

Hong Kong Financial Reporting Standards: **HKAS 39 “Financial Instruments: Recognition and Measurement”**

(Relevant to PBE Paper I – Financial Reporting)

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HKAS 39 provides the principles for recognition and measurement for financial instruments. In other words, it addresses the classification and accounting for financial assets and financial liabilities. In addition, HKAS 39 also provides some criteria for impairment and derecognition of financial instruments.

Definition

A financial instrument is defined in HKAS 32 as any

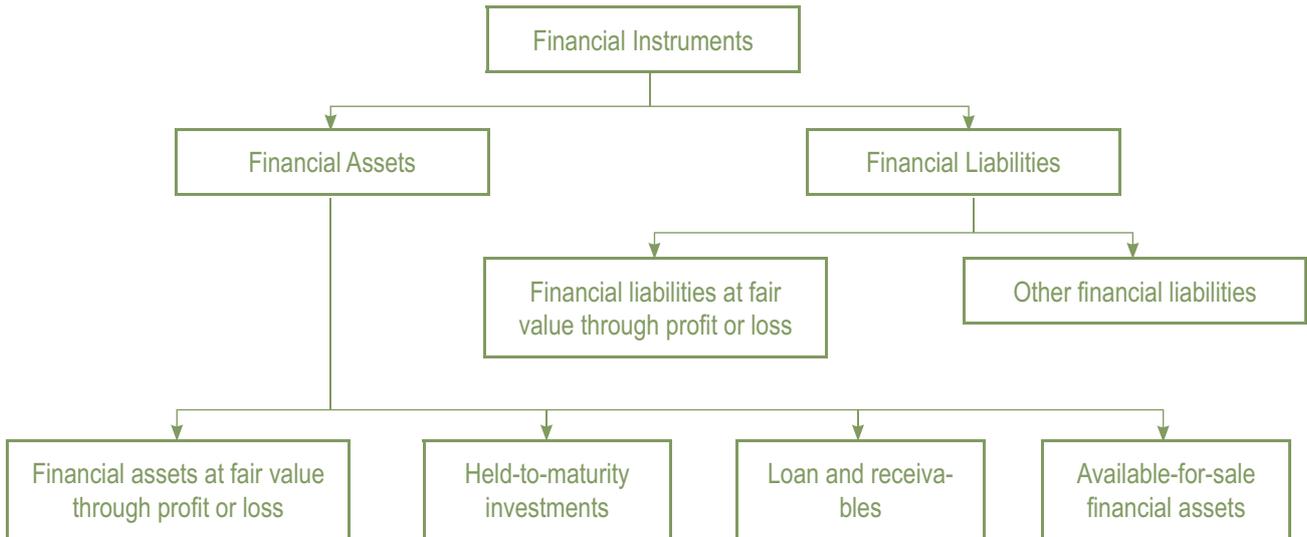
contract that gives rise to a financial asset in one entity and a financial liability or equity instrument in another entity.

1. Financial assets include any assets that give rise to a contractual right to receive cash or other financial assets, e.g. cash, trade receivables, investment in shares, loans receivable.
2. Financial liabilities include any contractual liability to pay cash or other financial assets, e.g. bank overdrafts, trade payables, loans payable.

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Classification of financial instruments

According to HKAS 39, financial instruments are classified into the following categories:



The following table summarizes HKAS 39's classification requirements and provides some examples of financial instruments in different categories:

Category	Characteristics	Example
Financial assets at fair value through profit or loss	Financial assets that are either held for trading (i.e. to sell in the near future) or electively designated into the category.	Investment in listed shares or debts that are held for short-term profit taking, derivatives held for speculative purposes.
Held-to-maturity investments	Financial assets with fixed or determinable payments which the entity intends to hold to maturity.	Government and corporate bonds, redeemable preference shares.
Loans and receivables	Unquoted financial assets with fixed or determinable payment.	Account receivables, loans to customers, mortgage loans, credit card receivables.
Available-for-sale financial assets	Financial assets that are designed as available-for-sale by the entity or which do not fall into any of the above three categories.	Equity instruments held for non-trading purposes like investments in ordinary shares and preference shares.
Financial liabilities at fair value through profit or loss	Financial liabilities that are either held for trading (i.e. repurchase for the near future) or electively designated into the category.	Derivative liabilities and other trading liabilities.
Other financial liabilities	All financial liabilities other than those at fair value through profit or loss.	Account payables, notes payables and issued debt securities.

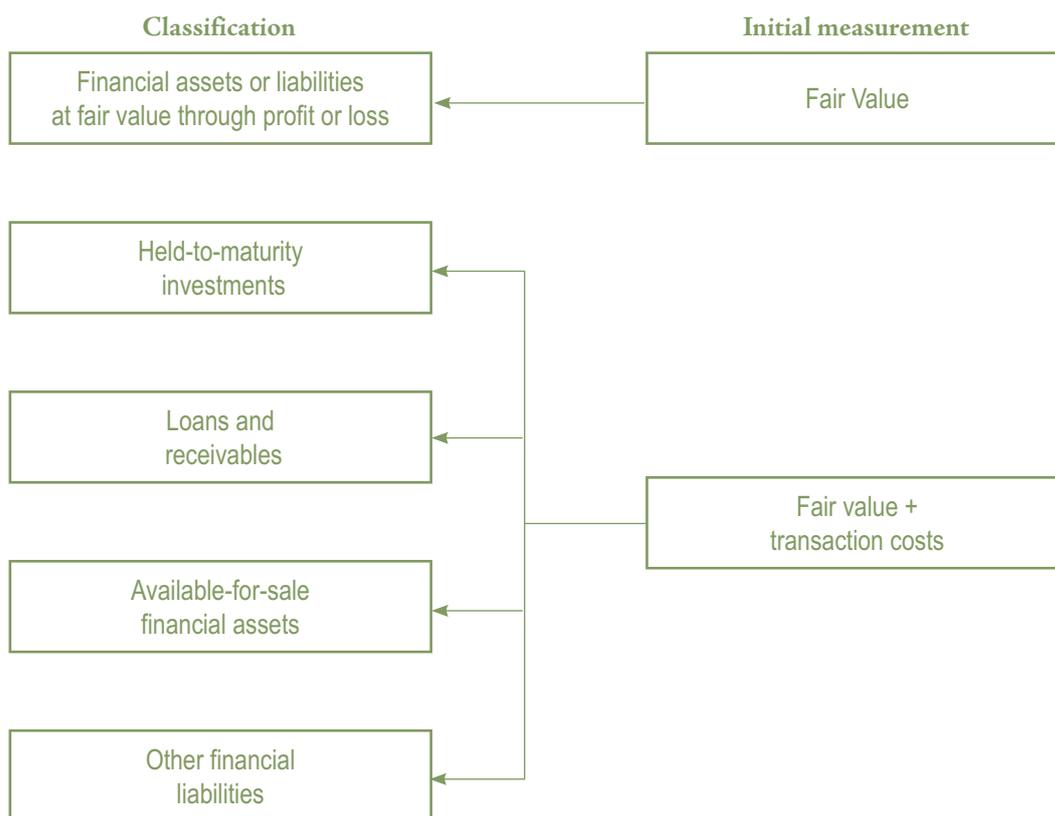
Initial recognition of financial instruments

The term “initial recognition” refers to the time at which an entity should record an asset or liability initially on its balance sheet. According to HKAS 39, an entity should recognize a financial asset or financial liability when the entity becomes a party to the contractual provisions of the instrument. In other words, financial assets or liabilities should be recognized when the entity becomes a party to the contract rather than when the transaction is settled. For example, ABC Ltd commits to purchase Z’s shares on day 1 and will settle the amount on day 3. ABC Ltd should recognize Z’s shares as a financial asset on day 1 rather than day 3.

Measurement of financial instruments

1. Initial measurement

According to HKAS 39, all financial assets and liabilities are measured on initial recognition at their fair value plus transaction costs, except for financial assets or liabilities at fair value through profit or loss. Examples of transaction costs include commission paid to brokers and stamp duties. The fair value is usually the actual transaction price on the transaction date.



However, if loan assets or liabilities are issued at below the market interest rate, then the fair value on recognition is not the amount paid but the amount discounted for the effect of the below-market-value interest on the loans.

Example 1

ABC Ltd provides interest-free loans to directors for a four-year term. The total loan amount is \$1 million, payable in equal installments at the end of each year. The market interest rate for a similar loan is 5 percent.

Fair value of loan receivable

$$= \$250,000/(1+5\%) + \$250,000/(1+5\%)^2 + \$250,000/(1+5\%)^3 + \$250,000/(1+5\%)^4$$

$$= \$886,487$$

The journal entry for initial recognition of the loan is:

	Dr \$	Cr \$
Loan receivable	886,487	
Employee benefit	113,513	
Bank		1,000,000

2. Subsequent measurement

Subsequent to initial recognition, financial assets and financial liabilities are measured at fair value, amortized cost or cost depending on their classification and whether their fair value can be determined reliably. The subsequent measurement of financial instruments and the accounting treatment of the gain or loss are summarized in the following table:

Category	Subsequent measurement	Gain/loss treatment
Financial assets at fair value through profit or loss	At fair value	Recognized in profit or loss
Held-to-maturity investments	At amortized cost	Recognized in profit or loss
Loans and receivables	At amortized cost	Recognized in profit or loss
Available-for-sale financial assets	At fair value (for quoted financial assets)	Recognized in equity
	At cost (for unquoted financial assets)	
Financial liabilities at fair value through profit or loss	At fair value	Recognized in profit or loss
Other financial liabilities	At amortized cost	Recognized in profit or loss



a. Fair value determination

The above table shows that financial assets or liabilities at fair value through profit or loss and quoted available-for-sale financial assets are measured at fair value. HKAS 39 provides the following sequence to determine fair value:

1	Existence of active market like stock or bond market	Fair value = current bid price/ transaction price
2	No existence of active market	Fair value = discounted cash flow/ current value of similar instrument
3	No existence of active market and fair value cannot be determined	Fair value = cost

b. Amortized cost

Held-to-maturity investments, loans and receivables, and other financial liabilities are subsequently measured at amortized cost using the effective interest method. Under the effective interest rate, the amortized cost is the cost adjusted by the cumulative amortization of the premium or discount (i.e. the difference between the purchase price and the maturity amount) through the expected life of the financial instrument. Consider investment in bonds as an example to clarify the difference between an investment at a premium and at a discount:

- Bonds are issued at a premium when the purchase price of the bonds is greater than the maturity amount. For example, if you pay \$1,200 to purchase bonds with a nominal value of \$1,000, there is a premium of \$200 since you pay a premium for the bonds.
- Bonds are issued at a discount when the purchase price of the bonds is smaller than the maturity amount. For example, if you pay \$900 to purchase bonds with a nominal value of \$1,000, there is a discount of \$100 since you receive a discount for the bonds.

The journal entries for the premium or discount amortization of debt securities are summarized in the following tables:

Date	Premium amortization	Discount amortization
Purchase date	Dr Held-to-maturity investments Cr Bank	Dr Held-to-maturity investments Cr Bank
Recognize interest for each year	Dr Bank Cr Held-to-maturity investments Cr Interest income	Dr Bank Dr Held-to-maturity investments Cr Interest income
Maturity date	Dr Bank Cr Held-to-maturity investments	Dr Bank Cr Held-to-maturity investments



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Example 2

Case A

ABC Limited purchases 10% bonds with a three-year term for \$1,200 at the start of year 1. The bond has a nominal value of \$1,000 and the interest is payable at end of each year.

The effective interest rate is the rate that exactly discounts estimated future cash flows through the expected life of the financial instrument. Let us say that the effective interest rate is r and future cash flow is CF . The effective interest rate is therefore determined by the following formula:

$$\begin{aligned} \text{Fair value} &= CF1/(1+r) + CF2/(1+r)^2 + CF3/(1+r)^3 \\ \$1,200 &= \$100/(1+r) + \$100/(1+r)^2 + \$1,100/(1+r)^3 \\ &\Rightarrow r = 3\% \end{aligned}$$

The premium on bonds is \$200 (\$1,200-\$1,000) and annual amortization of the premium is shown as below:

Year	Opening amortized cost	Cash flows 10%	Interest income 3%	Premium amortization	Closing amortized cost
	(A)	(B)	(C) = (A) x 3%	(D) = (B) - (C)	(A) - (D)
1	1,200	100	36	64	1,136
2	1,136	100	34	66	1,070
3	1,070	100	30*	70	1,000
		300		200	

* rounded up figure

The journal entries for year 1 to year 3 are:

	Dr \$	Cr \$
Year 1		
Held-to-maturity investments	1,200	
Bank		1,200
Bank	100	
Held-to-maturity investments		64
Interest income		36
Year 2		
Bank	100	
Held-to-maturity investments		66
Interest income		34
Year 3		
Bank	100	
Held-to-maturity investments		70
Interest income		30
Bank	1,000	
Held-to-maturity investments		1,000

Case B

This time ABC Limited purchases 10% bonds with a three-year term for \$900 at the start of year 1. Again, the bond has a nominal value of \$1,000 and the interest is payable at end of each year.

The effective interest rate is the rate that exactly discounts estimated future cash flows through the expected life of the financial instrument. Let us say the effective interest rate is r and future cash flow is CF . The effective interest rate is therefore determined by the following formula:

$$\begin{aligned}\text{Fair value} &= CF1/(1+r) + CF2/(1+r)^2 + CF3/(1+r)^3 \\ \$900 &= \$100/(1+r) + \$100/(1+r)^2 + \$1,100/(1+r)^3 \\ \Rightarrow r &= 14.3\%\end{aligned}$$

The discount on bonds is \$100 (\$1,000-\$900) and annual amortization of the premium is shown below:

Year	Opening amortized cost	Cash flows 10%	Interest income 14.3%	Premium amortization	Closing amortized cost
	(A)	(B)	(C) = (A) x 3%	(D) = (B) - (C)	(A) - (D)
1	900	100	129	(29)	929
2	929	100	133	(33)	962
3	962	100	138*	(38)	1,000
		300		(100)	

* rounded up figure

The journal entries for year 1 to year 3 are:

	Dr \$	Cr \$
Year 1		
Held-to-maturity investments	900	
Bank		900
Bank	100	
Held-to-maturity investments	29	
Interest income		129
Year 2		
Bank	100	
Held-to-maturity investments	33	
Interest income		133
Year 3		
Bank	100	
Held-to-maturity investments	38	
Interest income		138
Bank	1,000	
Held-to-maturity investments		1,000

Impairment of financial instruments

The purpose of impairment is to assess whether the values of the financial instruments are decreasing or not. According to HKAS 39, an impairment test is required where there is objective evidence that the financial assets are being impaired. Objective evidence of impairment includes one or more events after the initial recognition of the financial assets, which has an adverse impact on the estimated future cash flows of the financial assets. For example, significant financial difficulty of the bond issuer results in a default in paying interest payment or principal payment.

HKAS 39 also states that financial liabilities are not subject to testing for impairment.

An impairment test is required for financial assets measured at amortized cost and also on assets designed as available for sale. The only category of financial assets that is not subject to testing for impairment is financial assets at fair value through profit or loss, because any decrease in fair value of these assets is recognized in profit or loss immediately.

The following table summarizes how to determine the amount of impairment loss for each category of financial assets:

Category	Amount of impairment loss
Financial assets at fair value through profit or loss	Not applicable
Held-to-maturity investments	Impairment loss = existing carrying amount – present value of estimated future cash flows discounted using the original effective interest rate
Loans and receivables	Impairment loss = existing carrying amount – present value of estimated future cash flows discounted using the original effective interest rate
Available-for-sale financial assets	Impairment loss = the amount of unrealized holding losses previously recognized directly in equity

Example 3

Using same information in Example 2 Case A, after paying interest payment at the end of year 1, the issuer of the bond announces that due to financial difficulties, the coupon rate of the bond is now 5% (i.e. instead of 10%) for each of next two years. The bond has the same nominal value of \$1,000 and the interest is payable at end of each year.

Present value of future cash flow using original effective interest rate

$$\begin{aligned}
 &= CF_1/(1+r) + CF_2/(1+r)^2 \\
 &= 50/(1+3\%) + 1,050/(1+3\%)^2 \\
 &= \$1,039
 \end{aligned}$$

Impairment loss

$$\begin{aligned}
 &= \text{existing carrying amount at end of year 1} - \text{present value of future cash flow} \\
 &= \$1,136 - \$1,039 \\
 &= \$97
 \end{aligned}$$

The journal entry for the impairment loss is:

	Dr \$	Cr \$
Profit and loss – impairment loss	97	
Held-to-maturity investments		97

Derecognition of financial instrument

The term “derecognition” as defined by HKAS 39 is the removal of a previously recognized financial asset or financial liability from an entity’s balance sheet.

HKAS 39 sets out the conditions that must be met in order to derecognize a financial asset or financial liability.

1. Derecognition of financial assets

Under HKAS 39, an entity should derecognize a financial asset when: (a) contractual rights to financial asset expire; or (b) a financial asset has been transferred and the transfer qualifies for derecognition.

The first criterion (a) for derecognition of a financial asset is usually easy to apply. This means if the contractual right to the cash flows from the financial assets expires, the entity should remove these assets from its balance sheet. Situations are when a customer has paid off an obligation to the entity, or when an option held by the entity has expired.

The application of second criterion (b) for derecognition of a financial asset is often more complex. It relies on assessment of whether the asset has been transferred and the extent to which the risks and rewards have been retained or transferred. The following table summarizes the accounting treatment for different situations:

Situation	Example	Accounting treatment
Transfer substantially all risks and rewards of ownership of the transferred financial assets.	An unconditional sale of a financial asset. A sale of a financial asset with the option to buy back at fair value at the time of purchase.	Derecognition of the financial assets and recognition of gain or loss in the income statement.
Retain substantially all risks and rewards of the ownership of the transferred financial assets.	A sale and repurchase agreement where the repurchase price is a fixed price or its sale price plus a lender’s return. A securities lending agreement.	Continued recognition of the financial assets.

2. Derecognition of financial liabilities

The derecognition requirements for financial liabilities are different from those of financial assets. Instead, they focus on whether the financial liability has been extinguished. In other words, when the obligation specified in the contract is discharged or cancelled or expired, the entity should remove the financial liability from its balance sheet. For example, the expiry of a put option (i.e. a contract that gives the holder the right to sell the underlying asset at a specified price for a specified time) written by Company A requires that the company should derecognize the financial liability because this option liability has expired.

