

the inclusion of unrealised gains in profit or loss. The IASC postponed the implementation of this fair value model to the long-term but sought to join with national standard setters to develop an integrated and harmonised international accounting standard on financial instruments built on the principles of the discussion paper. As an interim measure, E62 was issued in June 1998 and subsequently finalised as IAS 39 in December 1998.

Subsequently, both IAS 32 and IAS 39 were revised and updated by the IASB for refinements, improvements, and convergence with the USA's Standards. IAS 32 was subsequently separated into two Standards, the disclosure requirements are covered in IFRS 7 *Financial Instruments: Disclosures*, whilst the presentation requirements are retained in IAS 32. It shall be noted that the former IAS 39 prescribed a mixed measurement model that made greater use of fair value in accounting for financial instruments, but required certain financial assets and most financial liabilities to be carried at cost or amortised cost.

Many users had expressed concerns that the requirements of IAS 39 were rule-based, complex and difficult to apply in practice. The IASB undertook a project to replace the entire IAS 39 in three phases covering: (a) classification and measurement of financial assets and financial liabilities, (b) impairment methodology and (c) hedge accounting. The first part of phase 1 was completed in November 2009 and it resulted in the issuance IFRS 9<sub>(2009)</sub> to provide guidance on the classification and measurement of financial assets only. The second part of phase 1 was completed in November 2010 and it resulted in a revised version of IFRS 9<sub>(2010)</sub> that included measurement of financial liabilities. In July 2014, the complete version of IFRS 9<sub>(2014)</sub> was issued and it now includes impairment methodology and hedge accounting, that is the completion of phases 2 and 3, respectively. The effective date of this new IFRS is for annual periods beginning on or after 1 January 2018 with earlier application permitted. In Malaysia, the MASB has issued MFRS 9<sub>(2014)</sub> which has identical requirements with IFRS 9<sub>(2014)</sub>.

## 1.2 Definitions

### 1.2.1 Financial Instruments

The Standard defines a *financial instrument* as “any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity”. A financial instrument exists so long as there is a contractual relationship arising from the instrument. The contractual relationship, which establishes the rights and obligations, may create exposure to risks and rewards, regardless of the extent of performance or the existence of any unconditional right to receive or obligation to pay any consideration.

The focus of definition is on contract or contractual relationship with clear economic consequences that the parties have little, if any, discretion to avoid, usually because the agreement is enforceable at law. The agreement establishes the rights and obligations of the counterparties. This is known as the “*rights and obligations*” approach used in accounting for financial instruments as contrast to the “*risks and rewards*” approach used in accounting for non-financial items like property, plant and equipment. The following example demonstrates the conceptual difference between these two approaches.

#### Example 1

XYZ Bhd's current financial year ends on 31 December 20x8. On 1 November 20x8, it entered into a contract with a manufacturer in United Kingdom to buy a ship at a price of £100m to be delivered on 30 April 20x9. On this date, the exchange rate was RM5.000 to £1.00.

On the same day (ie on 1 November 20x8) the company entered into a contract with a banker to purchase the £100m foreign currency six-month forward at a forward price of RM5.010 per £1.00. The forward currency contract is due for settlement on 30 April 20x9, the following year.

At 31 December 20x8, the pound appreciated and the exchange rate on that date was quoted at RM5.200 to £1.00.

#### Required:

- For the contract to buy the ship, explain how XYZ Bhd should account for it on contract date and at year end. What financial risk was the company exposed to on contract date?
- For the forward foreign currency contract, explain how XYZ should account for it using: (i) the traditional “risks and rewards” approach and (ii) the “rights and obligations” approach.

#### Solution 1

- On the contract date, the arrangement represents a commitment to buy a ship from the manufacturer. There is no cash outlay on contract date. Thus, on this date, there is neither a recognition of the ship (as property, plant and equipment) nor the associated liability. This is because for such executory contract, one of the counter-parties must have performed before “risks and rewards” are deemed to have been transferred. In this case, the risks and rewards are transferred only when the ship is delivered on 30 April 20x9 and the company accepts the ship. Thus, at year end, this contract shall only be disclosed as a capital commitment. On the contract date, the company is exposed to foreign currency risk in that if the pound were to appreciate, it would have to pay more for the ship that it has contracted to buy.

- (b) The contract with the banker to buy the foreign currency six-month forward also represents a firm commitment to buy the currency at the price which is fixed on contract date but the settlement is in six months' time. Following the traditional "risks and rewards" approach, there is no recognition of asset or liability since there is no cash settlement on the contract date. The forward foreign currency transaction would thus be "off-balance sheet" (unrecognised) using this approach. If it is unrecognised, the issue of valuing the financial instrument at year end would not arise.

However, following the "rights and obligations" approach, the forward currency contract is recognised as follows:

	RM'm
Dr Derivative asset — forward currency (right to receive £100m at RM5.01)	501
Cr Derivative liability (obligation to pay in RM)	(501)
On presentation = net derivative amount	<u>nil</u>

The derivative financial instrument is thus recognised at nil amount in the statement of financial position at the commitment date (1 November 20x8). The recognition of a nil amount is conceptually different from no recognition because the nil amount represents a measurement issue. Thus, at year end, the derivative is valued using the closing rate and this produces a gain on measurement. The amount in the statement of financial position would thus be as follows:

	RM'm
Derivative asset — forward currency (right to receive £100m at RM5.20)	520
Derivative liability (obligation to pay RM)	(501)
On presentation — net derivative amount	<u>19</u>

On 31 December 20x8, XYZ Bhd records the following journal entry:

	RM'm	RM'm
Dr Derivative asset in financial position	19	
Cr Fair value gain in profit or loss		<u>19</u>

## 1.2.2 Financial Assets

A *financial asset* is defined as "any asset that is:

- (a) cash;
- (b) an equity instrument of another entity;
- (c) a contractual right:
  - (i) to receive cash or another financial asset from another entity; or
  - (ii) to exchange financial assets or financial liabilities with another entity under terms which are potentially favourable to the entity; or
- (d) a contract that will or may be settled in the entity's own equity instruments and is:
  - (i) a non-derivative for which the entity is or may be obliged to receive a variable number of the entity's own equity instruments; or
  - (ii) a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed amount of the entity's own equity instruments. For this purpose, the entity's own equity instruments do not include instruments that are themselves contracts for the future receipt or delivery of the entity's own equity instruments."

Cash is a financial asset and it includes all legal tenders, bank deposits and foreign currency accounts. An investment in equity shares of another entity is a financial asset because when the investment is sold, it leads to receipt of cash. A trade receivable is also a financial asset because it represents a contractual right to receive cash from the debtor. A call option qualifies as a financial asset to the holder of the option because it gives the holder the right to buy a financial asset when the terms become favourable. Note that item (c)(ii) includes all derivatives of forwards, futures, swaps and options that are potentially favourable to the entity. In Example 1, the forward foreign currency contract at year end has become potentially favourable and thus recognised as a financial asset in the statement of financial position.

The definition of a financial asset includes contracts on an equity's own equity instruments. If it is a contract to repurchase or issue a fixed number of an entity's own equity instruments, the contract is an equity instrument (not a financial asset or a financial liability). For example, if an entity has issued 1,000,000 warrants or options that entitle the holder to buy 1,000,000 ordinary shares of the entity at a specified exercise price, the warrant or option contract is an equity instrument because the number of shares to be issued is fixed and settlement of the contract would result in the entity issuing 1,000,000 ordinary shares. Similarly, a contract to repurchase a fixed number of an entity's own equity instruments is an equity instrument because when settled it leads to the entity buying back a fixed number of its own equity instrument.

For a contract on an entity's own equity instrument to be a financial asset, the number of shares to be repurchased or issued must be variable, depending upon uncertain future or contingent conditions (such as when it is dependent on future commodity prices) and the contract has at the reporting date become favourable.

### 1.2.3 Financial Liabilities

A *financial liability* is defined as “any liability that is a contractual obligation:

- (a) to deliver cash or another financial asset to another entity;
- (b) to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity; or
- (c) a contract that will or may be settled in the entity's own equity instruments and it is:
  - (i) a non-derivative for which the entity is or may be obliged to deliver a variable number of the entity's own equity instruments; or
  - (ii) a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. For this purpose the entity's own equity instruments do not include instruments that are themselves contracts for the future receipt or delivery of the entity's own equity instruments.”

Examples of financial liabilities are trade and other payables representing amount payable in cash to creditors, term loans and bonds. But they may also include a call option written by an entity (the writer) because in such written options, the writer may have to exchange financial instruments with the holder of the call option under conditions that are potentially unfavourable. Again, as in the case of financial assets, item (b) included derivatives of forwards, futures, swaps and options written which have become potentially unfavourable at the reporting date. Similarly, a financial guarantee given to a bank to enable a related party to secure a loan from the bank represents a financial liability (a financial derivative) of the guarantor.

As in the case of financial assets, the definition of a financial liability is broadened to include contracts that are to be settled in a variable number of an entity's own equity instruments and the contract has become potentially unfavourable at the reporting date.

The Standard further clarifies that a “puttable instrument” that requires the issuer to pay in cash or another financial asset when put is a financial liability of the issuer. For example, if an entity issues a class of ordinary shares that carry a put option to a holder, that class of ordinary shares has a component of financial liability because when the holder exercises his right

and puts it, the entity cannot avoid the obligation to pay in cash to the holder. Similarly, for open ended trust funds where fund managers must stand ready to buy back units from their unit holders, the unit holders' fund is a financial liability because the arrangement contains a put option given to the unit holders who hold a right to sell their units back to their respective funds.

### 1.2.4 Equity Instruments

An *equity instrument* is defined as “any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities”. This definition encompasses not just ordinary equity shares of the parent shareholders, but it also includes equity belong to potential shareholders, such as option and warrant holders, preference shares that meet the definition of equity, and non-controlling interests in partly owned subsidiaries.

The Standard clarifies that for an instrument to be classified as equity, there must not exist any contractual obligation to deliver cash or another financial asset to holder of the instrument. Also, if the contract is to be settled in the entity's own equity instruments, for the contract to be classified as equity, it must not contain contingent settlement provisions where the settlement would result in a variable number of the entity's own equity instruments.

### 1.2.5 Derivatives

Derivatives are instruments that derive their values from changes in values of their underlying primary instruments. The Standard defines a *derivative* as a financial instrument or other contracts:

- (a) whose value changes in response to the change in a specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, a credit rating or credit index, or similar variable (sometimes called the “underlying”);
- (b) that requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in the market conditions and
- (c) that is settled at a future date.

Derivative instruments create rights and obligations that have the effect of transferring one or more of the financial risks inherent in an underlying primary financial instrument. They do not necessary result in a transfer of the underlying primary financial instrument on inception of the contract and such a transfer does not necessarily takes place on maturity of the derivative instrument.

Examples of derivative instruments are forward contracts, futures contracts, swap contracts, option contracts, hybrid or synthetic instruments that combine options in swap contracts or other host contracts, such as caps, floors or collars in debt instruments.

The Standard shall be applied to those contracts to buy or sell a non-financial item that can be settled net in cash or another financial instrument, or by exchanging financial instruments, as if the contracts were financial instruments, with the exception of contracts that were entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item in accordance with the entity's expected purchase, sale or usage requirements.

There are various ways in which a contract to buy or sell a non-financial item can be settled net in cash or another financial instrument or by exchanging financial instruments. These include:

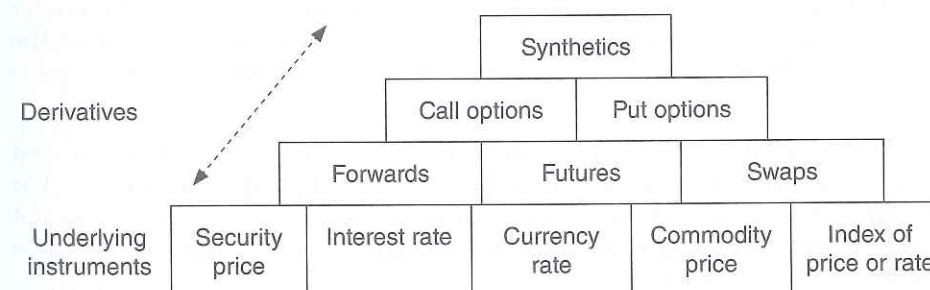
- when the terms of the contract permit either party to settle it net in cash or another financial instrument or by exchanging financial instruments;
- when the ability to settle net in cash or another financial instrument, or by exchanging financial instruments, is not explicit in the terms of the contract, but the entity has a practice of settling similar contracts net in cash or another financial instrument, or by exchanging financial instruments (whether with the counterparty, by entering into offsetting contracts or by selling the contract before it is exercised or lapses);
- when, for similar contracts, the entity has a practice of taking delivery of the underlying and selling it within a short period after delivery for the purpose of generating a profit from short-term price fluctuations in price or dealer's margin and
- when the non-financial item that is the subject of the contract is readily convertible into cash.

For example, if a manufacturing entity enters into a forward contract with a plantation entity to purchase 10 tonnes of CPO three-month forward, and it takes delivery of the CPO at the end of the three-month period for its usage in processing, the forward contract, though a commodity-based derivative, is not within the scope of derivative accounting in MFRS 9. Similarly, for a commodity producer that enters into forward contracts to sell its commodity forward and makes delivery of the commodity on maturity, such contracts are for the purpose of delivery of the commodity in accordance the entity's expected sale requirements and are thus outside the scope of MFRS 9. Note that although such forward contracts are outside the scope of MFRS 9, it may be necessary to assess whether any of such contracts has become onerous (where the eventual costs would exceed the benefits expected), and if so, recognise a provision in accordance with MFRS 137 *Provisions, Contingent Liabilities and Contingent Assets*.

For commodity-based contracts that are cash-settled, they shall be accounted for as if they were financial instruments. This would typically apply to most commodity futures contracts. For commodity forward contracts that an entity trades on and takes a short-term profit margin, they shall also be accounted as financial instruments within the scope of MFRS 9. For example, an entity enters into a forward contract to purchase a commodity with a counterparty. It takes delivery of the commodity and within a short period sells the commodity forward to another counterparty. In this case, both the forward contracts to buy and to sell the commodity shall be accounted for as financial instruments notwithstanding that there is gross physical delivery of the underlying commodity. The exception applies only if the gross physical delivery is for the purpose of meeting the entity's expected purchase, sale or usage requirements.

In some cases, it may not be clearly evident whether commodity forward contracts are for the purpose of meeting the entity's expected purchase, sale or usage requirements, or for the purpose of trading for short-term profit margin. For example, where an entity purchases (through forward contracts) and takes delivery of a commodity, uses some of it for processing and then sell the excess to another counterparty. In this case, it may be necessary to assess the past practice to determine whether there is a trading intention or a mere one-off excess. If past practice indicates that there has always been a "trading" element, then a portion of the contract would have to be identified and treated as a derivative within the scope of MFRS 9. Alternatively, if there are numerous such contracts, then each contract would have to be assessed to determine whether it is for usage purpose or for trading purpose. However, a mere one-off excess does not preclude the contract from being treated as for usage purpose.

The diagram below provides a simplified view of the building blocks to derivatives and financial instruments



## 1.3 Recognition

### 1.3.1 Initial Recognition

Initial recognition is concerned with when (the timing) a financial asset or financial liability is first recognised in the statement of financial position. MFRS 9 requires that an entity shall recognise a financial asset or a financial liability in its statement of financial position when, and only when, the entity becomes a party to the contractual provisions of the instruments [MFRS 9.3.1.1]. MPERS prescribes similar requirement for the initial recognition of a financial asset or a financial liability. The critical criterion for initial recognition of a financial asset or a financial liability is the date an entity enters into a contract and the contract establishes the rights and obligations of the counterparties.

With this requirement, an entity recognises at contract date, all of its contractual rights and obligations under derivatives in its statement of financial position as assets and liabilities, respectively, even if the net amount recognised initially is nil.

Examples of initial recognition are:

- (i) unconditional receivables and payables;
- (ii) firm commitments to buy or sell non-financial items but the contracts can be settled net in cash (eg commodity futures);
- (iii) a forward contract is recognised as an asset or a liability on commitment date rather than on the date on which settlement takes place;
- (iv) a futures contract or a swap contract is recognised on commitment date rather than on the dates of net cash settlements;
- (v) a financial guarantee issued is recognised as a derivative liability on issue date even if the amount recognised initially is nil (eg payment is assessed as not probable) and
- (vi) option contracts are recognised as assets or liabilities when the holder or writer, respectively, becomes a party to the contract. To the holder, the premium paid is an asset, whilst to the writer, the premium received is a liability.

Planned future transactions, no matter how likely, are not assets and liabilities of an entity because it has not become a party to a contract. For example, if an entity plans to take a loan in six months' time, it does not result in the loan being recognised yet because the entity has not become a party to a loan contract.

Most forward, futures and swap contracts do not require an initial net outlay as they are set at the money such that the fair values of the rights and

obligations are equal. Thus, their initial recognition will be a nil amount as it reflects the net fair value of the contracts. The entity may need to record separately (eg in a memorandum account) the notional or principal amount underlying each contract.

## 1.4 Classification of Financial Assets

### 1.4.1 Categories of Financial Assets and Classification Criteria

In the former MFRS 139, financial assets were classified in one of four measurement models, namely: (a) at fair value through profit or loss (FVPL), (b) held-to-maturity (HTM) assets, (c) loans and receivables (L&R) and (d) available-for-sale (AFS) assets. The classification then could be applied on an instrument-by-instrument basis, by an accounting policy election or by designation. An entity's business model objective for managing financial assets was not a primary consideration in the classification.

MFRS 9 uses a business model approach to classify a financial asset. The classification is based on how an entity manages its financial assets (ie its business model) and the contractual cash flow characteristics of the financial assets. In the final MFRS 9<sub>(2014)</sub>, a financial asset is classified in one of three measurement models:

- (a) at amortised cost (AC) model;
- (b) at fair value through other comprehensive income (FVOCI) model or
- (c) at fair value through profit or loss (FVPL) model.

An entity shall classify financial assets as subsequently measured at amortised cost, fair value through other comprehensive income or fair value through profit or loss on the *basis* of both:

- (a) the entity's business model for managing the financial assets and
- (b) the contractual cash flow characteristics of the financial asset [MFRS 9.4.1.1].

MFRS 9 prescribes two measurement bases for financial assets, that is at amortised cost basis or at fair value basis. The measurement and classification is premised on the difference between financial assets that have highly volatile cash flows (such as derivatives) or are part of a trading operation (debt or equity instruments held for trading) where fair value is argued as providing more useful information, as contrast to financial assets with principal amounts that are held for collection of contractual cash flows

of interest and principal, where amortised cost information is considered more useful.

#### 1.4.1.1 The Amortised Cost (AC) Model

This amortised cost model can only be applied to debt instruments with contractual cash flows of principal and interest on principal. It cannot be applied to equity instruments because there are no contractual cash flows of interest and principal. An entity's business model for managing financial assets shall be considered first, and the contractual cash flows considered only for financial assets measured at amortised cost because of its business model. Financial assets shall be measured at amortised cost if both the following conditions are met:

- the financial asset is held within a business model whose objective is to hold the asset in order to collect contractual cash flows and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on principal outstanding [MFRS 9.4.1.2].

The *amortised cost* of a financial asset or financial liability is the amount in which the financial asset or financial liability is measured at initial recognition minus principal repayment, plus or minus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, and minus any reduction (directly or through the use of an allowance account) for impairment or uncollectibility. The *effective interest method* is a method of calculating the amortised cost of a financial asset or financial liability and of allocating the interest income or interest expense over the relevant period. The *effective interest rate* is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability.

For a debt instrument, an entity that applies the amortised cost model would earn a constant rate of return or yield based on the effective interest rate determined at initial recognition. Changes in the fair value (or market price) of the instrument caused by changes in market interest rate are not recognised. In contrast, if the entity applies the fair value model for a debt instrument, the yield would consist of the coupon interest receivable plus or minus the change in the fair value of the instrument.

#### Example 2

On 1 January 20x1, Falcon Bhd purchases 1,000 units of a quoted bond at a price of RM875 per unit. The nominal value of the bond per unit is RM1,000. Transaction costs incurred amount to RM10,000. The bond pays a fixed coupon interest rate of 5% annually on 31 December with the last coupon interest payable on 31 December 20x5. The bond is redeemable by the issuer on 31 December 20x5 at a premium of 10% over its nominal value. At 31 December 20x1, the market price of the bond is RM940 per unit.

If Falcon Bhd applies the amortised cost model, the effective interest rate is determined, using the discounted cash flow model, as follows:

$$875,000 + 10,000 = \sum_{t=1}^5 \frac{50,000}{(1+r)^t} + \frac{1,100,000}{(1+r)^5}$$

where  $r$  = effective interest rate.

Using a spreadsheet,  $r$  is determined as follows:

Year	Cash flows
0	(885,000)
1	50,000
2	50,000
3	50,000
4	50,000
5	1,150,000
$r$	=irr(Y0:Y5) = 9.6563%

The amortised cost carrying amounts of the investment and interest income (calculated at the effective interest rate), in each year before redemption, are as follows:

Year	Opening carrying amount RM (a)	Interest income at 9.6563% RM (b) = (a) x 9.6563%	Coupon interest received RM (c)	Closing carrying amount RM (d) = (a) + (b) - (c)
1	885,000	85,458	(50,000)	920,458
2	920,458	88,882	(50,000)	959,340
3	959,340	92,637	(50,000)	1,001,977
4	1,001,977	96,754	(50,000)	1,048,731
5	1,048,731	101,269	(50,000)	1,100,000
Total		465,000	(250,000)	

**Example 3**

On 1 January 20x0, Setia Bhd purchases 100,000 units of a quoted bond as at its issue price of RM0.84837 per unit. The bond carries a coupon interest rate of 6% per annum and is due for redemption at its nominal value on 31 December 20x4. As at 1 January, 20x0, the date of the bond issue, the prevailing market interest rate for similar risk class bonds is 10%.

The market interest rate and the market price of the bond for each of the five financial years are as follows:

	Market interest rate (%)	Price per 1,000 units
Year ended 31 December 20x0	10	RM873.21
Year ended 31 December 20x1	16	RM775.41
Year ended 31 December 20x2	16	RM839.48
Year ended 31 December 20x3	5	RM1,009.52
Year ended 31 December 20x4 (maturity date)	5	RM1,000.00

**Required**

For each of the following bases, determine the carrying amount of investment in the quoted bond on initial recognition at 1 January 20x0, and subsequently on 31 December 20x0 to 31 December 20x4. Also, determine the income effect under each of the three bases:

- Setia Bhd classifies the bond at AC Model;
- Setia Bhd classifies the bond at FVPL Model and
- Setia Bhd classifies the bond at FVOCI Model

[Note: In this example, we have assumed a “wild” fluctuation in the market interest rate to demonstrate the differences among the three measurement models. In reality, benchmark market interest rate, such as the KLIBOR, moves only marginally over the short-term period, such as by 10–50 basis points.]

**Solution 3**

- Bond Investment — at amortised cost basis

The discount arising on purchase of the bond is RM100,000–RM84,837 = RM15,163. Under the amortised cost basis, this discount is recognised (through amortisation) as part of the interest income to produce a constant periodic rate of return of 10% per annum, the prevailing market interest rate at the date of purchase of the bond. Thus, if Setia Bhd holds the bond to maturity it will earn a yield of 10% per year, a historical rate of interest. The yield can be proved as follows:

$$RM84,837 = PVIFA_{(r,5)} \times RM6,000 + PVIF_{(r,5)} \times RM100,000$$

Using a spreadsheet programme, the yield,  $r$ , = 10.00%

Therefore, the carrying amount of the bond on initial recognition, subsequently, and the income effect would be as follows:

Year	Opening carrying amount RM (a)	Interest income at 10% RM (b) = 10% x (a)	Coupon interest received RM (c)	Closing carrying amount RM (d) = (a) + (b) + (c)
1	84,837	8,484	(6,000)	87,321
2	87,321	8,732	(6,000)	90,053
3	90,053	9,005	(6,000)	93,058
4	93,058	9,306	(6,000)	96,364
5	96,364	9,636	(6,000)	100,000
Sum		45,163	(30,000)	

The journal entries for the bond investment would be as follows:

At the time of the investment:

	RM	RM
Dr Bond investment	84,837	
Cr Bank account		84,837
— to record purchase of bond investment.		

At the end of Year 1, the interest income is recognised as follows:

Dr Bank account — coupon interest	6,000
Dr Bond investment — accretion in value	2,484
Cr Interest income	8,484
— to recognise interest income and accretion in bond investment.	

The journal entries for interest income and accretion in value for each of the following four years would be the same (the amounts based on the third column in the Schedule above). The interest yield each year based on the carrying amount outstanding will be 10% per year. The total interest income over five years is RM45,163, consisting of coupon interest received (RM30,000) and discount on the bond (RM15,163).

At the end of Year 5, the carrying amount of the bond will be equal to the redemption sum. On redemption, the following journal entry will be made:

Dr Bank account	100,000
Cr Bond investment	100,000
— to record receipt on bond redeemed by issuer.	

users of financial statements rely more on fair value information in their investment or lending decisions. For some types of financial assets, cost-based models are preferred. However, for financial liabilities, the amortised cost model is preferred, with limited exceptions for the use of the fair value model in some circumstances. In issuing IFRS 9 to replace IAS 39, the IASB did not push for greater use of the fair value model for financial instruments, focusing instead on a user-friendly business model approach and simplifying the accounting requirements in some areas. The measurement basis for financial instruments in the MPERS Framework is generally on the cost or amortised cost model, except for derivative instruments and some financial assets whose fair value can be measured reliably without undue cost or effort, which are measured at fair value.

## 2.2 Initial Measurement of Financial Assets and Financial liabilities

When a financial asset or a financial liability is first recognised in the statement of financial position, the issue is how it should be measured. Except for trade receivables, at initial recognition, an entity shall measure a financial asset or financial liability at its 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 that are directly attributable to the acquisition or issue of the financial asset or financial liability [MFRS 9.5.1.1]. For a financial asset or financial liability measured at fair value through profit or loss, the transaction costs shall be expensed when incurred.

The Standard defines *transaction costs* as “incremental costs that are directly attributable to the acquisition, issue or disposal of a financial asset or financial liability”. An incremental cost is one that would not have been incurred if the entity has not acquired, issued or disposed of the financial instrument. For example, commissions and fees paid to acquire a quoted investment are costs for that investment.

### Example 1

Jute Bhd acquires 1,000,000 ordinary shares of Lenting Bhd from the open market at a price of RM6 per share. Brokerage charges amount to RM50,000.

If the investment is classified as AC model or FVOCI model, Jute Bhd records the initial measurement at RM6,050,000, inclusive of transaction costs. If the investment is classified as FVPL model, the measurement on initial recognition is RM6,000,000. The transaction costs are recognised as an expense in profit or loss.

### 2.2.1 Difference on Initial Measurement

In the MFRSs, the fair value measurement is based on the notion of an exit price, that is price to sell an asset or transfer a liability in the marketplace. If a financial instrument is purchased from an active traded market, the price paid for the purchase, that is the entry price is normally equal to the fair value. However, if the instrument is not traded, the price paid for it may not be the same as fair value. In this case, an entity needs to estimate the fair value of the instrument on initial recognition, and there may be a gain or loss arising on the initial recognition. MPERS generally requires that the initial measurement of a financial instrument is the transaction price, which means that there will be no gain or loss on initial recognition.

In MFRS 9, if the fair value of the financial asset or financial liability at initial recognition differs from the transaction price, an entity shall apply paragraph B5.1.2A [MFRS 9.5.1.1A]. That paragraph clarifies that if the fair value is evidenced by a quoted price in an active market for an identical asset or liability (ie a Level 1 fair value measurement in the hierarchy in MFRS 13 *Fair Value Measurement*) or based on a valuation technique that uses only data from observable markets (ie a Level 2 fair value measurement), an entity shall recognise the difference between the fair value at initial recognition and the transaction price as a gain or loss in profit or loss.

#### Example 2

Entity P purchases 10,000,000 ordinary shares of a quoted company from a shareholder by a private arrangement at a price of RM3.60 per share. The quoted market price of the ordinary shares is RM3.50 per share. Entity P pays a premium because it is a “block” purchase. In this case, Entity P shall record the following journal on initial recognition:

	RM	RM
Dr Investment in quoted shares at fair value	35,000,000	
Dr Loss in profit or loss	1,000,000	
Cr Cash		36,000,000

In all other cases, the fair value shall be adjusted to defer the difference between fair value at initial recognition and the transaction price. After initial recognition, the entity shall recognise that deferred difference as a gain or loss only to the extent that it arises from a change in a factor (including time) that market participants would take into account when pricing the asset or liability. This includes accretion of interest over time.



**Example 3**

An entity purchases a private debt instrument for RM831,000 inclusive of RM1,000 transaction costs. The debt instrument carries a nominal value of RM1,000,000 that pays a fixed interest of 4% per year for five years. The debt instrument is redeemable at the nominal value at the end of Year 5. The entity determines that the market interest rate that reflects the credit risk of the issuer is 8%. The entity measures the fair value of the debt instrument as follows:

$$FV = \sum_{t=1}^5 \frac{40,000}{(1.08)^t} + \frac{1,000,000}{(1.08)^5}$$

Using an excel programme, the fair value is determined as follows:

Year	RM
1	40,000
2	40,000
3	40,000
4	40,000
5	1,040,000
NPV	840,292

The entity records the investment at fair value plus the transaction costs, as follows:

	RM	RM
Dr Investment in private debt (840,292 + 1,000)	841,292	
Cr Cash		831,000
Cr Gain on initial measurement deferred		10,292

The entity defers the gain and presents the investment at RM831,000. The entity may opt to recognise the gain on initial measurement by amortisation over the period of the investment, for example on a straight-line basis, over the five-year period of the investment.

For an unquoted equity investment carried at FVPL or designated at FVOCI and which is measured using unobservable inputs (a Level 3 measurement), any difference between the transaction price and the fair value that is deferred on initial recognition is included in the calculation of the change in fair value of the investment in a subsequent period. The change in fair value is recognised in profit or loss (or in OCI for an equity investment designated at FVOCI) and the gain or loss would include any deferred difference on initial recognition.

**Example 4**

An entity purchases 1,000,000 ordinary shares of an unquoted company for a cash consideration of RM3,500,000. Transaction costs amount to RM10,000. Using unobservable inputs from the marketplace, the entity estimates that the fair value of the ordinary shares is RM3 per share. The equity investment is measured at FVPL. The entity records the following journal entries:

	RM	RM
Dr Investment in equity shares, at fair value (1,000,000 x 3)	3,000,000	
Dr Loss on investment deferred	500,000	
Cr Cash		3,500,000
—to record investment at fair value and defer loss.		
Dr Expense in profit or loss	10,000	
Cr Cash		10,000

—to recognise transaction costs in profit or loss.

The investment is initially carried in the statement of financial position at RM3,500,000 (inclusive of the deferred loss). If, at the end of Year 1, the fair value of the unquoted investment (measured using the same valuation technique applied when it was first acquired) is RM3.10 per share, the journal entry for the fair value change would be as follows:

	RM	RM
Dr Fair value loss in profit or loss	400,000	
Cr Investment in equity shares		400,000

The investment at the end of Year 1 is carried at its fair value of RM3,100,000 and there is no longer a need to separate the loss deferred.

**2.2.2 An Exception for Trade Receivables**

The Standard makes an exception for trade receivables in that at initial recognition, an entity shall measure trade receivables that do not have a significant financing component (determined in accordance with MFRS 15 *Revenue from Contracts with Customers*) at their transaction price (as defined in MFRS 15) rather than at fair value [MFRS 9.5.1.3]. In MFRS 15, a trade receivable for which payment is expected to be received within 12 months does not contain a significant financing component. In this case, the initial measurement of the trade receivable is the transaction price for revenue recognition, which is normally the amount invoiced to a customer, net of any goods and services tax that will be collected on behalf of and payable to the Royal Custom Authority.

In some revenue transactions, an entity may provide an incentive for early payment, such as a discount from the invoiced price if payment is made within a specified credit period. In MFRS 15, the discount offered is a variable consideration and it shall be included in the measurement of the transaction price using one of two methods: a probability-weighted outcome method or the most likely outcome method, depending on which method better predicts the consideration to which the entity is entitled to.

**Example 5**

On 1 January 20x9, Entity M sells goods to a customer for an invoiced amount of RM100,000. The terms of payment provide for the customer a 1% discount from the invoiced price if payment is made within 60 days. Otherwise, the full amount is due after 90 days.

Based on its past experience, Entity M concludes that the most likely outcome is that the customer will avail the discount. In this case, the transaction price is measured at RM99,000, which factors in the discount. It records the following journal entry:

	RM	RM
Dr Trade receivable	100,000	
Cr Revenue		99,000
Cr Discount for early payment		1,000
When payment is made within 60 days:		
Dr Cash	99,000	
Dr Discount for early payment	1,000	
Cr Trade receivable		100,000

If, for some reasons, the customer did not avail the discount and the payment was received after 90 days, the journal entry would be as follows:

	RM	RM
Dr Cash	100,000	
Dr Discount for early payment	1,000	
Cr Trade receivable		100,000
Cr Revenue — (as an adjustment to revenue)		1,000

**2.2.3 Effect of Transaction Costs**

The effect of including transaction costs in the initial measurement of a financial asset, other than those at measured at FVPL, is a reduction in the effective rate of return on the investment. For example, in the case

of investment in a bond, the transaction costs will increase the initial carrying amount of the bond and thereby reduce the effective interest rate.

**Example 6**

Hati Bhd acquires 1,000,000 units of ABC bond from the open market at a price of RM0.85 per unit. The bond pays a coupon rate of 6% at the end of each year. It is redeemable at its nominal value of RM1 each at the end of Year 5. Transaction costs amount to RM8,500.

Hati Bhd's business model is to collect contractual cash flows and it classifies the bond as measured at AC model.

**Required:**

- Calculate the initial carrying of investment and the yield if transaction costs are not included;
- Calculate the initial carrying amount of investment and the yield if transaction costs are included and
- Under the amortised cost effective interest method, prepare an amortisation schedule to show the carrying amount and the effective interest amount in each year before redemption.

**Solution 6**

- The initial carrying amount is RM850,000, excluding the transaction costs. Using the IRR formula, the effective yield is determined as follows:

$$850,000 = \sum_{t=1}^5 \frac{60,000}{(1+r)^t} + \frac{1,000,000}{(1+r)^5}$$

The yield,  $r$ , is determined at 9.952%

- The initial carrying amount is RM858,500, including transaction costs. Using the IRR formula, the effective yield is determined as follows:

$$858,500 = \sum_{t=1}^5 \frac{60,000}{(1+r)^t} + \frac{1,000,000}{(1+r)^5}$$

The yield,  $r$ , is determined at 9.705%

This yield is lower than the one determined without the transaction costs. The net effect of including the transaction costs in the calculation of the effective interest rate is that the transaction costs are deferred and amortised as part of the interest income calculation over the period of the bond investment.

## (c) Bond Investment — Amortised Cost Effective Interest Method

Year	Opening balance RM (a)	Interest income at 9.705% RM (b) = a x 9.705%	Coupon interest received RM (c)	Closing balance RM (d) = a + b + c
1	858,500	83,314	(60,000)	881,814
2	881,814	85,577	(60,000)	907,391
3	907,391	88,059	(60,000)	935,449
4	935,449	90,782	(60,000)	966,231
5	966,231	93,769	(60,000)	1,000,000
Total		<u>441,500</u>	<u>(300,000)</u>	

The journal entries would be as follows:

	RM	RM
On initial recognition:		
Dr Bond investment (850,000 + 8,500)	858,500	
Cr Bank account		858,500

At the end of Year 1:

Dr Bank account	60,000	
Dr Bond Investment	23,314	
Cr Interest income		83,314

The journal entries for the interest income in each of the following four years would be the same, except that the amount increases each year to reflect the effective yield of 9.705%. At the end of Year 5, the carrying amount is exactly equal to the redemption amount. Thus, upon redemption, the journal entries would be:

	RM	RM
Dr Bank account	1,000,000	
Cr Bond investment		1,000,000

## 2.2.4 Initial Measurement in MPERS

For basic financial instruments, MPERS S11.13 requires that when a financial asset or financial liability is recognised initially, an entity shall measure it at the transaction price (including transaction costs except in the initial measurement of financial assets and liabilities that are measured at fair value through profit or loss) unless the arrangement constitutes, in effect, a financing transaction. This measurement applies to all basic financial assets and financial liabilities, such as trade receivables, trade payables, loans and borrowings, and investments in debt and equity instruments.

### Example 7

A private entity acquires 1,000,000 units of unquoted bond of an issuer at a price of RM0.90 per unit. Transaction costs amount to RM10,000. The bond investment is measured at amortised cost model. In this case, the entity records the initial investment at RM910,000, that is the entry price of RM900,000 plus the transaction costs of RM10,000, without having to subject the measurement to a fair value test.

A financing transaction may take place in connection with the sale of goods or services, for example, if payment is deferred beyond normal business terms or is financed at a rate of interest that is not a market rate. If the arrangement constitutes a financing transaction, the entity shall measure the financial asset or financial liability at the present value of the future payments discounted at a market rate of interest for a similar debt instrument.

### Example 8

Entity B sells goods to a customer for an invoiced amount of RM1,000,000. The normal credit term for such sales is three months from the date of sales. For this transaction, Entity B has given the customer a term of 24 months. The current market interest rate of the customer is 6.5%. In this case, the sales arrangement constitutes a financing transaction. Entity B shall measure the trade receivable at the present value of the expected payment at the end of 24 months, that is  $RM1,000,000/(1.065)^2 = RM881,659$ . Entity B records the following at the date of sales:

	RM	RM
Dr Trade receivable — gross amount	1,000,000	
Cr Sales revenue		881,659
Cr Deferred interest income — offset with gross amount		118,341

At the end of 12 months, Entity B recognises interest income, as follows:

	RM	RM
Dr Deferred interest income	57,308	
Cr Interest income (6.5% x 881,659)		57,308

At the end of 24 months and when the cash is received, Entity B records the following:

	RM	RM
Dr Cash	1,000,000	
Dr Deferred interest income	61,033	
Cr Trade receivable		1,000,000
Cr Interest income (6.5% x 938,967)		61,033

For non-basic financial instruments, MPERS S12.7 requires that when a financial asset or financial liability is recognised initially, an entity shall measure it at its fair value, which is normally the transaction price. Non-basic financial instruments in MPERS S12 include derivative instruments, financial guarantee contracts and complex instruments, such as convertible securities. Their fair values are normally based on the transacted prices, such as derivative instruments of forwards, futures and swaps which are transacted with counter-party bankers or in an exchange-traded futures market. In such cases, it is not necessary for a private entity to perform a separate fair value measurement at initial recognition.

## 2.3 Subsequent Measurement of Financial Assets

After initial recognition, an entity applying MFRS 9 shall measure a financial asset in accordance with the measurement model applied at:

- amortised cost (AC model);
- fair value through other comprehensive income (FVOCI model) or
- fair value through profit or loss (FVPL model) [MFRS 9.5.2.1].

### 2.3.1 Amortised Cost and Effective Interest Method (AC Model)

Under the amortised cost effective interest method, interest revenue shall be calculated by using the effective interest method. This shall be calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for:

- Purchased or originated credit-impaired financial assets. For those financial assets, the entity shall apply the credit-adjusted effective interest rate to the amortised cost of the financial asset from initial recognition.
- Financial assets that are not purchased or originated credit-impaired financial assets but subsequently have become credit-impaired financial assets. For those financial assets, the entity shall apply the effective interest rate to the amortised cost of the financial asset in subsequent reporting periods [MFRS 9.5.4.1].

An entity that, in a reporting period, calculates interest revenue by applying the effective interest method to the amortised cost of a financial asset in accordance with paragraph 5.4.1(b), shall, in subsequent reporting periods, calculate the interest revenue by applying the effective interest rate to the gross carrying amount if the credit risk on the financial instrument improves so that the financial asset is no longer credit-impaired and the improvement can be related objectively to an event occurring after the requirements in

paragraph 5.4.1(b) were applied (such as an improvement in the borrower's credit rating) [MFRS 9.5.4.2].

The *amortised cost* of a financial asset or financial liability is the amount in which the financial asset or financial liability is measured at initial recognition minus principal repayment, plus or minus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, and minus any reduction (directly or through the use of an allowance account) for impairment or uncollectibility.

The *effective interest method* is a method of calculating the amortised cost of a financial asset or financial liability and of allocating the interest income or interest expense over the relevant period.

The *effective interest rate* (EIR) is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability. MFRS 9 requires that when calculating the effective interest rate, an entity shall estimate cash flows considering all contractual terms of the financial instrument (such as prepayment, call and similar options) but shall not consider future credit losses. The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs and all other premiums or discounts.

#### Example 9

On 1 January 20x1, Falcon Bhd purchases 1,000 units of a quoted bond at a price of RM875 per unit. The nominal value of the bond per unit is RM1,000. Transaction costs incurred amount to RM10,000. The bond pays a fixed coupon interest rate of 5% annually on 31 December with the last coupon interest payable on 31 December 20x5. The bond is redeemable by the issuer on 31 December 20x5 at a premium of 10% over its nominal value.

#### Required

Determine the effective interest rate and the carrying of the investment in each year under the amortised cost model.

#### Solution 9

The effective interest rate is determined as follows:

$$875,000 + 10,000 = \sum_{t=1}^5 \frac{50,000}{(1+r)^t} + \frac{1,100,000}{(1+r)^5}$$

where r = effective interest rate (EIR).

thereafter interest payable will be reset to the then prevailing market interest rate at an interval of every five years.

The prevailing market rate for similar risk class bond at the time of the bond issue is about 9.3%. Transactions costs and fees paid amount to RM25,000.

The market interest rates at the end of each five-year interval are as follows:

At end of Year 5:	9.5%
At end of Year 10:	10.0%
At end of Year 15:	8.5%

### Required

Determine the effective interest rate for the first five years and show the carrying amount of the investment under the amortised cost model. Also, determine the effective interest rate and the carrying amount of the investment in each of the subsequent five-year intervals.

### Solution 12

The discount on purchase, transaction costs and fees paid relate only to the first five years (before the interest payable is reset to market interest rate). Thus, they shall be included in the calculation of the effective interest for the first five years and amortised over that period only.

The effective interest rate for the first five years is determined as follows:

$$950,000 + 25,000 = \sum_{t=1}^5 \frac{80,000}{(1+r)^t} + \frac{1,000,000}{(1+r)^5}$$

where the effective interest rate, "r", is calculated at 8.6367%.

The carrying amount of the investment at the end of each year and the interest income in each year would be as follows:

Year	Opening carrying amount RM	Effective interest at 8.6367% RM	Coupon interest received RM	Closing carrying amount RM
1	975,000	84,208	(80,000)	979,208
2	979,208	84,571	(80,000)	983,779
3	983,779	84,966	(80,000)	988,745
4	988,745	85,394	(80,000)	994,139
5	994,139	85,861	(80,000)	1,000,000
Total		<u>425,000</u>	<u>(400,000)</u>	

At the end of Year 5, the interest payable is reset to market interest rate of 9.5%. By the end of Year 5, the discount on the bond, transaction costs and fees would have been fully amortised. Thus, the effective interest rate for the next five years would

be equal to the market interest rate at the date of the reset, that is 9.5%. As this rate is equal to the coupon interest receivable, the carrying amount of the investment will be at RM1,000,000, as shown below.

Year	Opening carrying amount RM	Effective interest at 9.5% RM	Coupon interest received RM	Closing carrying amount RM
6	1,000,000	95,000	(95,000)	1,000,000
7	1,000,000	95,000	(95,000)	1,000,000
8	1,000,000	95,000	(95,000)	1,000,000
9	1,000,000	95,000	(95,000)	1,000,000
10	1,000,000	95,000	(95,000)	1,000,000
Total		<u>475,000</u>	<u>(475,000)</u>	

Similarly, when the interest payable in each of the next five-year intervals is reset to market interest rate, the effective interest rate will be adjusted to the market rate at the date of each reset. Thus, the effective interest rates for Years 11–15 and for Years 16–20 would be 10% and 8.5%, respectively. The carrying amount of the investment before redemption remains at RM1,000,000 in each year.

In the above example, where the interest payable is reset to market interest rate at intervals of every five years (ie fixed for a period and then floats to market interest rate at reset dates), the effective interest rate under the amortised cost model is recalculated at each reset date and remains at that rate for the intervening period until the next reset date. During the intervening period before the next reset date, the effective interest rate is not adjusted for changes in market interest rates.

However, for a fully floating rate debt instrument, periodic re-estimation of cash flows to reflect movements in market interest rates alters the effective interest rate. The effective interest rate of such an instrument in each period would be equal to the current market interest rate in that period. If a floating rate financial instrument is recognised initially at an amount equal to the principal receivable or payable on maturity, re-estimating the future interest payments normally has no significant effect on the carrying amount of the financial asset or financial liability. For such a financial asset or a financial liability, and if there is no change to the credit risk, the amortised cost carrying amount will be approximately equal to its fair value.

For example, floating rate loans and receivables that are originated by an entity would have effective interest rates that are approximately equal to their, respectively, current market rates. Similarly, if an entity borrows from

a bank on the floating rate basis, its effective interest rate on the borrowings in each period would be equal to its current market interest in each period.

### 2.3.2 Fair Value through Other Comprehensive Income (FVOCI Model)

In MFRS 9, a financial asset shall be measured at fair value through other comprehensive income if both of the following conditions are met:

- The asset is held within a business model in which assets are managed both in order to collect contractual cash flows and for sale.
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Under this measurement category, a “hybrid” treatment is required for the fair value changes whereby interest income, impairment losses, exchange gains or losses and any gain or loss on derecognition would be recognised in profit or loss; all other gains or losses would be recognised in OCI.

Interest income and impairment losses would be computed and recognised in the same manner as for financial assets measured on amortised cost. This means that interest income needs to be recognised in profit or loss using the amortised cost effective interest method, whilst test for impairment losses would need to use the original effective interest for discounting revised cash flows of the debt instruments measured in this category. Exchange gain or loss on a monetary debt instrument classified in this category is recognised in profit or loss in accordance with MFRS 121 *The Effects of Changes in Foreign Exchange Rates*.

An entity would need to firstly determine the total fair value change of the financial asset in each period. The difference between total change in fair value and the sum of the gains and losses for the other components recognised in profit or loss, is the fair value change component that is recognised in OCI. However, the cumulative gain or loss recognised in OCI would be reclassified to profit or loss when the financial asset is derecognised.

These requirements would have the same effects as the treatments for debt instruments classified as available-for-sale under the former MFRS 139's requirements. Some are of the view that this would be re-introducing the AFS category, albeit for debt instruments only, a category which has been removed in the original MFRS 9<sub>(2009)</sub> to simplify the accounting requirements for financial assets. However, the IASB believes that this hybrid treatment would result in amortised cost information being provided in profit or loss and fair value information being provided in the statement of financial position.

#### Example 13

On 31 December 20x0, Entity P purchases a quoted debt instrument for RM8,800,000, paying a transaction cost of RM200,000. The debt instrument pays a coupon interest of 5% on the nominal value of RM10,000,000 at the end of each financial year on 31 December and is redeemable at its nominal amount on 31 December 20x5.

On 31 December 20x0, market interest rate of similar risk-class instruments is 8.01%. At the end of each subsequent financial year, the market interest rate and the market value of the debt instrument are as follows:

	Market interest rate	Market Value RM'000
At 31 December 20x1	8%	9,006
At 31 December 20x2	7%	9,475
At 31 December 20x3	6%	9,817
At 31 December 20x4	7%	9,813
At 31 December 20x5 (on maturity)	8%	10,000

Entity P's business model is to hold and manage the debt instrument both to collect contractual cash flows of principal and interest and for sale.

Under MFRS 9, Entity P would need to classify the debt instrument as measured at fair value through OCI category. It needs to first determine the interest income using the amortised cost effective interest method, as follows:

The effective interest rate is calculated as follows:

$$8,800,000 + 200,000 = \sum_{t=1}^5 \frac{500,000}{(1+r)^t} + \frac{10,000,000}{(1+r)^5}$$

where the effective interest rate,  $r$ , is 7.47%.

The effective interest rate can be derived directly by using the excel program as follows:

Year	Cash Flows RM'000
0	(8,800)
0	(200)
0	(9,000)
1	500
2	500
3	500
4	500
5	10,500
IRR	7.47%

The amortised cost carrying amount and interest income recognised in profit or loss in each year would be as follows:

Year	Opening balance	Interest Income at 7.47%	Coupon received	Closing balance
	RM'000	RM'000	RM'000	RM'000
1	9,000	672	(500)	9,172
2	9,172	685	(500)	9,357
3	9,357	699	(500)	9,556
4	9,556	714	(500)	9,770
5	9,770	730	(500)	10,000
		3,500	(2,500)	

The debt instrument is measured at fair value on initial recognition plus transaction cost (because it is not measured at FVPL) and at the end of each reporting period. The difference between the total fair value change and interest income is recognised in OCI, as follows:

Year	Opening balance at fair value	Interest income at amortised cost method	Coupon received	Adjusted balance	Closing balance at fair value	Gain or loss to OCI	Cumulative OCI gain or loss
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
1	9,000	672	(500)	9,172	9,006	(166)	(166)
2	9,006	685	(500)	9,191	9,475	284	118
3	9,475	699	(500)	9,674	9,817	143	260
4	9,817	714	(500)	10,030	9,813	(217)	43
5	9,813	730	(500)	10,043	10,000	(43)	(0)
		3,500	(2,500)			(0)	

For example, at the end of Year 1, the total fair value change is an increase of RM6,000 (ie 9,006,000–9,000,000). The amounts recognised in profit or loss and in OCI can be analysed as follows:

	RM'000
Interest income recognised in profit or loss	672
Less: Coupon interest received	(500)
Accretion in amortised cost	<u>172</u>
Other fair value change recognised in OCI	(166)
Total change in fair value	<u>6</u>

The journal entries at the end of Year 1 would be as follows:

	RM'000	RM'000
Dr Cash — coupon interest received	500	
Dr Debt instrument — total change in fair value	6	
Dr Fair value loss in OCI	166	
Cr Interest income in profit or loss		672

Similarly, the journal entries at the end of Year 2 would be as follows:

	RM'000	RM'000
Dr Cash — coupon interest received	500	
Dr Debt instrument — total fair value change	469	
Cr Interest income in profit or loss		685
Cr Fair value gain in OCI		284

At the end of Year 3, the debt instrument has a carrying fair value of RM9,817,000 and related cumulative OCI gain of RM260,000. If on this date, the debt instrument is sold at its fair value, the journal entries would be as follows:

	RM'000	RM'000
Dr Cash — proceeds from sale	9,817	
Dr OCI — reclassification adjustment	260	
Cr Debt instrument — derecognised		9,817
Cr Gain on derecognition in profit or loss		260

### 2.3.3 Fair Value through Profit or Loss (FVPL Model)

This measurement category applies to all stand-alone derivatives, equity investments, and debt instruments held for trading. The presumption implied in the Standard is that fair value can be reliably measured for all financial assets classified as FVOCI or FVPL investments. For example, investments in quoted equity shares and trading in derivative instruments would satisfy this presumption as market prices or quotations are readily available. In MFRS 9, the presumption is also applied for unquoted equity investments (the cost exception measurement for unquoted equity investments in the former MFRS 139 has been removed in MFRS 9).

MFRS 13 *Fair Value Measurement* provides guidance on the fair value measurement considerations. In a hierarchy of guidance, the fair value of a financial asset shall be measured as follows:

- (a) If the asset is quoted in an active market, the published price quotation is the best evidence of fair value. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis.
- (b) If the asset is not quoted in an active market, the fair value shall be determined by a valuation technique. Valuation techniques that can be used are those that are already well established and which rely on inputs that are observable from the marketplace. In the absence of observable inputs from the markets, an entity uses assumptions and inputs (including internally developed assumptions) that are reasonable and supportable in the valuation. These techniques may include discounted cash flow models (eg when valuing private debt instruments), option pricing models (eg when valuing options) price-earnings valuation model (eg when valuing private equity shares).

In a FVPL model, an entity recognises changes in fair value of a financial asset as gains and losses in profit or loss. For a debt instrument, any interest received is also recognised as income in profit or loss. The interest income recognised is based on the coupon interest rather than the effective interest, that is there is no calculation of the effective interest rate for a debt instrument measured at FVPL. For an equity instrument, dividend is recognised as income when a shareholder's right to receive dividend is established, which is usually the date when the dividend payment by an investee has been appropriately authorised.

For an unquoted debt instrument measured at FVPL, an entity would need to measure the fair value of the investment at the end of each reporting period. The entity shall use the contractual cash flows over the remaining term of the instrument and discount those cash flows at the *current market interest* of an equivalent risk-class instrument. The market interest rate of an issuer may change over time due to changes in the reference benchmark interest rate (such as the KLIBOR or government bond rate with the same maturity period) and the credit risk of the issuer.

#### Example 14

On 31 December 20x1, Entity M purchases an unquoted bond of a private entity at its nominal value of RM1,000,000. Transaction cost amount to RM2,000. On this date, the private entity has a credit rating of "ABB" and its equivalent market interest rate is 7% (comprising a five-year risk-free rate of 4% and a credit spread of 3%). The bond pays a coupon interest rate of 7% annually at 31 December and it matures on 31 December 20x6. Entity M classifies the bond as measured at fair value through profit or loss.

At 31 December 20x2, the credit risk of the private entity increases by 0.5% (or 50 basis points) and a four-year risk-free rate is 4.2%. The equivalent market interest rate of the bond is 7.7%.

At 31 December 20x3, both the credit spread and risk-free rate decline. The equivalent market interest rate of the bond on this date is 6.9%.

#### Required

Explain and show the accounting requirements for the bond investment above.

#### Solution 14

On 31 December 20x1, the bond is recognised at its fair value, which in this case, is the transaction price of RM1,000,000 since the bond pays a coupon rate that is equal to the market interest rate of 7%. Entity M records the following journal entries:

Initial recognition (31 December 20x1):

	RM	RM
Dr Bond investment at FVPL	1,000,000	
Dr Expense in profit or loss	2,000	
Cr Cash		1,002,000

At the end of the first year (31 December 20x2):

	RM	RM
Dr Cash	70,000	
Cr Interest income		70,000

Entity M measures the fair value of the bond by discounting the remaining contractual cash flows at the current market interest rate of 7.7%, as follows:

$$FV = \sum_{t=1}^4 \frac{70,000}{(1.077)^t} + \frac{1,000,000}{(1.077)^4} = \text{RM}976,659$$

	RM	RM
Dr Fair value loss on bond in profit or loss	23,341	
Cr Bond investment at FVPL (1,000,000–976,659)		23,341

At the end of the second year (31 December 20x3)

	RM	RM
Dr Cash	70,000	
Cr Interest income		70,000

Entity M measures the fair value of the bond using the current market interest rate of 6.9%, as follows:



$$FV = \sum_{t=1}^3 \frac{70,000}{(1.069)^t} + \frac{1,000,000}{(1.069)^4} = \text{RM}1,002,629$$

	RM	RM
Dr Bond investment at FVPL (1,002,629–976,659)	25,970	
Cr Fair value gain on bond in profit or loss		25,970

Similarly, for an investment in unquoted equity shares that is measured at FVPL, an entity needs to estimate the fair value at the end of each reporting period. The entity shall apply one or more of the accepted share valuation methods or techniques to estimate that fair value, such as the net assets method, the earnings method and the discounted cash flow method (See Chapter 4 for details of these valuation methods). The methods may each provide different estimate of fair value. The entity shall consistently use the same method(s) for subsequent measurement of the unquoted investment. It also needs to factor in the risk of unquoted shares (compared to quoted shares) and the lack of liquidity for unquoted shares.

#### Example 15

Entity K is an investment entity. It measures all its financial assets at FVPL. On 1 January 20x8, it purchases 1,000,000 ordinary shares of a private entity at RM3 per share. Transaction cost amounts to RM5,000. Entity K determines that the RM3 transaction price represents the fair value, consistent with a valuation technique based on the price-earnings ratio of 15 times, earnings of 30 sen per share and a one-third discount for unquoted shares (ie  $15 \times \frac{2}{3} \times 30$  sen).

During the current year ended 31 December 20x8, the private entity pays a dividend of 20 sen per share to its shareholders. On 31 December 20x8, the average price-earnings ratio of quoted companies in the same industry as the private entity is 18 times. The equity earnings of the private entity have increased during the year and it is estimated that a reasonable maintainable earning is 35 sen per share.

#### Required

Explain and show the accounting requirements for the equity investment above.

#### Solution 15

On 1 January 20x8, Entity K records the equity investment at its fair value, which in this case, is the transaction price, as follows:

	RM	RM
On 1 January 20x8 Initial Recognition:		
Dr Equity investment at FVPL (1,000,000 x 3)	3,000,000	
Dr Expense in profit or loss	5,000	
Cr Cash		3,005,000
Dividend received for the year:		
Dr Cash (1,000,000 x .20)	200,000	
Cr Dividend income in profit or loss		200,000

At the end of the year (31 December 20x8), Entity K measures the fair value of the equity investment using the same valuation technique used in the initial measurement, as follows:

Fair value per share =  $18 \times \frac{2}{3} \times 35$  sen = RM4 per share.

The total fair value of the investment is RM4,000,000. Entity K records the fair value gain as follows:

	RM	RM
Dr Equity investment at FVPL (RM1 x 1,000,000)	1,000,000	
Cr Fair value gain on equity investment in profit or loss		1,000,000

For derivative contracts that are purchased from the exchange futures markets or from dealers' or brokers' markets, the fair values are based on the contracted or quoted prices. If the quoted prices are not available, an entity needs to estimate the fair values using well-established valuation techniques that are available in the finance literature, for example, valuation of forwards, swaps and option contracts.

#### Example 16

On 30 September 20x8, Entity Y enters into a six-forward contract to purchase 1,000,000 Genting shares from an investor at a contract forward price of RM8,854,377. On this date, Genting shares are quoted on the stock exchange at RM8.75 per share. The six-month government treasury bills provide a yield of 3.9% per annum. Genting shares have an annualized dividend yield of 1.5%. Entity Y and the investor agree to strike the forward price, using the following calculation:

Forward price = 1,000,000 shares × [RM8.75(1 + .039 – 0.015)<sup>.5</sup>] = RM8,854,377

Entity Y's financial year ends on 31 December 20x8. On this date, Genting shares are quoted at RM9 per share. The three-month government treasury bills provide a yield of 4%.

On 31 March 20x9, the settlement date, Genting shares are quoted at RM9.20 per share. The forward contract is settled by physical delivery and paid in cash.

In a perfect hedge, the risk is eliminated completely (100%). However, in practice, it is rare to find hedges that are perfect. Broadly, hedges can be categorised into “short hedges” and “long hedges”.

A *short hedge* involves taking a short or sell position in the hedging instrument (eg a short position in a futures contract or a forward contract). The aim of a short hedge is to protect a fall in the price of the underlying hedged item. A short hedge is appropriate when an entity already owns an asset and it wants to protect the risk that the price of the asset will fall in the future.

For example, an entity owns some CPO inventory that it knows will be sold within the next three months. To protect against the risk of a decline in the spot CPO price in the future when the inventory is sold, it can take a short position in the CPO futures before the inventory is sold. If the price of the CPO declines when the inventory is sold, the loss on sale is offset by the gain on the short hedge. Similarly, a short hedge can also be used to protect a decline in the price of a future transaction (forecast transaction). For example, a CPO producer may not own the inventory now but it knows that there will be inventory at some time in the future (its forecast production). It can therefore take a short position in a hedge to protect a risk of decline in the future CPO price when a sale is transacted.

A *long hedge* involves taking a long or buy position in the hedging instrument. The aim of a long hedge is to protect a rise in the price of the underlying hedged item. A long hedge is appropriate when an entity knows that it will have to purchase a certain asset and wants to lock in the price today.

For example, a CPO user knows that it will require a certain amount of CPO inventory for its usage in production. It may take a long position in the CPO futures now (lock in the price now) to protect against a rise in the CPO price when the inventory is purchased in the future.

### 5.1.3 What Is Hedge Accounting?

Hedge accounting attempts to match the gain or loss of a hedged item (an item exposed to risk) with the corresponding loss or gain of its hedging instrument. It is thus concerned with the process of matching the offsetting effects of the hedging relationships in profit or loss. For example, if the gain or loss of the hedged item is taken to profit or loss, the loss or gain of the hedging instrument is also taken to profit or loss to provide the offsetting effect. However, if the hedge relates to a firm commitment to buy a property, plant and equipment, then the gain or loss of the hedging instrument is recognised in other comprehensive income and deferred in equity (a hedge reserve) until the property, plant or equipment is acquired. The hedge reserve

may then be released as a basis adjustment to the cost of the property, plant and equipment, or by reclassification adjustments to profit or loss based on the depreciation charged in profit or loss.

The ultimate aim in hedge accounting is to realise a “matched” timing of recognition of gains and losses (the offsetting effects) in profit or loss between the hedged item and the corresponding hedging instrument. The main concern is to reduce the volatility in performance reporting. This is usually accomplished in two ways:

- (a) a change in the fair value of the hedging instrument is recognised in profit or loss when it occurs, and at the same time, a corresponding but opposite change in the value attributable to the hedged risk of the hedged item is recognised in profit or loss (this is known as fair value hedge accounting) and
- (b) a change in the fair value of the hedging instrument is initially recognised in other comprehensive income and retained in a hedge reserve (in equity). When the corresponding hedged item affects profit or loss, the hedge reserve is recycled (reclassified) to profit or loss to realise the matching or offsetting effect in profit or loss (this is known as cash flow hedge accounting).

## 5.2 The New Hedge Accounting Model in MFRS 9

Compared to the former MFRS 139, MFRS 9 introduces a new hedge accounting model that is more principle-based and that aligns the hedge accounting requirements more closely to an entity's risk management activities. The new model specifies that the objective of hedge accounting is to represent, in the financial statements, the effect of an entity's risk management activities that use financial instruments to manage exposures arising from particular risks 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 fair value in OCI) [MFRS 9.6.1.1].

This is a principle-based rather than a rule-based approach that focuses on an entity's risk management. The new hedge accounting model uses the risk management activities of an entity as the foundation for deciding what qualifies (or what does not qualify) for hedge accounting. The aim of the model is to faithfully represent, in the financial statements, the impact of the risk management activities of an entity.

## 5.3 Qualifying Hedging Instruments

Hedging instruments are typically derivative instruments, such as forwards, futures, swaps and options that can provide off-setting effects to gain or loss of hedged items exposed to risks. The former MFRS 139 restricted

certain instruments for qualifying as hedging instruments even when such financial instruments provided an effective offset for risks managed under common risk management strategies. The key restriction in the former MFRS 139 was the disallowance of designating non-derivative instruments as hedging instruments for hedges of risks other than foreign currency risk.

MFRS 9 prescribes that a derivative measured at fair value through profit or loss may be designated as a hedging instrument, except for some written put options [MFRS 9.6.2.1]. It also specifies that a non-derivative financial asset or a non-derivative financial liability measured at fair value through profit or loss may be designated as a hedging instrument unless it is a financial liability designated at fair value through profit or loss for which the amount of its change in fair value that is attributable to changes in the credit risk of that liability is presented in OCI. For a hedge of foreign currency risk, the foreign currency risk component of a non-derivative financial asset or a non-derivative financial liability may be designated as a hedging instrument provided that it is not an investment in an equity instrument for which an entity has elected to present changes in fair value in OCI [MFRS 9.6.2.2].

The new hedge accounting model thus expands the types of eligible financial instruments to allow non-derivative financial assets and liabilities at fair value through profit or loss to be designated as hedging instruments, that is to acknowledge their effect also for accounting purposes. As in the former MFRS 139, MFRS 9 requires that for hedge accounting purposes, only contracts with a party external to the reporting entity (ie external to the group or individual entity that is being reported on) can be designated as hedging instruments [MFRS 9.6.2.3].

The other key change in the new hedge accounting model is the removal of the distinction between combinations of stand-alone written and purchased options and those combined in one contract. In the new model, the eligibility of an option contract to be designated as a hedging instrument should depend on its economic substance and risk management objectives rather than its legal form alone. Consequently a stand-alone written option would be eligible for designation as a hedging instrument if it is jointly designated with other hedging instruments so that, in combination, they do not result in a net written option.

### 5.3.1 Designation of Hedging Instruments

The condition for designation of a hedging instrument in MFRS 9 is similar to those in the former MFRS 139 in that a qualifying instrument must be designated in its entirety as a hedging instrument. For example, an option contract may be designated as a hedging instrument in its entirety without separating the intrinsic value and the time value of the option. Similarly, a forward contract may be designated as a hedging instrument in its entirety without separating the forward element and the spot element in the forward contract.

However, MFRS 9 provides for the following exceptions (non-mandatory but permitted):

- (a) Separating the intrinsic value and time value of an option contract and designating as the hedging instrument only the change in intrinsic value of an option and not the change in its time value.
- (b) Separating the forward element and the spot element of a forward contract and designating as the hedging instrument only the change in the value of the spot element of a forward contract and not the forward element; similarly, the foreign currency basis spread may be separated and excluded from the designation of a financial instrument as the hedging instrument.
- (c) A proportion of the entire hedging instrument, such as 50% of the nominal amount, may be designated as the hedging instrument in a hedging relationship. However, a hedging instrument may not be designated for a part of its change in fair value that results from only a portion of the time period during which the hedging instrument remains outstanding [MFRS 9.6.2.4].

MFRS 9 further allows an entity to view a combination, and jointly designate as the hedging instrument, any combination of derivatives (or a proportion of them) and non-derivatives (or a proportion of them), including those circumstances in which the risk or risks arising from some hedging instruments offset those arising from others [MFRS 9.6.2.5]. However, it clarifies that a derivative instrument that combines a written put option and a purchased option (for example, an interest rate collar) does not qualify as a hedging instrument if it is, in effect, a net written option at the date designation. Similarly, two or more instruments (or proportions of them) may be jointly designated as the hedging instrument only if, in combination, they are not, in effect, a net written put option at the date of designation [MFRS 9.6.2.6].

## 5.4 Qualifying Hedged Items

Like the former MFRS 139, MFRS 9 prescribes that a hedged item can be a recognised asset or liability, an unrecognised firm commitment, a forecast transaction or a net investment in a foreign operation. The hedged item can be:

- (a) a single item (such as a loan denominated in a foreign currency that is exposed to currency risk) or
- (b) a group of items (that share the same risk, such as a portfolio of bonds that share similar interest rate risk).

A hedged item can also be a component of such an item or group of items [MFRS 9.6.3.1]. The other conditions for hedged items are similar to those in the former MFRS 139, and these include measurement reliability of the hedged item, forecast transaction must be highly probable and that involves transaction with external parties, etc.

The term “highly probable” implies a significantly high degree of probability for the occurrence of a forecast transaction. An element of judgement is required when assessing whether a forecast transaction is highly probable to occur. This may be based on similar transactions in the past and supported with recent evidence that chances of the occurrence are high. For example, if an entity’s past sales in the first quarter of a financial year average about US\$30m, designating forecast sales of US\$30m or less for the first quarter would be more probable to occur than designating forecast sales of more than US\$30m. Similarly, designating forecast transactions for a shorter period, such as purchases for one year, would be more probable to occur than designating forecast transactions for a longer period, such as forecast purchases for two years.

A key change introduced in the new model is to align the treatment of financial and non-financial items to allow the hedging of risk components in non-financial items, when they are separately identifiable and reliably measurable. This change will enable such hedges to be reflected in the designation used for hedge accounting, thereby enabling preparers to better reflect and users to better understand the actual risk management activity and the effectiveness of hedging strategies. Also, groups of items (including net positions) would be eligible for hedge accounting.

#### 5.4.1 Designation of Hedged Items

MFRS 9 allows an entity to designate an item in its entirety or a component of an item as the hedged item in a hedging relationship. An entire item comprises all changes in cash flows or fair value of an item. A component comprises less than the entire fair value change or cash flow variability of an item. In that case, an entity may designate only the following types of components (including combinations) as hedged items:

- (a) Only changes in the cash flows or fair value of an item attributable to a specific risk or risks (risk component), provided that, based on an assessment within the context of the particular market structure, the risk component is separately identifiable and reliably measurable. Risk components include a designation of only changes in the cash flows or the fair value of a hedged item above or below a specified price or other variable (a one-sided risk).
- (b) One or more selected contractual cash flows.
- (c) Components of a nominal amount, that is a specified part of the amount of an item [MFRS 9.6.3.7].

The items identified for hedging shall be specifically designated. This requires, among others, specifying the portion of the cash flows or fair value, the amount of the currency or other variables, and the specific financial risks being hedged. For example, in a cash flow hedge of forecast sales that are expected to occur in the following year, the entity must specify the amount

(for example, the first US\$10,000,000 sales in the first quarter) of the forecast sales to be hedged rather than specifying a percentage of the forecast sales to be hedged.

### 5.5 Qualifying Criteria for Hedge Accounting

A hedging relationship qualifies for hedge accounting only if all of the following criteria are met:

- (a) The hedging relationship consists only of eligible hedging instruments and eligible hedged items.
- (b) At the inception of the hedging relationship there is formal designation and documentation of the hedging relationship and the entity’s risk management objective and strategy for undertaking the hedge. That documentation shall include identification of the hedging instrument, the hedge item, the nature of the risk being hedged and how the entity will assess whether the hedging relationship meets the hedge effectiveness requirements (including its analysis of the sources of hedge ineffectiveness and how it determines the hedge ratio).
- (c) The hedging relationship meets all of the following hedge effectiveness requirements:
  - (i) there is an economic relationship between the hedged item and the hedging instruments;
  - (ii) the effect of credit risk does not dominate the value of changes that result from that economic relationship;
  - (iii) the hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the entity actually hedges and the quantity of the hedging instrument that the entity actually uses to hedge that quantity of hedged item. However, that designation shall not reflect an imbalance between the weightings of the hedged item and hedging instruments that would create hedge ineffectiveness (irrespective of whether recognised or not) that could result in an accounting outcome that would be inconsistent with the purpose of hedge accounting [MFRS 9.6.4.1].

#### 5.5.1 Hedge Effectiveness

Hedge effectiveness is the extent to which changes in the fair value or the cash flows of the hedging instrument offset changes in the fair value or the cash flows of the hedged item (for example, when the hedged item is a risk component, the relevant change in fair value or cash flows of an item is the one that is attributable to the hedged risk). Hedge ineffectiveness is the extent to which the changes in the fair value or the cash flows of the hedging instrument are greater or less than those on the hedged item [MFRS 9.B6.4.1].

For example, an entity has a short position of 1,000 tonnes in the hedged forecast CPO it needs to purchase. It takes a long position of 1,100 tonnes in the hedging CPO futures contracts. The hedge ratio in this case is 1.10.

In accordance with the hedge effectiveness requirements, the hedge ratio of the hedging relationship must be the same as that resulting from the quantity of the hedged item that the entity actually hedges and the quantity of the hedging instrument that the entity actually uses to hedge that quantity of hedged item. Hence, if an entity hedges less than 100% of the exposure on an item, such as 85%, it shall designate the hedging relationship using a hedge ratio that is the same as that resulting from 85% of the exposure and the quantity of the hedging instrument that the entity actually uses to hedge those 85%. Similarly, if, for example, an entity hedges an exposure using a nominal amount of 40 units of a financial instrument, it shall designate the hedging relationship using a hedge ratio that is the same as that resulting from that quantity of 40 units (ie the entity must not use a hedge ratio based on a higher quantity of units that it might hold in total or a lower quantity of units) and the quantity of the hedged item that it actually hedges with those 40 units [MFRS 9.B6.4.9].

However, the designation of the hedging relationship using the same hedge ratio as that resulting from the quantities of the hedged item and the hedging instrument that the entity actually uses shall not reflect an imbalance between the weightings of the hedged item and the hedging instrument that would in turn create hedge ineffectiveness (irrespective of whether recognised or not) that could result in an accounting outcome that would be inconsistent with the purpose of hedge accounting. Hence, for the purpose of designating a hedging relationship, an entity must adjust the hedge ratio that results from the quantities of the hedged item and the hedging instrument that the entity actually uses if that is needed to avoid such an imbalance [MFRS 9.B6.4.10].

Examples of relevant considerations in assessing whether an accounting outcome is inconsistent with the purpose of hedge accounting are:

- (a) whether the intended hedge ratio is established to avoid recognising hedge ineffectiveness for cash flow hedges, or to achieve fair value hedge adjustments for more hedged items with the aim of increasing the use of fair value accounting, but without offsetting fair value changes of the hedging instrument and
- (b) whether there is a commercial reason for the particular weightings of the hedged item and the hedging instrument, even though that creates hedge ineffectiveness. For example, an entity enters into and designates a quantity of the hedging instrument that is not the quantity that it determined as the best hedge of the hedged item because the standard volume of the hedging instruments does not allow it to enter into that

exact quantity of hedging instrument (a “lot size issue”). An example is an entity that hedges 100 tonnes of coffee purchases with standard coffee futures contracts that have a contract size of 37,500 lbs (pounds). The entity could only use either five or six contracts (equivalent to 85.0 and 102.1 tonnes respectively) to hedge the purchase volume of 100 tonnes. In that case, the entity designates the hedging relationship using the hedge ratio that results from the number of coffee futures contracts that it actually uses, because the hedge ineffectiveness resulting from the mismatch in the weightings of the hedged item and the hedging instrument would not result in an accounting outcome that is inconsistent with the purpose of hedge accounting [MFRS 9.B6.4.11].

A hedge is regarded as highly effective only if both the following conditions are met:

- (a) *Prospective Testing* — At the inception of the hedge and on an on-going basis (as a minimum, at each subsequent reporting periods, such as quarterly), the hedge is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk during the period for which the hedge is designated. Such an expectation can be demonstrated in various ways, including comparison of past changes of the hedged item with past changes of the hedging instrument, demonstrating a high statistical correlation between the fair value or cash flows of the hedged item and those of the hedging instrument. Other than a one to one comparison, the entity may choose a hedge ratio to improve the effectiveness of the hedge.
- (b) *Retrospective Testing* — The actual results of the hedge offsetting effects are within the targeted effectiveness specified by the entity (the former MFRS 139 specified a range of 80–125% offsetting effect). MFRS 9 does not have this 80–125% rule for hedge effectiveness. An entity determines its own hedge effectiveness in its risk management objectives and strategies. It may continue to use the 80–125% as an internal guide for assessing hedge effectiveness.

For example, if the loss on the hedging instrument is RM2,000 whilst the gain on the hedged item is RM2,400, the offset can be measured by  $2,000/2,400$ , which is 83.3%, or  $2,400/2,000$ , which is 120%. In this example, the offsetting effect falls with the range of 80%–125% and would be concluded as highly effective.

## 5.6 Hedging Relationships

Like the former MFRS 139, MFRS 9 identifies three types of hedging relationships, as follows:

- (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.

- (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.
- (c) *Hedge of a net investment in a foreign operation* as defined in MFRS 121 [MFRS 9.6.5.2].

If the hedged item is an equity instrument for which an entity has elected to present changes in fair value in other comprehensive income, the hedged exposure must be one that could affect other comprehensive income. In that case, and only in that case, the recognised hedge ineffectiveness is presented in other comprehensive income [MFRS 9.6.5.3].

Unrecognised firm commitments, such as commitments to buy inventories, property, plant and equipment, or other non-financial assets, may expose the entity to price risk or currency risk. For a hedge of the foreign currency risk of a firm commitment, the Standard allows a choice of accounting for it as a fair value hedge or a cash flow hedge. All other hedges of firm commitments shall be accounted for as fair value hedges.

## 5.7 Fair Value Hedge Accounting

### 5.7.1 The Accounting Treatments

MFRS 9 prescribes that as long as a fair value hedge meets the qualifying criteria for hedge accounting, the hedging relationship shall be accounted for as follows:

- (a) The gain or loss on the hedging instrument shall be recognised in profit or loss (or other comprehensive income, if the hedging instrument hedges an equity instrument for which an entity has elected to present changes in fair value in other comprehensive income).
- (b) The hedging gain or loss on the hedged item shall adjust the carrying amount of the hedged item (if applicable) and be recognised in profit or loss. If the hedged item is a financial asset (or a component thereof) that is measured at fair value through other comprehensive income, the hedging gain or loss on the hedged item shall be recognised in profit or loss. However, if the hedged item is an equity instrument for which an entity has elected to present changes in fair value in other comprehensive income, those amounts shall remain in other comprehensive income. When a hedged item is an unrecognised firm commitment (or a component thereof), the cumulative change in the fair value of the hedged item subsequent to its

designation is recognised as an asset or a liability with a corresponding gain or loss recognised in profit or loss [MFRS 9.6.5.8].

When a hedged item in a fair value hedge is a firm commitment (or a component thereof) to acquire an asset or assume a liability, the initial carrying amount of the asset or the liability that results from the entity meeting the firm commitment is adjusted to include the cumulative change in the fair value of the hedged item that was recognised in the statement of financial position [MFRS 9.6.5.9].

Any adjustment arising from paragraph 6.5.8(b) shall be amortised to profit or loss if the hedged item is a financial instrument (or a component thereof) measured at amortised cost. Amortisation may begin as soon as an adjustment exists and shall begin no later than when the hedged item ceases to be adjusted for hedging gains and losses. The amortisation is based on a recalculated effective interest rate at the date that amortisation begins. In the case of a financial asset (or a component thereof) that is a hedged item and that is measured at fair value through other comprehensive income, amortisation applies in the same manner but to the amount that represents the cumulative gain or loss previously recognised instead of by adjusting the carrying amount [MFRS 9.6.5.10].

### 5.7.2 Fair Value Hedge of Price Risk of Quoted Equity Investments

The Standard does not provide requirements for hedging of equity investments measured at fair value through profit or loss. Hedging of such financial assets would generally be inconsistent with an entity's business model objective of investing in quoted equity instruments for trading purposes to exploit opportunities for price volatility. Hedging would simply neutralise the volatility. In any case, hedge accounting requirement is redundant because both the gain or loss of a hedging instrument and the corresponding loss or gain on the equity investments would be recognised in profit or loss when they arise.

Hedge accounting would be applicable to designated equity investments measured at fair value through other comprehensive income. In this case, the offsetting effects of the hedging relationship shall also be recognised in other comprehensive income. The cumulative amount recognised in OCI shall not be reclassified to profit or loss even if the equity investment is subsequently derecognised (for example, on disposal).

#### Example 1

At the beginning of quarter 1, Hams Bhd purchases 50,000 ordinary shares of LDP Bhd at a price of RM5 per share inclusive of transaction cost. The investment is designated as an equity investment and changes in fair value are recognised

in other comprehensive income and remain in a fair value reserve. At the end of quarter 1, the closing price of LDP's ordinary shares is RM6.

At the beginning of quarter 2, to protect the value of its investment in LDP shares, Hams Bhd purchases 100,000 put options that give it the right to sell LDP shares at RM6 per share within six months. The price paid for the stock options is RM0.47 per option. The hedged risk in this case is the market price risk of the LDP shares.

At the end of quarter 2, the LDP's ordinary shares are quoted at RM5.20 whilst the put options are quoted at RM0.85.

At the end of quarter 3, LDP ordinary shares are quoted at RM6.80 whilst the put options expire out of money at nil value.

At the beginning of quarter 4, Hams Bhd decides not to continue with the hedge. The closing price of LDP's ordinary shares at the end of quarter 4 is RM7.00. The investment is subsequently sold at RM7.00 per share.

#### Required

Show the journal entries for each quarter, including hedge accounting, where applicable.

#### Solution 1

	RM	RM
Quarter 1:		
Dr Equity investment — LDP shares	250,000	
Cr Bank account		250,000
<i>– to record purchase of LDP shares.</i>		
Dr Equity investment — LDP shares	50,000	
Cr Other comprehensive income — fair value reserve		50,000
<i>– to fair value equity investment and recognise gain in OCI.</i>		
Quarter 2:		
Dr Put options on LDP shares	47,000	
Cr Bank account		47,000
<i>– to record purchase of put options and designate them as a hedging instrument.</i>		
Dr Loss on hedged item in OCI — fair value reserve	40,000	
Cr Equity investment — LDP shares		40,000
<i>– to recognise loss on hedged item in OCI</i>		
Dr Put options on LDP shares	38,000	
Cr Gain on hedging instrument in OCI — fair value reserve		38,000
<i>– to fair value and recognise gain of hedging instrument in OCI.</i>		

(Note: Hedge effectiveness is 40,000/38,000 which is 105% or 38,000/40,000, which is 95%, and concluded as highly effective)

#### Quarter 3:

Dr Equity investment — LDP shares	80,000	
Cr Gain on hedge item in OCI — fair value reserve		80,000
<i>– to record gain on hedged item in OCI.</i>		
Dr Loss on hedging instrument in OCI — fair value reserve	85,000	
Cr Put options on LDP shares		85,000
<i>– to record loss and derecognise the hedging instrument.</i>		

(Note: hedge effectiveness is 80,000/85,000, which is 94.1% or 85,000/80,000, which is 106% and concluded as highly effective)

#### Quarter 4:

Dr Equity investment — LDP shares	10,000	
Cr Other comprehensive income — fair value reserve		10,000
<i>– to fair value equity investment and recognise gain in OCI.</i>		

#### Summary of the hedging relationship:

	Equity Investment RM	Hedging instrument RM	Other comprehensive income RM
Quarter 1			
Beginning	250,000	–	
Other comprehensive income	50,000		50,000
Quarter 2	300,000	47,000	
Loss in profit or loss	(40,000)	–	(40,000)
Gain in profit or loss	–	38,000	38,000
Quarter 3	260,000	85,000	
Gain in profit or loss	80,000	–	80,000
Loss in profit or loss	–	(85,000)	(85,000)
Quarter 4	340,000		
Other comprehensive income	10,000		10,000
Balance c/forward	350,000	–	53,000

On disposal, the journal entries would be as follows:

	RM	RM
Dr Cash	350,000	
Cr Equity investment — LDP shares		350,000
<i>– To derecognise equity investment on disposal.</i>		
Dr Fair value reserve in OCI	53,000	
Cr Retained profits		53,000
<i>– To transfer fair value reserve to retained profits.</i>		

### 5.7.3 Fair Value Hedge of Debt Instruments Measured at FVOCI

For a debt instrument mandatorily measured at FVOCI in accordance with an entity's business model objective, the fair value gain or loss of the hedging instrument and the corresponding loss or gain on the underlying hedged item shall be recognised in profit or loss during the term of the hedge that is designated as a fair value hedge.

#### Example 2

Entity K purchases a debt instrument at a cost of RM96,000,000 (inclusive of transaction costs). In accordance with its business model objective, it classifies the instrument as measured at fair value through OCI. The instrument pays a fixed coupon interest rate of 5% and is redeemable at its nominal value of RM100,000,000 at the end of Year 5.

The effective interest rate of the debt instrument is determined at 5.9482%. Entity K produces an amortisation schedule to determine the effective interest income as follows:

Year	Opening balance	Effective interest at 5.9482%	Coupon interest	Closing balance
	RM'000	RM'000	RM'000	RM'000
1	96,000	5,710	(5,000)	96,710
2	96,710	5,753	(5,000)	97,463
3	97,463	5,797	(5,000)	98,260
4	98,260	5,845	(5,000)	99,105
5	99,105	5,895	(5,000)	100,000
Total		<u>29,000</u>	<u>(25,000)</u>	

Market interest rate of the debt instrument changes over the five-year term and the fair value of the debt instrument (based on the market price) at the end of each year is as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5
Market interest rate	7%	5%	6%	7%	8%
Fair value (RM'000)	93,226	94,751	96,384	98,131	100,000

At the beginning of Year 2, Entity K uses a KLIBOR derivative to hedge the price risk of the debt instrument. At the end of Year 2, the derivative has a fair value loss of RM770,000. Entity K rolls over the hedging instrument in Year 3 and the derivative has a fair value loss of RM830,000. The derivative expires at the end of Year 3 and Entity K discontinues the hedge accounting thereafter.

#### Required

Explain and show how the fair value hedge accounting shall be applied in the above case.

#### Solution 2

In the absence of hedge accounting, the debt instrument would be measured at fair value through OCI as follows:

Year	Opening balance	Effective interest	coupon interest	Adjusted amount	Fair value gain / (loss)	Market price
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
1	96,000	5,710	(5,000)	96,710	(3,484)	93,226
2	93,226	5,753	(5,000)	93,979	773	94,751
3	94,751	5,797	(5,000)	95,548	836	96,384
4	96,384	5,845	(5,000)	97,229	902	98,131
5	98,131	5,895	(5,000)	99,026	974	100,000
Total		29,000	(25,000)		—	

The journal entry at the end of Year 1 (no hedging) would be as follows:

	RM'000	RM'000
Dr Debt investment	710	
Dr Cash account	5,000	
Cr Interest income		5,710
<i>—to recognise interest income at effective interest rate.</i>		
Dr Fair value loss in OCI	3,484	
Cr Debt investment		3,484
<i>—to recognise fair value change in OCI.</i>		
At the end of Year 2 (with fair value hedge):		
Dr Debt investment	753	
Dr Cash account	5,000	
Cr Interest income		5,753
<i>—to recognise interest income at effective interest rate.</i>		
Dr Debt investment	773	
Cr Fair value gain in profit or loss		773
<i>—to recognise fair value gain of hedged item in profit or loss.</i>		
Dr Fair value loss in profit or loss	770	
Cr Derivative liability		770



<i>—to recognise fair value loss of hedging instrument in profit or loss.</i>		
At the end of Year 3 (with fair value hedge):		
Dr Debt investment	797	
Dr Cash account	5,000	
Cr Interest income		5,797
<i>—to recognise interest income at effective interest rate.</i>		
Dr Debt investment	836	
Cr Fair value gain in profit or loss		836
<i>—to recognise fair value gain of hedged item in profit or loss.</i>		
Dr Fair value loss in profit or loss	830	
Cr Derivative liability		830
<i>—to recognise fair value loss of hedging instrument in profit or loss.</i>		
At the end of Year 4 (no hedging):		
Dr Debt instrument	845	
Dr Cash account	5,000	
Cr Interest income		5,845
<i>—to recognise interest income at effective interest rate.</i>		
Dr Debt investment	902	
Cr Fair value gain in OCI		902
<i>—to recognise fair value gain in OCI.</i>		
At the end of Year 5 (no hedging):		
Dr Debt investment	895	
Dr Cash	5,000	
Cr Interest income		5,895
<i>—to recognise interest income at effective interest rate.</i>		
Dr Debt investment	974	
Cr Fair value gain in OCI		974
<i>—to recognise fair value gain in OCI.</i>		
Upon redemption on maturity:		
Dr Cash account	100,000	
Cr Debt investment		100,000
<i>—to recognise cash received on redemption.</i>		
Dr Loss on derecognition in profit or loss	1,608	
Cr Reclassification adjustment in OCI		1,608
<i>—to reclassify fair value reserve to profit of loss.</i>		

#### 5.7.4 Fair Value Hedge of Debt Instruments Measured at Amortised Cost

For a fair value hedge of a debt instrument measured at amortised cost, the offsetting effect is to adjust the carrying amount of the debt instrument. The adjustment to the carrying amount is restricted to the gain or loss on the hedged item attributable to the hedged risk. Changes in the fair value attributable to the other risks not hedged are not adjusted. For example, in the case of a fair value hedge of a fixed rate debt instrument, it is necessary to specifically identify whether the hedge is for interest rate risk only, credit risk or credit spread only, or both risks. Thus, if the hedge is specifically for benchmark interest rate risk, the adjustment to the carrying amount of the hedged item shall be restricted to the change in fair value caused by the change in the benchmark interest rate and not to other risks, such as a change in credit rating of the issuer.

For example, a debt asset is carried at the amortised cost amount of RM73.5m. It was acquired at the time when the market interest rate was 8%. This rate consisted of KLIBOR of 5% plus credit spread of 3%. The current KLIBOR is at 6%. However, due to deterioration in the credit rating of the issuer, the credit spread is now 3.5%. The current market interest rate on this L&R asset is therefore 9.5%. The current fair value of the debt asset is measured, using a discount rate of 9.5%, at RM69.5m. If there has been no change in the credit rating, the present value of the cash flows of the debt asset, using a discount rate of 9% would have been RM70.8m.

The total change in value of the debt asset (from amortised cost to fair value) can be analysed as follows:

Total change in value	RM73.5m–RM69.5m	RM4.0m
Due to interest rate risk	RM73.5m–RM70.8m	RM2.7m
Due to credit spread	RM70.8m–RM69.5m	RM1.3m

Assume that a hedging instrument is used to hedge the KLIBOR interest rate risk only and it results in a hedged gain of RM2.7m. The journal entries for the fair value hedge would be as follows:

Dr Derivative asset	RM2.7 m	
Cr Hedge gain in profit or loss		RM2.7 m
<i>—to fair value hedging instrument and recognise gain in income.</i>		
Dr Loss on hedged item in profit or loss	RM2.7 m	
Cr Debt asset (as an adjustment)		RM2.7 m
<i>—to adjust loss of hedged item attributable to the hedged risk.</i>		

After the adjustment, the debt asset would be carried at the following amount:

	RM'm
Amortised cost amount	73.5
Debt asset adjustment	(2.7)
Net carrying amount	<u>70.8</u>

Note that the carrying amount is not equal to the fair value of the debt asset because it does not include changes in fair value attributable to the credit spread, which is not hedged.

The Standard requires that any adjustment to the carrying amount of a hedged item for which the effective interest method is used shall be amortised to profit or loss. Amortisation may begin as soon as an adjustment exists and shall begin no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged. The adjustment is based on a recalculated effective interest rate at the date amortisation begins.

### Example 3

At the beginning of Year 1, Halia Bhd acquires a long-term receivable for RM68,058,000. The instrument pays no interest but is redeemable at RM100,000,000 at the end of Year 5. Halia classifies the receivable as debt asset at amortised cost model and uses the effective interest method to account for the instrument. The effective interest on this instrument is 8%. It produces an amortisation schedule, as follows:

Year	Opening carrying amount RM'000	Interest income at 8% RM'000	Closing carrying amount RM'000
1	68,058	5,445	73,503
2	73,503	5,880	79,383
3	79,383	6,531	85,733
4	85,733	6,859	92,592
5	92,592	7,407	100,000
Sum		<u>31,942</u>	

In Year 1, Halia Bhd uses a derivative to hedge the interest rate risk of the debt asset. At the end of Year 1, the fair value change of the hedging derivative instrument results in a loss of RM3,500,000 whilst the corresponding fair value gain attributable to the hedged risk of the debt asset is RM3,000,000. However, due to the improvement in the credit rating of the issuer, the fair value of the debt asset is determined at RM78,500,000 at the end of Year 1.

### Required:

- Show the journal entries to record the purchase of debt asset, the interest income in Year 1 and the fair value hedge effect in profit or loss.
- Recalculate the effective interest at the end of Year 1. Produce an amortisation schedule to show the recalculated carrying amount and interest income for the remaining four years.

### Solution 3

(a) Year 1:	RM'000	RM'000
Dr Debt asset	68,058	
Cr Bank account		68,058
<i>—to record purchase of debt asset.</i>		
Dr Debt asset	5,445	
Cr Interest income		5,445
<i>—to recognise interest income at 8%.</i>		
Dr Debt asset — adjustment to asset	3,000	
Cr Gain in profit or loss		3,000
<i>—to adjust debt asset and recognise gain in profit or loss.</i>		
<i>[Note: the debt asset adjustment is presented as a separate line item immediately below the debt asset line item].</i>		
Dr Loss in profit or loss		3,500
Cr Derivative hedging instrument		3,500
<i>—to recognise loss of hedging instrument in profit or loss.</i>		

- The sum of the carrying amount of the debt asset and the debt asset adjustment at the end of Year 1 is RM73,503,000 + RM3,000,000 = RM76,503,000. The debt asset shall not be adjusted to its fair value of RM78,500,000 because the credit risk (improvement in credit rating) is not hedged. The recalculated effective interest is determined as follows:

$$\text{RM}76,503,000 = \text{RM}100,000,000 / (1 + r)^4$$

where  $r = 6.9253\%$

The revised amortisation schedule for the remaining four years is as follows:

Year	Opening carrying amount RM'000	Effective interest at 6.9253% RM'000	Closing carrying amount RM'000
2	76,503	5,298	81,801
3	81,801	5,665	87,466
4	87,466	6,057	93,523
5	93,523	6,477	100,000
Sum		<u>23,497</u>	

The difference between the effective interest and the originally determined interest income represents the amortisation required on the debt asset adjustment as follows:

Year 1	Original interest income RM'000	Revised effective interest RM'000	Amortisation of asset adjustment RM'000
2	5,880	5,298	582
3	6,351	5,665	686
4	6,859	6,057	801
5	7,407	6,477	931
Sum	<u>26,497</u>	<u>23,497</u>	<u>3,000</u>

Thus, at the end of Year 2, Halia shall record the following journals:

	RM'000	RM'000
Dr Debt asset	5,880	
Cr Interest income		5,298
Cr L&R asset adjustment		582

The above journal will be repeated in the subsequent three years. By the end of Year 5, the debt asset adjustment would be fully amortised and the carrying amount of the debt asset would be equal to RM100,000,000, which is its redemption value.

### 5.7.5 Fair Value Hedge of a Firm Commitment

A firm commitment is defined in the Standard as "a binding agreement for the exchange of a specified quantity of resources at a specified price on a specified future date or dates". The Standard requires that hedges of firm commitments shall be accounted for as fair value hedges, except for hedges of foreign currency risks of firm commitments, which may be accounted for as cash flow hedges.

When an unrecognised firm commitment is designated as a hedged item in a fair value hedge, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognised as an asset

or a liability with the corresponding gain or loss recognised in profit or loss. The changes in the fair value of the hedging instrument are also recognised in profit or loss.

Subsequently, when the firm commitment results in the entity acquiring an asset or assuming a liability that is a hedged item in a fair value hedge, the initial carrying amount of the asset or liability is adjusted to include the cumulative gain or loss of the firm commitment attributable to the hedged risk that was recognised in the statement of financial position.

Note that for a firm commitment to buy a non-financial asset (such as a firm commitment to purchase a property, plant and equipment and a firm commitment to purchase inventories), and in the absence of a designated hedge of such a commitment, it is not within the scope of MFRS 9. Such commitments are generally not recognised but disclosed and accounted for in accordance with other MFRSs. For example, commitments to purchase a property, plant and equipment would be disclosed as a capital commitment. Even if there is a formal contract, such as a forward contract to purchase inventories, the forward contract is not accounted for as a financial derivative under MFRS 9 if it is entered into to meet the entity's purchase or usage requirements.

However, if a firm commitment relating to a non-financial asset is designated as a hedged item and the entity uses a hedging instrument to hedge a particular risk (such as a currency risk or a price risk) of the non-financial asset, then the firm commitment shall be accounted for in accordance for the hedge accounting prescribed in MFRS 9.

For example, an entity enters into firm commitments (or forward purchases) to buy commodities (such as crude palm oil, corn, gold, metal, etc) to meet its normal usage requirements. It hedges the firm commitments for price and/or currency risks. In this case, the entity shall apply the hedge accounting requirements of MFRS 9, although the commitments or forward purchases on the commodities are for meeting the entity's purchase or usage requirements.

#### Example 4

On 30 September 20x1, MNO Bhd enters into a firm commitment with a counterparty to buy 1,000,000 units of Metal X. Metal X is traded in the market and on this date, the spot price of Metal X is quoted at RM3.00 per unit.

Details of the commitment and other information are as follows:

Commitment date:	30/09/20x1
Exercise date:	31/03/20x2
Exercise price:	Prevailing spot price on 31/03/20x2.

In June 2005, the Corporate Law Reform Committee (CLRC) set up by the Companies Commission of Malaysia, issued a consultative document on *Capital Maintenance Rules and Share Capital: Simplifying and Streamlining Provisions Applicable to Shares*. The CLRC proposed to abandon the two concepts of authorised share capital and the par value shares. It was guided by two key principles of: (i) simplifying company operations with the objective of reducing compliance costs and (ii) promoting corporate governance.

The CLRC believed that a no par value share regime would simplify the workings of company law so as to ensure that it facilitates businesses to be competitive and suitable to the needs of the modern business environment. The company accounts with respect to capital can be greatly simplified, for example, share premium account and capital redemption reserves are concepts which would no longer be required. It will correct or clarify the misleading perception that because of the authorised share capital and par value, the company will have reserves and be able to pay its debts to creditors. It will enable a company to undertake capital raising exercises with greater flexibility. For example, a company may easily issue new shares without contravening the prohibition on issuing of shares at a discount or even capitalise profits without having to issue new shares, which cannot be done in a par value share regime. Subject to shareholders' and regulatory approvals, shares may be issued in any class, in any number or in any price, in tandem with the needs of the company. The accounting procedures for issuance of shares will also be simplified in a no par value share regime.

#### Example 1

A company issues 1,000,000 shares at a price of RM3.00 per share.

In a PV share regime, if the shares have a par value of RM1 each, the accounting entry would be as follows:

	RM'000	RM'000
Dr Cash	3,000	
Cr Share capital — par value		1,000
Cr Share premium		2,000

In a NPV share regime, the accounting entry would be as follows:

Dr Cash	3,000	
Cr Contributed share capital		3,000

## 7.3.2 Types and Nature of Shares

The nature of shares in the original Companies Act 1965 was specified in s 98 in that the shares or other interest of any member in a company shall be moveable property, transferable in the manner provided by the articles and shall not be of the nature of immovable property. There was no specific provision on the types of shares. In practice, the share capital was normally ordinary shares issued provided they carried a par value.

### 7.3.2.1 Types of Shares

Under the new Companies Act 2016, s 69 specifies that subject to the constitution of the company, shares in a company may:

- be issued in different classes;
- be redeemable in accordance with s 72;
- confer preferential rights to distribution of capital or income;
- confer special, limited or conditional voting rights or
- not confer voting rights.

### 7.3.2.2 Nature of Shares

Section 70 of the new Act specifies that a share or other interest of a member in a company is personal property and transferable in accordance with s 105. The condition in the original Companies Act 1965 of "*shall not be of the nature of immoveable property*" has been removed as it serves no purpose.

### 7.3.2.3 Rights and Powers Attaching to Shares

Section 71(1) of the new Act requires that a share in a company, other than preference shares, confers on the holder:

- the right to attend, participate and speak at a meeting;
- the right to vote on a show of hands on any resolution of the company;
- the right to one vote for each share on a poll on any resolution of the company;
- the right to an equal share in the distribution of the surplus assets of the company or
- the right to an equal share in dividends authorised by the Board.

However, the rights to dividends as specified therein may be negated, altered or added to the Constitution of the company or in accordance with the terms on which the share is issued [s 71(2)].

### 7.3.2.4 No Par Value (NPV) Shares

Section 74 of the new Act specifies that all shares issued before or upon commencement of this Act shall have no par or nominal value. This means

that the no par value (NPV) share is a mandatory requirement rather than an option and it shall apply to all shares, whether issued before or upon commencement of this section.

An important accounting implication is that the requirement for NPV shares is retrospective, that is it applies to all shares issued before 31 January 2017. The new Act does not deal with, or prescribe requirements for, the presentation of financial statements. It, however, requires that companies' financial statements shall be prepared and presented in accordance with the approved accounting standards issued by the MASB. In MFRS 101, *Presentation of Financial Statements*, whenever an entity reclassifies a line item in the statement of financial position, the comparative information shall be amended to conform to the current year's presentation. This means that the comparative capital accounts (par value shares and share premium) of prior periods need to be amended to conform to this new requirement.

It is evident that the new law provides for greater flexibility in that shares issued can be in any class with differing rights to dividends or distributions, be redeemable, with options, etc. These reflect the many different types of capital instruments that are issuable in the modern-day capital markets. However, for accounting, the shares issued do not automatically mean that they are, or are entirely, equity instruments in accordance with MFRS 132 *Financial Instruments: Presentation*. For example, shares issued with a mandatory fixed dividend or with a put option to holders are (or contain) a financial liability in accordance with MFRS 132.

#### Example 2: Classification of Shares

A company issues 1,000,000 shares at a price of RM1 per share. This class of shares carries a mandatory fixed dividend of five sen per share per year (any dividend payment in excess of five sen is at the discretion of the company), equal voting rights and equal share in capital distributions with other classes of shares. The company's current cost of borrowing is 8% per year.

In this case, there is a liability component in the class of shares issued, which is measured at the present value (PV) of the mandatory dividend payable each year. The PV of the dividend stream discounted to perpetuity at the current cost of borrowing is =  $RM50,000/0.08 = RM625,000$ . This requires that the proceeds of RM1,000,000 shall be allocated to a liability component of RM625,000 and the balance of the proceeds of RM375,000 allocated to the equity component. This class of shares shall be accounted for as a compound financial instrument in accordance with MFRS 132 and MPERS S22.

### 7.3.3 Issue of Shares at a Discount

Under s 59 of the original Companies Act 1965, a company was permitted to issue shares at a discount (ie at a price below their par value), provided the specified conditions, such as approval by shareholders and confirmation by Court, etc, were met. The conditions were argued as restrictive, time-consuming and costly to implement in practice.

The accounting treatment for the discount was also unclear, such as whether it should be included in the initial measurement of the shares issued, charged as an expense in profit or loss, or charged directly to retained profits in equity. In a PV share regime, the discount could not be written off against the par value of the shares. In accounting, since the issuance of shares is an equity transaction, the discount should not be charged as an expense in profit or loss, but could be charged directly in retained profits or held as a "dangling" debit in equity. However, past accounting practices for the discount on share issue were diverse.

This section in the original Act has been removed in the Companies Act 2016 as it is irrelevant in a NPV share regime. When appropriately authorised, shares can be issued at any price and there is no reference to whether the issue price is at a premium or at a discount.

#### Example 3

A company issues 1,000,000 shares at a price of 80 sen per share.

In a PV share regime, if the shares have a par value of RM1.00 each, the accounting entry would be as follows

	RM'000	RM'000
Dr Cash	800	
Dr Discount on share issue	200	
Cr Share capital — par value		1,000

In a NPV share regime, the accounting entry would be as follows:

Dr Cash	800	
Cr Contributed share capital		800

### 7.3.4 Power of Directors to Allot Shares or Grant Rights

#### 7.3.4.1 Exercise of Power of Directors to Allot Shares or Grant Rights

Section 75 of the Companies Act 2016 replaces the s 48 of the original Companies Act 1965 and it continues to give power to directors to allot

shares or grant rights. The conditions for the exercise of this power have been modified and expanded to include allotment of shares, grant of rights, a bonus issue made in proportion to members' shareholdings, allotment to a promoter and shares issuable in consideration for acquisition of shares or assets, provided members have been informed. However, prior approval by resolution by the company in a general meeting of members must first be obtained.

Note that there is no longer a minimum subscription requirement of 5% of nominal value of the shares on application. However, in an initial public offer (public offer of shares) under the Capital Markets and Services Act 2007, a minimum subscription on application is set at no less than 5% of the offer price.

#### 7.3.4.2 Calls, Payments and Forfeiture of Shares

Section 81 of the Companies Act 2016 replaces s 56 of the original Companies Act 1965 and it continues to allow a company to issue shares by varying the times of payments of calls, payments received in advance of calls, pay dividends in proportion to amount paid-up, etc. However, the separation of the issue price (for application and call monies) into nominal value and share premium is irrelevant in a NPV share regime.

Under s 82, if shares are issued by calls, each call (including amount payable on allotment) shall not exceed one-fourth of the issue price or be payable at less than thirty days from the date fixed for the payment of the last preceding call. Each member shall, subject to receiving at least 14 days' notice specifying the date, time and place of payment, pay to the company the amount called on his shares. Section 83 of the Companies Act 2016 retains the power of directors to forfeit shares if a member fails to pay call or instalment of a call within the stipulated time. The forfeited shares may be sold or otherwise disposed of on such terms and in such manner as the board of directors think fit. The forfeited shares may also be cancelled.

## 7.4 The Accounting Procedures for Issuance of Ordinary Shares

The Companies Act 2016 does not specify the circumstances, manner and terms for issuance of shares. These are for the board of directors to decide in its management of capital, although prior approvals from shareholders and regulatory bodies are usually required. When an entity applies for a listing on a stock exchange, shares are normally issued to the public investors. Other ways of raising capital include rights issue of shares to existing shareholders, private placements of shares, tender offers and special offer of shares to specific investors. Shares may also be issued for acquisition of assets or businesses and for retirement of debts.

### 7.4.1 Issue of Shares at Fair Value for Cash Consideration

The accounting procedures of a share issue depend upon the terms of the issue that set out the timing for application and allotment, the calls (if any) and the forfeiture and reissue terms.

In the case of a private limited company, this is usually not a problem because any issue of shares would be made or offered ratably to its existing shareholders. However, in the case of a public offer of shares, a prospectus is required to be issued together with the application form. The prospectus is, however, not legally an offer by the company to the public investors, but an invitation to offer. In other words, the company, via the prospectus, is inviting the public investors to make an offer to the company, intimating their willingness to invest and become shareholders of the company.

When an entity goes for a listing on a stock exchange and issues shares to the public investors, the issue price is deemed to be at fair value because it is the price transacted between willing parties in the marketplace. For academic interest we will first discuss the issue of shares from the stage of making an invitation to calls and finally to forfeiture and reissue of shares, based on the provisions available in the Companies Act 2016. The steps involved may include:

- (i) making the invitation together with the necessary forms and terms for application;
- (ii) making the allotment (note that in an IPO the Capital Markets and Services Act 2007 requires that the first allotment shall not proceed until a minimum subscription is achieved and the minimum payable on application shall not be less than 5% of the issue price of the shares);
- (iii) making the calls, if any;
- (iv) forfeiture of shares and
- (v) reissue of forfeited shares.

#### Example 4 (A comprehensive case)

As at 31 December 20x5, Peta Sdn Bhd had contributed share capital amount of RM15,000,000 and this consisted of 10,000,000 ordinary shares which were fully paid up. On 1 September 20x6, Peta Sdn Bhd was listed on the Stock Exchange via an initial public offer (IPO) of ordinary shares. Peta Bhd issued 10,000,000 ordinary shares at an issue price of RM3.00 per share during the year ended 31 December 20x6.

The payment terms of the issue together with the closing dates were as follows:

	Per share
	RM
1 September 20x6: On application	1.00
1 December 20x6: On allotment	0.70
31 March 20x7: On first call	0.70
30 June 20x7: On final call	0.60
	<u>3.00</u>

Applications were received for 30,000,000 shares, a three-time over-subscription. Of these, applications on 15,000,000 shares were rejected and the application monies repaid to the unsuccessful applicants. The remainder was allotted pro rata on a "one for one and one-half" basis, and the surplus application monies were carried forward to allotment on account.

The balance of the allotment monies was received on due date.

In the subsequent year 20x7, the calls were made and the call monies were received on their due dates, except for the following two cases:

- Holders of 100,000 shares paid their final call monies along with the first call and
- Holders of 50,000 shares failed to pay either call. Their shares were forfeited and subsequently reissued at RM2.00 per share and were paid up.

#### Required

- Show the journal entries to record the issuance of shares and
- Draft suitable note disclosures relating to the contributed share capital account of Peta Bhd for the financial years ended 31 December 20x6 and 31 December 20x7.

#### Solution 2

- Journal entries to record the issuance of shares

When application monies are received:

1.9.20x6:	RM	RM
Dr Bank account	30,000,000	
Cr Share application account		30,000,000

—to record application monies received.

Note that the share application account is credited because prior to the allotment, the share applicants are creditors (and not shareholders) of the company, that is there is no contract between the company and the applicants yet. Thus, the monies that the applicants have sent in do not belong to the company and they are refundable in the event that shares are not allotted to the individual applicants.

When the allotment is made:

1.12.20x6:

	RM	RM
Dr Share application account	15,000,000	
Cr Bank account		15,000,000
—to record monies returned to unsuccessful applicants.		
Dr Share application account	5,000,000	
Cr Allotment monies received in advance		5,000,000
—to carry forward allotment monies received in advance.		

When the allotment is finalised:

Dr Share application account	10,000,000	
Dr Allotment monies received in advance	5,000,000	
Dr Receivable from shareholders	2,000,000	
Cr Share allotment account		17,000,000
—to record allotment of shares.		

When allotment monies are received:

Dr Bank account	2,000,000	
Cr Receivable from shareholders		2,000,000
—to record balance of allotment monies received.		

Note that on allotment, the contract between the company and the successful applicants come into being because the company has formally accepted the applicants' offer. They thus become shareholders as on that allotment date. The credit that is in the share application account is no longer owed to them as it becomes part of the contributed share capital of the company. Thus, the journal entry to close the allotment account and recognise contributed capital paid up is:

1.12.20x6:

	RM	RM
Dr Share allotment account	17,000,000	
Cr Contributed share capital account		17,000,000
—to record issuance of shares paid-up to date.		