveness. Where the ratio is no longer valid a rebalancing event could arise (see Section 8.7 for further details).

## 8.5.2 Measuring hedge Ineffectiveness

Hedge ineffectiveness is the extent to which the changes in the fair value or cash flows of the hedging instrument are greater or less than those on the hedged item. [AASB 9.B6.4.1]. Measurement of hedge ineffectiveness continues to be required by AASB 9.

All hedge ineffectiveness is recognised in profit or loss for FVH (except where the hedged item is an equity instrument designated at FVOCI). *[AASB 9.6.5.8]*. For CFH and NIH, ineffectiveness is recognised in profit or loss to the extent that the cumulative change in the fair value or cash flows of the hedging instrument are greater than those on the hedged item. *[AASB 9.6.5.11, 13-14]*.

Although, for many hedge relationships, it will be acceptable to undertake a qualitative assessment as to whether the hedge effectiveness requirements are met, there is still a requirement to measure and record ineffectiveness appropriately.

In order to measure or calculate hedge ineffectiveness, an agency must fair value the hedging instrument and hedged item.

Where the hedged item is an unrecognised forecast transaction or is not able to be easily fair valued, AASB 9 allows the use of a 'hypothetical derivative' that would perfectly hedge the exposure as a proxy for the hedged item. [AASB 9.B6.5.5].

A hypothetical derivative is typically used where the hedged item is a loan or receivable measured at amortised cost or a highly probable forecast transaction that is not recorded on the statement of financial position. The hypothetical derivative reflects the key terms of the hedged item and the hedged rate being solved to derive a fair value of nil at inception.

The perfect hypothetical derivative is likely to have some dissimilar terms to the hedging instrument, as illustrated in the example below. This is because the actual derivative used as a hedging instrument is typically priced such that it results in a non-zero fair value at inception as it includes credit risk and profits margins of the entity issuing the derivative. Differences between the actual and the hypothetical derivative can result in hedge ineffectiveness.

In a CFH, once an agency has fair valued both the hedged item and the hedging instrument, the effective portion is determined to be the lower of the change in fair value of the hedged item (hypothetical derivative, if applicable) or the change in fair value of the actual hedging instrument. i.e. if the change in fair value of the instrument exceeds that of the hedged item then ineffectiveness is recognised in profit or loss.

A qualitative assessment is not an acceptable testing basis for measuring ineffectiveness.

#### **Example: Measuring hedge ineffectiveness**

Agency X is using interest rate swap to fix its floating rate exposure arising from a loan. For the purpose of this example assume the Agency X's loan exposure is 5 years, \$100 million balance paying quarterly BBSW + 2% margin interest. Agency X uses a hypothetical derivative as a proxy for the fair value of the loan because the loan is carried at amortised cost.

Description	Actual Derivative (instrument)	Hypothetical Derivative (item)
Key terms	5 year, \$100 million receive quarterly BBSW & pay quarterly fixed 3.5%	5 year, \$100 million receive quarterly BBSW & pay quarterly fixed 3.3% <sup>10</sup> .
Reporting date change in fair value	\$1 million asset	\$0.9 million asset
Ineffectiveness	\$0.1 million ineffectiveness is recorded in profit or loss as the actual derivative's fair value has increased by more than the hypothetical derivative (that represents the hedge item).	

<sup>&</sup>lt;sup>10</sup> The hypothetical derivative is never equal to the actual derivative due to the credit and execution margin in the actual derivative. In our example, we've equated this to 0.2%.

## 8.6 Cost of hedging

AASB 9 introduces new requirements for the accounting of the fair value changes associated with the following hedging instruments:

- o Time value associated with options
- The forward points associated with forward contracts, and
- Currency basis spreads embedded within foreign currency derivatives.

Each of these components of derivatives were considered, under AASB 139, to be either potential sources of hedge ineffectiveness or were not able to be designated in the hedge relationship, and were therefore recorded in profit or loss. These components of a derivative were not able to be treated as effective offsetting fair value movements, because they relate to additional charges associated with the issuance of the derivative. This is because these costs are not present in the hedged item and are therefore, not able to be included in a perfect hypothetical derivative, discussed in Section 8.5.2 above.

The IASB and AASB have recognised that these components are all necessary costs associated with entering into those types of derivatives and they should be treated differently from a hedge accounting perspective. Therefore, **AASB 9 allows changes in the fair value of a derivative associated with the time value of options, forward points and foreign currency basis spreads to be excluded from the hedging instrument and the excluded portions can either remain as a 'cost of hedging' to be deferred in a separate reserve within equity. [AASB 9.6.5.15-16].** 

Once costs of hedging are identified, they are deferred through a cost of hedging reserve in equity. The costs are subsequently reclassified to profit and loss, or into the carrying value of the hedged item (non-financial asset i.e. property, plant and equipment (PPE) or inventory). The timing of reclassification depends on whether the costs are:

- o transaction related costs of hedging, or
- o period of time costs of hedging.

**Transaction related cost of hedging** – relate to hedge relationships that reference a single transaction in the future. i.e. the use of a USD FX option to purchase an item of PPE or inventory in USD, at a point in the future. The cost of hedging will be reclassified to the carrying amount of the PPE when purchased or expensed when the inventory is sold (refer to Section 8.9 for a further discussion on the accounting for hedge relationships).

**Time-period related costs of hedging** – relate to hedge relationships where an agency is protecting volatility in profit or loss over time i.e. a 12-month interest rate option hedging multiple interest payments across the year. The reclassification of the cost of hedging to profit or loss (interest expense) would be on a systematic basis. Any changes in the fair value of the time value component not consistent with that basis would be deferred to the cost of hedging reserve.

Categorisation of cost of hedging as a transaction related or period of time hedge aligns the accounting treatment of cost of hedging to the timing of when the hedged item will affect profit or loss.

#### Time value of options

The value of an option contains two components:

- o intrinsic value: Difference between the option's exercise price and the spot price, and
- time value component: Residual difference between the option's total fair value and its intrinsic value

Example: Time value of an option to purchase commodity

Agency A acquires a call option for \$50.

The exercise price of the option is \$100 (i.e. Agency A has acquired the right to purchase Commodity X at \$100).

The spot price for Commodity X at contract inception is \$110.

The option's intrinsic value is therefore \$10 (Difference between spot price (\$110) and exercise price (\$100))

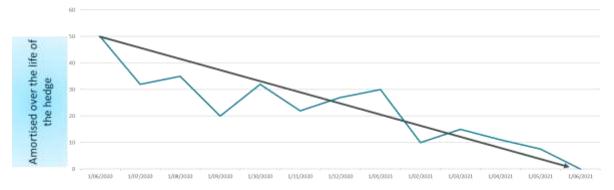
The option's time value is \$40 (Fair value of \$50 less intrinsic value of \$10)

When using an option as a hedging instrument, AASB 139 allows entities to designate either the whole contract, or only the intrinsic value of the option, as the hedging instrument. If the entire contract is designated as the hedging instrument, hedge ineffectiveness normally results because the related hedged item typically does not have a time value component. If only the intrinsic value of the option is designated as the hedging instrument, although hedge effectiveness may be improved, all changes in the time value component of the option will be recorded in profit or loss (at FVTPL in the same way as any other derivative that is not designated in a hedging relationship).

Under AASB 9, an entity can continue to designate only the intrinsic value of the option as the hedging instrument, but the changes in time value will be recorded in other comprehensive income (OCI) instead of profit or loss. The following charts demonstrates how the time value component of the option can change over time. The time value component will always be zero at the option's expiry date.



Time value of options - Transaction related hedged item



Time value of options - Time-period related hedged item

### Example: Accounting for costs of hedging

Hedging Instrument	Interest rate option	Foreign currency option
Hedged item	Quarterly interest payments over a 1yr period	Purchase of a new fixed asset in USD in 3 months' time
Cost of hedging component	Premium paid at inception of the option and subsequent changes in time value	Premium paid at inception of the option and subsequent changes in time value
Time-period or transaction related?	Time-period related i.e. instrument protects the agency over a 12-month period.	Transaction related i.e. at maturity of the instrument
Accounting treatment	Option premium is deferred in OCI and then expensed to interest expense over the life of the option on a systematic basis. Changes in time value other than the amortisation of the premium are deferred in OCI	Changes in fair value associated with the time value of the option during the life of the instrument are deferred in OCI and reclassified into the cost of the fixed asset when acquired

Where 'costs of hedging' are excluded from the designation of the hedging relationship, the amounts deferred in accumulated OCI (to the extent that it relates to the hedged item) are not part of the cash flow hedge but instead a different component of equity.

If the critical terms of the option and the hedged item are not fully aligned (i.e. where all the critical terms of option do not perfectly match the hedged item), then there is a difference between the 'aligned time value' and the 'actual time value' (i.e. the time value of the actual option hedging instrument). The difference in between the two time values are accounted for as follows:

- o if the actual time value is higher than the aligned time value at the inception of the hedge:
  - the amount deferred in accumulated OCI should be determined based on the aligned time value of the hedged item
  - o any difference between the two time values are recognised in profit or loss.
- $\circ$  if the actual time value is lower than the aligned time value at the inception of the hedge:
  - the amount deferred in accumulated OCI is determined by refence to the lower of the cumulative changes of the actual and aligned time value
  - o any remainder of the change in actual time value is recognised in profit or loss.<sup>11</sup>

## 8.7 Hedge Ratio / Rebalancing

As noted in Section 7.5.1, rebalancing by agencies is expected to be rare and exceptional given the hedge ratio of most agencies is expected to generally be 1:1. It is required that agencies consult with NSW Treasury if they are considering rebalancing their hedge ratio.

## 8.8 Discontinuation of hedge accounting

Hedge accounting is discontinued when:

- the hedging instrument is sold or expires
- o the hedged item no longer exists, or

<sup>&</sup>lt;sup>11</sup> AASB 9.B6.5.32 & 33

 the hedging relationship (or part of the hedging relationship) ceases to meet the qualifying criteria (after taking into account any rebalancing of the hedging relationship, if applicable). [AASB 9.6.5.6].

Voluntary de-designation is prohibited under AASB 9. This is a change from AASB 139.

AASB 9 prohibits de-designation and the discontinuation of a hedging relationship that:

- still meets the risk management objective, and
- continues to meet all other qualifying criteria (after considering any rebalancing, if applicable). *[AASB 9.B6.5.23].*

In the event that a hedge relationship is discontinued, the accounting for the related hedge adjustments is unchanged from those required in AASB 139, as outlined in the table below:

Scenario	Accounting requirements	
The hedged item no longer exists or is no longer expected to occur	The fair value adjustments to the hedged item (FVH) or the balance held in the cash flow hedge reserve (CFH) are immediately reclassified to profit or loss. If the hedging instrument remains, future changes in fair value are accounted for through profit or loss.	
The hedged item exists or is expected to occur	The fair value adjustment or cash flow hedge reserve remains in the statement of financial position and is recycled to profit or loss when the hedged item affects profit or loss.	
	Example:	
	<ul> <li>If the hedged item is inventory, fair value adjustments to the hedged item (FVH) or the balance held in the cash flow hedge reserve (CFH) are reclassified to profit of loss when the inventory is sold, or</li> </ul>	
	<ul> <li>ii. If the hedged item is interest payments, fair value adjustments to the hedged item (FVH) or the balance held in the cash flow hedge reserve (CFH) are released to profit of loss in the same period the cash flows would have occurred had the hedge relationship not been de-designated.</li> </ul>	
	If the hedge instrument remains, future changes in fair value are accounted for through profit or loss	

#### Risk management strategy vs risk management objective [AASB 9.B6.5.24]

NSW Treasury expects there to be limited circumstances where an agency's risk management objective will change such that there is discontinuation of hedge accounting. However, for completeness, we have included the commentary below for consideration when assessing any changes to hedging strategy / objectives.

#### Risk management strategy

An agency's risk management strategy is established at the highest level at which it manages risk. This typically identifies the risks to which the entity is exposed and sets out how the entity responds to them.

Such strategies are usually in place for a longer period and might include some flexibility to react to changes in circumstances (e.g. changes in interest rates or commodity price levels). These are normally general documents cascaded down through policies containing more specific guidelines.

#### Risk management objective

In contrast, a risk management objective is applied at the level of a specific hedging relationship. It relates to how the designated hedging instrument is used to hedge the specific exposure designated as the hedged item.

A risk management strategy can and often does involve many different hedging relationships, each with a risk management objective. Hence, the risk management objective for a specific hedging relationship can change, even if an agency's risk management strategy remains unchanged.

If the risk management objective for a hedge relationship has changed, hedge accounting must be discontinued.

## 8.9 Accounting for hedges

As noted in Section 8.1.2 there have been no changes to the three types of hedge relationships eligible for hedge accounting [AASB 9.6.5.2]:

- (a) fair value hedge: a hedge of the exposure to changes in fair value of a recognised asset or liability or an unrecognised firm commitment, or a component of any such item, that is attributable to a particular risk and could affect profit or loss. Typically, when an agency is 'floating' an exposure it would be a FVH, because the agency has no profit or loss volatility arising from cash flows which are currently fixed.
- (b) cash flow hedge: a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with all, or a component of, a recognised asset or liability (such as all or some future interest payments on variable-rate debt) or a highly probable forecast transaction, and could affect profit or loss. Typically, when an agency is 'fixing' an exposure, this is a CFH, because it is managing the profit or loss volatility arising from variable cash flows.
  - For example: A forward contract to buy US\$ used to hedge a contract to purchase property, plant and equipment in US\$.
- (c) hedge of a net investment in a foreign operation. Typically, agencies will not have investments in a foreign operation, so this type of relationship should be rare and exceptional. Therefore, this is not considered further in this document. Note that the accounting for NIH is similar in nature to a CFH relationship.

Components	Fair value hedge [AASB 9.6.5.8]	Cash flow hedge [AASB 9.6.5.11]
Hedged item	Carrying amount adjusted for changes in fair value with respect to the hedged risk. Adjusted through profit or loss	Typically an exposure recorded on balance sheet at amortised cost OR an unrecognised highly probable forecast transaction i.e. changes in fair value are not recorded.
Hedging instrument	Accounted for at fair value through profit and loss in the same account as the hedged item (except for equity instrument designated at FVOCI where the gains / losses from the hedging instrument and item remain in OCI)	<ul> <li>The amount recognised in OCI is the lower of:</li> <li>the cumulative gain or loss on the hedging instrument, and</li> <li>the cumulative change in fair value of the hedged item.</li> </ul>
Hedge ineffectiveness	The net difference between the fair value adjustment on the hedged item and the instrument fair value is recorded in profit or loss	If the cumulative fair value change in the hedging instrument is greater than the change in the hedged item ineffectiveness is recorded in profit or loss. If the cumulative change in the hedging instrument is less than the change in the hedged item no ineffectiveness is recorded.
Cost of hedging	In accordance with Section 8.6 i.e. over time or transaction related	In accordance with Section 8.6 i.e. over time or transaction related

The table below summarises the application of hedge accounting for CFH and FVH hedges:

Example relationship 1	Using a pay floating receive fixed interest rate swap to "float" a fixed interest rate bond liability	Using a pay fixed receive floating interest rate swap to fix the highly probable forecast floating rate coupon payments on a floating interest rate bond.
Example relationship 2	N/A	Using a currency forward to fix the variable exchange rate on a highly probable forecast purchase of PPE.

In the public sector, the most common hedge accounting transaction is a cash flow hedge of a forecast transaction that results in the recognition of a fixed asset or inventory. Under AASB 9 para 6.5.11(d)(i), the carrying value of the asset or inventory must be adjusted for the accumulated gains or losses recognised in the cash flow hedge reserve via OCI (often referred to as 'basis adjustment'). The example below illustrates such a transaction.

#### Example: Cash flow hedge

Relevant information: Agency S is going to acquire a piece of machinery that is to be capitalised as PPE when it is received and paid for in 6 months' time. The machinery will be constructed in the USA and the purchase price is US\$1 million. Agency S has a risk management policy to hedge all highly probable forecast foreign exchange risks through the use of standard derivatives.

In this example, Agency S has used AUD/USD call option to hedge the risk that exchange rates will deteriorate with an upfront premium of \$500 (represents the starting time value of the option<sup>12</sup> i.e. a cost of hedging). The option is considered to be a transaction related option as it relates to a purchase in 6 months at the maturity of the option. The changes in fair value have been included below for this example.

Time Period	FV of the option	FV hypothetical derivative	'Aligned' time value
ТО	Time value: \$500	Nil	\$480
	Intrinsic value: NIL (out of the money option)		
	Total fair value: \$500		
T1	Time Value: \$400	Nil	\$390
	Intrinsic Value: Nil	Time value is not a part of the hedge item	
	Total fair value: \$400		
T2 (assume settlement immediately after T2)	Time Value: NIL Intrinsic value \$32,000 Total fair value: \$32,000	\$31,500	NIL
Accounting Journals	to be recorded:		

<u>T0: Entering into the option:</u> Dr Derivative asset Cr Cash / Accounts payable	500	500
<u>T1: Record the change in fair value of the derivative</u> Dr Cost of Hedging reserve Dr P&L	90 10	

<sup>&</sup>lt;sup>12</sup> An **option's fair value** comprises the change in **time value** (the loss of value associated with the upfront premium paid to enter into the option – time value will always reduce to zero at the exercise date) **+ intrinsic value** (the extent to which the option is in the money)

Cr Derivative asset		100
The only change in the fair value of the derivative is a reduction in a still considered to be out of the money. Changes in 'aligned' time was separate reserve in equity. Difference between changes in 'aligned' value is recorded in profit or loss. <b>T2: Record the change in fair value of the derivative</b> Dr Cost of Hedging reserve Dr P&L	alue' are account	ed for in a
Cr Derivative asset		400
Dr Derivative asset Cr Cash Flow Hedge reserve Cr P&L (hedge ineffectiveness)	32,000	31,500 500
The derivative fair value has been increased to \$32,000. However, within the change in fair value of \$31,500 the time value component has reduced to NIL and there is \$500 of hedge ineffectiveness as the hypothetical derivative's change in fair value is less than the change in the actual derivative.		
T2: Record the receipt of the machinery settlement of the option Dr Property, plant and equipment Cr Cash USD\$1 million purchase price / spot rate on the date of purchase 0.78	1,282,000	1,282,000
Dr Cash Cr Derivative Asset To record receipt of cash from the option counterparty	32,000	32,000
Dr Cash flow hedge reserve Cr Cost of hedging reserve Cr Property, plant and equipment	31,500	480 31,020
In accordance with AASB 9 para 6.5.11(d)(i) the PPE carrying amou portion of changes in fair value of the hedging instrument held in the		

the amounts held in the cost of hedging reserve. [AASB 9.6.5.15(b)(i)]. After the impacts of hedge accounting, the PPE is recorded at \$1,250,980 which will be depreciated over the life of the machinery. If hedge accounting had not been applied, the PPE would have been recorded at \$1,282,000 and gains on the option would have been recognised

immediately in profit or loss.

#### Worked example of a fair value hedge

Relevant information: Agency Y has repaid all previous bank debt facilities and issued a cheaper 10 year \$80 million Australian fixed 4% coupon / interest bond. The risk management policy for Agency Y is that it is only able to fix up to 75% of its total interest exposure. In order to meet this policy, Agency Y has entered into a \$20 million receive fixed 4% pay floating BBSW + 0.5% margin to reduce its fixed rate exposure and designated this into a fair value hedge relationship. The hedge ratio for this relationship is 1:1 because the \$20 million interest rate swap is only designated against \$20 million of the fixed rate bond. Without the application of hedge accounting the loan would otherwise be accounted for as an amortised cost financial liability.

The changes in fair value have been included below and for the purpose of this example assume that there were no transaction costs attributable to the issuance of the bond:

Time period	Fair value of swap	Fair value of the bond	
T0 – inception of bond & swap	Nil	\$80 million	
T1	\$1 million asset	Bond cost \$80 million FV adjustment to \$20 hedging instrument \$1 million	g
T2	\$1.5 million asset	Bond Cost \$80 million FV adjustment to \$20 million hedging instrument \$1.4 million	
Accounting journals to be recorded:			
<u>T0: record the issuance of the</u> Dr Cash Cr Borrowings	<u>bond:</u>	80,000,000 80,000,000	0
T1: record the change in fair values of the hedging instrument and hedged item			
Dr Derivative asset Cr Profit or loss		1,000,000 1,000,000	0
Dr Profit or loss Cr Borrowings		1,000,000 1,000,000	0
The change in fair value of the \$20 million interest rate derivative nets to NIL in profit or loss with the change in fair value of the \$20 million of the bond that has been designated in the FVH i.e. the hedge relationship is 100% effective.			
<i>T2 record the change in fair ve</i> Dr Derivative asset Cr Profit or loss	alue	500,000 500,000	0
Dr Profit or loss Cr Borrowings		400,000 400,000	0
The change in the fair value of the \$20 million interest rate derivative does not perfectly offset the change in fair value of the \$20 million of the bond that has been designated in the FVH. The \$0.1 million net difference in interest expense is attributed to hedge ineffectiveness.			

A hedge of foreign currency risk of a firm commitment may be accounted for as either a fair value hedge or cash flow hedge under AASB 9. [AASB 9.6.5.4]

## Policy Requirement under TC20-08

TC20-08 mandates agencies should contact Treasury to determine the appropriate policy choice for such derivative contracts for hedges of firm commitments.

## 9. Further information and contacts

This section is mandatory for all publications.

For further Information or clarification on issues raised in this paper, please contact:

Accounting Policy, NSW Treasury Email: accpol@treasury.nsw.gov.au