

1. Objective of HKAS 33

The objective of HKAS 33 *Earnings per Share* is to prescribe principles for the determination and presentation of earnings per share, so as to improve performance comparisons between different entities in the same reporting period and between different reporting periods for the same entity.

Even though earnings per share data have limitations because of the different accounting policies that may be used for determining 'earnings', a consistently determined denominator enhances financial reporting.

The focus of HKAS 33 is on the denominator of the earnings per share calculation.

2. Scope of HKAS 33

HKAS 33 shall be applied by entities:

- a) *whose ordinary shares or potential ordinary shares are publicly traded and*
- b) *that are in the process of issuing ordinary shares or potential ordinary shares in public markets.*²
(HKAS 33 para. 2)

An entity that discloses earnings per share shall calculate and disclose earnings per share in accordance with HKAS 33. (HKAS 33 para. 3)

When an entity presents both consolidated financial statements and separate financial statements prepared in accordance with HKAS 27 Consolidated and Separate Financial Statements, the disclosures required by HKAS 33 need be presented only on the basis of the consolidated information.

An entity that chooses to disclose earnings per share based on its separate financial statements shall present such earnings per share information only on the face of its separate income statement. An entity shall not present such earnings per share information in the consolidated financial statements. (HKAS 33 para. 4)

Antidilution is an increase in earnings per share or a reduction in loss per share resulting from the assumption that convertible instruments are converted, that options or warrants are exercised, or that ordinary shares are issued upon the satisfaction of specified conditions.

A contingent share agreement is an agreement to issue shares that is dependent on the satisfaction of specified conditions.

Contingently issuable ordinary shares are ordinary shares issuable for little or no cash or other consideration upon the satisfaction of specified conditions in a contingent share agreement.

Dilution is a reduction in earnings per share or an increase in loss per share resulting from the assumption that convertible instruments are converted, that options or warrants are exercised, or that ordinary shares are issued upon the satisfaction of specified conditions.

Options, warrants and their equivalents are financial instruments that give the holder the right to purchase ordinary shares.

An ordinary share is an equity instrument that is subordinate to all other classes of equity instruments.

A potential ordinary share is a financial instrument or other contract that may entitle its holder to ordinary shares.

Put options on ordinary shares are contracts that give the holder the right to sell ordinary shares at a specified price for a given period. (HKAS 33 para. 5)

¹ This note is sourced from HKAS 33 Earnings per Share. While the note is aimed at covering all critical points of HKAS 33, a complete and comprehensive coverage of it should still be the original standard, HKAS 33.

² All the paragraphs in HKAS have equal authority while main principles are highlighted in bold.

Ordinary shares participate in profit for the period only after other types of shares such as preference shares have participated. An entity may have more than one class of ordinary shares. Ordinary shares of the same class have the same rights to receive dividends.

Examples of potential ordinary shares are:

- (a) financial liabilities or equity instruments, including preference shares, that are convertible into ordinary shares;
- (b) options and warrants;
- (c) shares that would be issued upon the satisfaction of conditions resulting from contractual arrangements, such as the purchase of a business or other assets.

Terms defined in HKAS 32 *Financial Instruments: Disclosure and Presentation* are used in HKAS 33 with the meanings specified in paragraph 11 of HKAS 32, unless otherwise noted. HKAS 32 defines financial instrument, financial asset, financial liability, equity instrument, fair value, and provides guidance on applying those definitions.

3. Measurement of Basic Earnings per Share

An entity shall calculate ***basic earnings per share amounts*** for

- ***profit or loss attributable to ordinary equity holders of the parent entity and***
- ***if presented, profit or loss from continuing operations attributable to those equity holders.*** (HKAS 33 para.9)

Basic earnings per share shall be calculated by dividing profit or loss attributable to ordinary equity holders of the parent entity (the numerator) by the weighted average number of ordinary shares outstanding (the denominator) during the period. (HKAS 33 para. 10)

$$\text{Basic EPS} = \frac{\text{Profit or loss attributable to ordinary equity holder of the parent entity}}{\text{Weighted average number of ordinary shares outstanding during the period}}$$

The objective of basic earnings per share information is to provide a measure of the interests of each ordinary share of a parent entity in the performance of the entity over the reporting period.

3.1 Earnings

For the purpose of calculating basic earnings per share, the amounts attributable to ordinary equity holders of the parent entity in respect of:

- (a) ***profit or loss from continuing operations attributable to the parent entity; and***
- (b) ***profit or loss attributable to the parent entity***

shall be the amounts in (a) and (b) adjusted for the after-tax amounts of preference dividends, differences arising on the settlement of preference shares, and other similar effects of preference shares classified as equity. (HKAS 33 para. 12)

For the purpose of calculating earnings per share based on the consolidated financial statements, profit or loss attributable to the parent entity refers to profit or loss of the consolidated entity after adjusting for minority interests.

3.1.1 Earnings after tax expenses and dividends on preference shares

All items of income and expense attributable to ordinary equity holders of the parent entity that are recognised in a period, including tax expense and dividends on preference shares classified as liabilities are included in the determination of profit or loss for the period attributable to ordinary equity holders of the parent entity (see HKAS 1 *Presentation of Financial Statements*).

The after-tax amount of preference dividends that is deducted from profit or loss is:

- (a) the after-tax amount of any preference dividends on non-cumulative preference shares declared in respect of the period; and
- (b) the after-tax amount of the preference dividends for cumulative preference shares required for the period, whether or not the dividends have been declared.

The amount of preference dividends for the period does not include the amount of any preference dividends for cumulative preference shares paid or declared during the current period in respect of previous periods.

1. Increasing rate preference shares

Preference shares that provide for a low initial dividend to compensate an entity for selling the preference shares at a discount, or an above-market dividend in later periods to compensate investors for purchasing preference shares at a premium, are sometimes referred to as increasing rate preference shares.

Any original issue discount or premium on increasing rate preference shares is amortised to retained earnings using the effective interest method and treated as a preference dividend for the purposes of calculating earnings per share.

2. Repurchase of preference shares

Preference shares may be repurchased under an entity's tender offer to the holders. The excess of the fair value of the consideration paid to the preference shareholders over the carrying amount of the preference shares represents a return to the holders of the preference shares and a charge to retained earnings for the entity. This amount is deducted in calculating profit or loss attributable to ordinary equity holders of the parent entity.

3. Early conversion of convertible preference shares

Early conversion of convertible preference shares may be induced by an entity through favourable changes to the original conversion terms or the payment of additional consideration. The excess of the fair value of the ordinary shares or other consideration paid over the fair value of the ordinary shares issuable under the original conversion terms is a return to the preference shareholders, and is deducted in calculating profit or loss attributable to ordinary equity holders of the parent entity.

4. Settlement of preference shares at less than their fair value

Any excess of the carrying amount of preference shares over the fair value of the consideration paid to settle them is added in calculating profit or loss attributable to ordinary equity holders of the parent entity.

3.2 Shares

For the purpose of calculating basic earnings per share, the number of ordinary shares shall be the weighted average number of ordinary shares outstanding during the period. (HKAS 33 para. 19)

3.2.1 Weighted average number of ordinary shares outstanding

Using the weighted average number of ordinary shares outstanding during the period reflects the possibility that the amount of shareholders' capital varied during the period as a result of a larger or smaller number of shares being outstanding at any time.

The weighted average number of ordinary shares outstanding during the period is the number of ordinary shares outstanding at the beginning of the period, adjusted by the number of ordinary shares bought back or issued during the period multiplied by a time-weighting factor.

The time-weighting factor is the number of days that the shares are outstanding as a proportion of the total number of days in the period; a reasonable approximation of the weighted average is adequate in many circumstances.

Shares are usually included in the weighted average number of shares from the date consideration is receivable (which is generally the date of their issue), for example:

- (a) ordinary shares issued in exchange for cash are included when cash is receivable;
- (b) ordinary shares issued on the voluntary reinvestment of dividends on ordinary or preference shares are included when dividends are reinvested;
- (c) ordinary shares issued as a result of the conversion of a debt instrument to ordinary shares are included from the date that interest ceases to accrue;
- (d) ordinary shares issued in place of interest or principal on other financial instruments are included from the date that interest ceases to accrue;
- (e) ordinary shares issued in exchange for the settlement of a liability of the entity are included from the settlement date;
- (f) ordinary shares issued as consideration for the acquisition of an asset other than cash are included as of the date on which the acquisition is recognised; and
- (g) ordinary shares issued for the rendering of services to the entity are included as the services are rendered.

The timing of the inclusion of ordinary shares is determined by the terms and conditions attaching to their issue. Due consideration is given to the substance of any contract associated with the issue.

1. Ordinary shares issued as part of the cost of a business combination

Ordinary shares issued as part of the cost of a business combination are included in the weighted average number of shares from the acquisition date. This is because the acquirer incorporates into its income statement the acquiree's profits and losses from that date.

2. Ordinary shares issued upon conversion of convertible instrument

Ordinary shares that will be issued upon the conversion of a mandatorily convertible instrument are included in the calculation of basic earnings per share from the date the contract is entered into.

3. Contingently issuable shares

Contingently issuable ordinary shares are ordinary shares issuable for little or no cash or other consideration upon the satisfaction of specified conditions in a contingent share agreement. (HKAS 33 para. 5)

Contingently issuable shares are treated as outstanding and are included in the calculation of basic earnings per share only from the date when all necessary conditions are satisfied (i.e. the events have occurred).

Shares that are issuable solely after the passage of time are not contingently issuable shares, because the passage of time is a certainty.

Outstanding ordinary shares that are contingently returnable (i.e. subject to recall) are not treated as outstanding and are excluded from the calculation of basic earnings per share until the date the shares are no longer subject to recall.

Example: Issue of shares during the year at the full market price*Source from ACCA Student Accountants*

	<u>31 Dec 04</u>	<u>31 Dec 05</u>
Earnings	\$1,000	\$1,300
Ordinary shares in issue at 1 January	5,000	6,000

On 1 April 2005, 1,000 more shares were issued at the full market price. Calculate the EPS for the year ended 31 December 2005 and the corresponding figure.

Answers

Weighted average no. of shares in issue for 2005 = $5,000 \times \frac{1}{4} + 6,000 \times \frac{3}{4} = 5,750$ shares

	<u>31 Dec 04</u>	<u>31 Dec 05</u>
Then - Earnings	\$1,000	\$1,300
- Weighted average no. of shares	<u>5,000</u>	<u>5,750</u>
Basic EPS	\$0.200	\$0.226

3.2.2 No. of ordinary shares outstanding changed with no resources changed

The weighted average number of ordinary shares outstanding during the period and for all periods presented shall be adjusted for events, other than the conversion of potential ordinary shares, that have changed the number of ordinary shares outstanding without a corresponding change in resources. (HKAS 33 para. 26)

Ordinary shares may be issued, or the number of ordinary shares outstanding may be reduced, without a corresponding change in resources.

Examples include:

- (a) a capitalisation or bonus issue (sometimes referred to as a stock dividend);
- (b) a bonus element in any other issue, for example a bonus element in a rights issue to existing shareholders;
- (c) a share split; and
- (d) a reverse share split (consolidation of shares).

1. Capitalisation, bonus issue or share split

In a capitalisation or bonus issue or a share split, ordinary shares are issued to existing shareholders for no additional consideration. Therefore, the number of ordinary shares outstanding is increased without an increase in resources. The number of ordinary shares outstanding before the event is adjusted for the proportionate change in the number of ordinary shares outstanding as if the event had occurred at the beginning of the earliest period presented.

For example, on a two-for-one bonus issue, the number of ordinary shares outstanding before the issue is multiplied by three to obtain the new total number of ordinary shares, or by two to obtain the number of additional ordinary shares.

Example: Bonus issue of shares*Source from ACCA Student Accountants*

	<u>31 Dec 04</u>	<u>31 Dec 05</u>
Earnings	\$1,000	\$1,300
Ordinary shares in issue at 1 January	5,000	6,000

The movement of shares represents a 1 for 5 bonus issue on 1 April 2005. Calculate the EPS for the year ended 31 December 2005 and the corresponding figure.

Answers

	<u>31 Dec 04</u>	<u>31 Dec 05</u>
Earnings	\$1,000	\$1,300
Weighted average no. of shares (5,000 + 1,000)	<u>6,000</u>	<u>6,000</u>
Basic EPS	\$0.167	\$0.217

2. Rights issues

The issue of ordinary shares at the time of exercise or conversion of potential ordinary shares does not usually give rise to a bonus element. This is because the potential ordinary shares are usually issued for full value, resulting in a proportionate change in the resources available to the entity.

In a rights issue, however, the exercise price is often less than the fair value of the shares. Therefore, as noted in point b above (paragraph 27(b) of HKAS 33), such a rights issue includes a bonus element.

If a rights issue is offered to all existing shareholders, the number of ordinary shares to be used in calculating basic and diluted earnings per share for all periods before the rights issue is the number of ordinary shares outstanding before the issue, multiplied by the following factor:

$$\frac{\text{Fair value per share immediately before the exercise of rights}}{\text{Theoretical ex-rights fair value per share}}$$

The theoretical ex-rights fair value per share is calculated by adding the aggregate market value of the shares immediately before the exercise of the rights to the proceeds from the exercise of the rights, and dividing by the number of shares outstanding after the exercise of the rights.

Where the rights are to be publicly traded separately from the shares before the exercise date, fair value for the purposes of this calculation is established at the close of the last day on which the shares are traded together with the rights.

Example: Rights issue of shares		<i>Source from ACCA Student Accountants</i>	
		<u>31 Dec 04</u>	<u>31 Dec 05</u>
Earnings		\$1,000	\$1,300
Ordinary shares in issue at 1 January		5,000	6,000
There was a 1 for 5 rights issue for \$2 per share on 1 April 2005. Market price is \$2.5 per share. Calculate the EPS for the year ended 31 December 2005 and the corresponding figure.			
<u>Answers</u>			
Theoretical ex-rights price	1 share @ \$2.00		\$ 2.0
	<u>5 shares @ \$2.50</u>		<u>12.5</u>
i.e.	6 shares @ \$2.42		14.5
		<u>31 Dec 04</u>	<u>31 Dec 05</u>
Then	- Weighted average no. of shares	5,000	5,165 x 1/4
		<u>x 2.5/2.42</u>	+ <u>6,000 x 3/4</u>
		5,165	5,791
Basic EPS		\$0.1936	\$0.2245

2. Consolidation of ordinary shares

A consolidation of ordinary shares generally reduces the number of ordinary shares outstanding without a corresponding reduction in resources. However, when the overall effect is a share repurchase at fair value, the reduction in the number of ordinary shares outstanding is the result of a corresponding reduction in resources.

An example is a share consolidation combined with a special dividend. The weighted average number of ordinary shares outstanding for the period in which the combined transaction takes place is adjusted for the reduction in the number of ordinary shares from the date the special dividend is recognised.

4. Measurement of Diluted Earnings per Share

An entity shall calculate diluted earnings per share amounts for

- profit or loss attributable to ordinary equity holders of the parent entity and,
- if presented, profit or loss from continuing operations attributable to those equity holders. (HKAS 33 para. 30)

For the purpose of calculating diluted earnings per share, an entity shall adjust

- profit or loss attributable to ordinary equity holders of the parent entity, and
- the weighted average number of shares outstanding,

for the effects of all dilutive potential ordinary shares. (HKAS 33 para. 31)

Dilution is a reduction in earnings per share or an increase in loss per share resulting from the assumption that convertible instruments are converted, that options or warrants are exercised, or that ordinary shares are issued upon the satisfaction of specified conditions.

A ***potential ordinary share*** is a financial instrument or other contract that may entitle its holder to ordinary shares. (HKAS 33 para. 5)

The objective of diluted earnings per share is consistent with that of basic earnings per share — to provide a measure of the interest of each ordinary share in the performance of an entity — while giving effect to all dilutive potential ordinary shares outstanding during the period.

As a result:

- (a) profit or loss attributable to ordinary equity holders of the parent entity is increased by the after-tax amount of dividends and interest recognised in the period in respect of the dilutive potential ordinary shares and is adjusted for any other changes in income or expense that would result from the conversion of the dilutive potential ordinary shares; and
- (b) the weighted average number of ordinary shares outstanding is increased by the weighted average number of additional ordinary shares that would have been outstanding assuming the conversion of all dilutive potential ordinary shares.

4.1 Earnings

For the purpose of calculating diluted earnings per share, an entity shall adjust profit or loss attributable to ordinary equity holders of the parent entity, as calculated in accordance with section 3.1 above (paragraph 12 of HKAS 33), by the after-tax effect of:

- (a) any dividends or other items related to dilutive potential ordinary shares deducted in arriving at profit or loss attributable to ordinary equity holders of the parent entity as calculated in accordance with section 3.1 above (paragraph 12 of HKAS 33);
- (b) any interest recognised in the period related to dilutive potential ordinary shares; and
- (c) any other changes in income or expense that would result from the conversion of the dilutive potential ordinary shares. (HKAS 33 para. 33)

4.1.1 After potential ordinary shares converted

After the potential ordinary shares are converted into ordinary shares, the items identified in paragraphs (a) to (c) above no longer arise. Instead, the new ordinary shares are entitled to participate in profit or loss attributable to ordinary equity holders of the parent entity.

Therefore, profit or loss attributable to ordinary equity holders of the parent entity calculated in accordance with section 3.1 above (paragraph 12 of HKAS 33) is adjusted for the items identified in paragraphs (a) to (c) above and any related taxes.

The expenses associated with potential ordinary shares include transaction costs and discounts accounted for in accordance with the effective interest method (see paragraph 9 of HKAS 39 *Financial Instruments: Recognition and Measurement*).

The conversion of potential ordinary shares may lead to consequential changes in income or expenses. For example, the reduction of interest expense related to potential ordinary shares and the resulting increase in profit or reduction in loss may lead to an increase in the expense related to a non-discretionary employee profit-sharing plan.

For the purpose of calculating diluted earnings per share, profit or loss attributable to ordinary equity holders of the parent entity is adjusted for any such consequential changes in income or expense.

Examination question

Question

Modified from CPA QP FPE 2003 Dec Paper 1 Q3

A proposal is set out for Sporty, a HK incorporated company, to subscribe a US\$9,420,000 convertible debenture (“CD”) issued by PT Sincere. The main features of the CD are as follows:

1. The CD is a ten-year convertible debenture, carrying a coupon rate of 8% p.a. in arrears;
2. The CD is convertible to PT Sincere’s equity shares at any time from the date of issue to the maturity date at the following conversion price per share:

Conversion price = [(Audited net profit after tax) x 8 – Outstanding amount] ÷ 1.5 Million

Sporty has the right to appoint PT Sincere’s President (who is equivalent to the Chairperson of the Board of Directors) and two out of the remaining five vice-presidents (who are equivalent to a director) until the maturity of the CD. In accordance with PT Sincere’s articles, the President has a casting vote at board meetings if there is a tie in the votes cast by the six presidents.

Assume that Sporty decided to invest in PT Sincere and chose to subscribe to the convertible debenture on 5 January 2004. Explain the effect of the convertible debenture issued by PT Sincere on the earnings per share reported in Sporty’s consolidated financial statements for the year ending 30 September 2004. (5 marks)

Answers

Effect of the acquisition on Sporty’s EPS

The basic earnings per share (“basic EPS”) of a company is calculated by the formula:

$$\frac{\text{Net profit (loss) for the period attributable to ordinary shareholders}}{\text{Weighted average number of ordinary shares outstanding during the period}}$$

Since the acquisition of the CD does not affect either the numerator (except for the CD interest received and receivable) or the denominator, the basic EPS will not be materially affected.

HKAS 33 requires that where a listed company has potential ordinary share (POS) outstanding that are dilutive, the company should calculate and disclose diluted EPS. A POS is defined as a financial instrument or other contract that may entitle its holder to ordinary shares of the reporting entity, whether at the option of the issuer or the holder.

Since the CD in this case does not constitute a POS to Sporty, it does not affect the diluted EPS of Sporty.

However, the reported earnings will likely be significant if the results of PT Sincere are consolidated into Sporty’s financial statements. It may therefore be appropriate for Sporty to disclose the effect on EPS if the results of PT Sincere are included in the reported earnings.

HKAS 5 permits an enterprise to disclose additional per share figures other than the basic and diluted EPS figures required to be disclosed by HKAS 5. Such additional per share figures may take the form of per share amounts for various components of net profit.

The weighted average number of shares must still be determined in accordance with SSAP 5, and if the numerator (i.e. earnings consolidating the results of PT Sincere in this case) used is not reported on the face of the income statement, a reconciliation is required between the numerator and a line item which is reported in the income statement.

When such additional EPS figures are presented, both basic and diluted EPS figures must be presented with equal prominence.

4.2 Shares

For the purpose of calculating diluted earnings per share, the number of ordinary shares shall be

- *the weighted average number of ordinary shares calculated in accordance with section 3.2 and section 3.2.2 above (paragraphs 19 and 26 of HKAS 33),*
- *plus the weighted average number of ordinary shares that would be issued on the conversion of all the dilutive potential ordinary shares into ordinary shares.*

Dilutive potential ordinary shares shall be deemed to have been converted into ordinary shares at

- *the beginning of the period or,*
- *if later, the date of the issue of the potential ordinary shares. (HKAS 33 para. 36)*

4.2.1 Determine dilutive potential ordinary shares

1. Determine independently for each period

Dilutive potential ordinary shares shall be determined independently for each period presented. The number of dilutive potential ordinary shares included in the year-to-date period is not a weighted average of the dilutive potential ordinary shares included in each interim computation.

2. Potential ordinary shares weighted for the period they are outstanding

Potential ordinary shares are weighted for the period they are outstanding.

Potential ordinary shares that are cancelled or allowed to lapse during the period are included in the calculation of diluted earnings per share only for the portion of the period during which they are outstanding.

Potential ordinary shares that are converted into ordinary shares during the period are included in the calculation of diluted earnings per share from the beginning of the period to the date of conversion; from the date of conversion, the resulting ordinary shares are included in both basic and diluted earnings per share.

3. Conversion of potential ordinary shares

The number of ordinary shares that would be issued on conversion of dilutive potential ordinary shares is determined from the terms of the potential ordinary shares.

When more than one basis of conversion exists, the calculation assumes the most advantageous conversion rate or exercise price from the standpoint of the holder of the potential ordinary shares.

4. Convertible potential ordinary shares issued by subsidiary, joint venture or associate

A subsidiary, joint venture or associate may issue to parties other than the parent, venturer or investor potential ordinary shares that are convertible into either ordinary shares of the subsidiary, joint venture or associate, or ordinary shares of the parent, venturer or investor (the reporting entity).

If these potential ordinary shares of the subsidiary, joint venture or associate have a dilutive effect on the basic earnings per share of the reporting entity, they are included in the calculation of diluted earnings per share.

4.3 Dilutive Potential Ordinary Shares

Potential ordinary shares shall be treated as dilutive when, and only when, their conversion to ordinary shares would decrease earnings per share or increase loss per share from continuing operations. (HKAS 33 para. 41)

An entity uses profit or loss from continuing operations attributable to the parent entity as the control number to establish whether potential ordinary shares are dilutive or antidilutive. Profit or loss from continuing operations attributable to the parent entity is adjusted in accordance with section 3.1 above (paragraph 12 of HKAS 33) and excludes items relating to discontinuing operations.

4.3.2 Antidilutive

Antidilution is an increase in earnings per share or a reduction in loss per share resulting from the assumption that convertible instruments are converted, that options or warrants are exercised, or that ordinary shares are issued upon the satisfaction of specified conditions. (HKAS 33 para. 5)

Potential ordinary shares are antidilutive when their conversion to ordinary shares would increase earnings per share or decrease loss per share from continuing operations. The calculation of diluted earnings per share does not assume conversion, exercise, or other issue of potential ordinary shares that would have an antidilutive effect on earnings per share.

3. Determine dilutive or antidilutive

In determining whether potential ordinary shares are dilutive or antidilutive, each issue or series of potential ordinary shares is considered separately rather than in aggregate.

The sequence in which potential ordinary shares are considered may affect whether they are dilutive. Therefore, to maximise the dilution of basic earnings per share, each issue or series of potential ordinary shares is considered in sequence from the most dilutive to the least dilutive, i.e. dilutive potential ordinary shares with the lowest 'earnings per incremental share' are included in the diluted earnings per share calculation before those with a higher earnings per incremental share.

Options and warrants are generally included first because they do not affect the numerator of the calculation.

4.3.2 Options, warrants and their equivalents

For the purpose of calculating diluted earnings per share, an entity shall assume the exercise of dilutive options and warrants of the entity. The assumed proceeds from these instruments shall be regarded as having been received from the issue of ordinary shares at the average market price of ordinary shares during the period.

The difference between the number of ordinary shares issued and the number of ordinary shares that would have been issued at the average market price of ordinary shares during the period shall be treated as an issue of ordinary shares for no consideration. (HKAS 33 para. 45)

Options and warrants are dilutive when they would result in the issue of ordinary shares for less than the average market price of ordinary shares during the period. The amount of the dilution is the average market price of ordinary shares during the period minus the issue price. Therefore, to calculate diluted earnings per share, potential ordinary shares are treated as consisting of both the following:

- (a) a contract to issue a certain number of the ordinary shares at their average market price during the period. Such ordinary shares are assumed to be fairly priced and to be neither dilutive nor antidilutive. They are ignored in the calculation of diluted earnings per share.
- (b) a contract to issue the remaining ordinary shares for no consideration. Such ordinary shares generate no proceeds and have no effect on profit or loss attributable to ordinary shares outstanding. Therefore, such shares are dilutive and are added to the number of ordinary shares outstanding in the calculation of diluted earnings per share.

Options and warrants have a dilutive effect only when the average market price of ordinary shares during the period exceeds the exercise price of the options or warrants (i.e. they are 'in

the money’). Previously reported earnings per share are not retroactively adjusted to reflect changes in prices of ordinary shares.

Employee share options with fixed or determinable terms and non-vested ordinary shares are treated as options in the calculation of diluted earnings per share, even though they may be contingent on vesting. They are treated as outstanding on the grant date. Performance-based employee share options are treated as contingently issuable shares because their issue is contingent upon satisfying specified conditions in addition to the passage of time.

4.3.3 Convertible instruments

The dilutive effect of convertible instruments shall be reflected in diluted earnings per share in accordance with sections 4.1 and 4.2 above (paragraphs 33 and 36 of HKAS 33).

Convertible preference shares are antidilutive whenever the amount of the dividend on such shares declared in or accumulated for the current period per ordinary share obtainable on conversion exceeds basic earnings per share. Similarly, convertible debt is antidilutive whenever its interest (net of tax and other changes in income or expense) per ordinary share obtainable on conversion exceeds basic earnings per share.

The redemption or induced conversion of convertible preference shares may affect only a portion of the previously outstanding convertible preference shares. In such cases, any excess consideration referred to in paragraph 17 is attributed to those shares that are redeemed or converted for the purpose of determining whether the remaining outstanding preference shares are dilutive. The shares redeemed or converted are considered separately from those shares that are not redeemed or converted.

4.3.4 Contingently issuable shares

As in the calculation of basic earnings per share, contingently issuable ordinary shares are treated as outstanding and included in the calculation of diluted earnings per share if the conditions are satisfied (i.e. the events have occurred). Contingently issuable shares are included from the beginning of the period (or from the date of the contingent share agreement, if later).

1. Condition for issue of contingently issuable ordinary shares not satisfied

If the conditions are not satisfied, the number of contingently issuable shares included in the diluted earnings per share calculation is based on the number of shares that would be issuable if the end of the period were the end of the contingency period. Restatement is not permitted if the conditions are not met when the contingency period expires.

2. Condition on earnings satisfied

If attainment or maintenance of a specified amount of earnings for a period is the condition for contingent issue and if that amount has been attained at the end of the reporting period but must be maintained beyond the end of the reporting period for an additional period, then the additional ordinary shares are treated as outstanding, if the effect is dilutive, when calculating diluted earnings per share.

In that case, the calculation of diluted earnings per share is based on the number of ordinary shares that would be issued if the amount of earnings at the end of the reporting period were the amount of earnings at the end of the contingency period.

Because earnings may change in a future period, the calculation of basic earnings per share does not include such contingently issuable ordinary shares until the end of the contingency period because not all necessary conditions have been satisfied.

3. Condition on future market price

The number of ordinary shares contingently issuable may depend on the future market price of the ordinary shares.

In that case, if the effect is dilutive, the calculation of diluted earnings per share is based on the number of ordinary shares that would be issued if the market price at the end of the reporting period were the market price at the end of the contingency period.

If the condition is based on an average of market prices over a period of time that extends beyond the end of the reporting period, the average for the period of time that has lapsed is used.

Because the market price may change in a future period, the calculation of basic earnings per share does not include such contingently issuable ordinary shares until the end of the contingency period because not all necessary conditions have been satisfied.

4. Condition on future earnings and future prices

The number of ordinary shares contingently issuable may depend on future earnings and future prices of the ordinary shares.

In such cases, the number of ordinary shares included in the diluted earnings per share calculation is based on both conditions (i.e. earnings to date and the current market price at the end of the reporting period).

Contingently issuable ordinary shares are not included in the diluted earnings per share calculation unless both conditions are met.

5. Other condition

In other cases, the number of ordinary shares contingently issuable depends on a condition other than earnings or market price (for example, the opening of a specific number of retail stores).

In such cases, assuming that the present status of the condition remains unchanged until the end of the contingency period, the contingently issuable ordinary shares are included in the calculation of diluted earnings per share according to the status at the end of the reporting period.

6. Calculation of diluted earnings per share with contingently issuable potential ordinary shares

Contingently issuable potential ordinary shares (other than those covered by a contingent share agreement, such as contingently issuable convertible instruments) are included in the diluted earnings per share calculation as follows:

- (a) an entity determines whether the potential ordinary shares may be assumed to be issuable on the basis of the conditions specified for their issue in accordance with the contingent ordinary share provisions in this section (section 4.3.4 or paragraphs 52-56 of HKAS 33); and
- (b) if those potential ordinary shares should be reflected in diluted earnings per share, an entity determines their impact on the calculation of diluted earnings per share by following the provisions for options and warrants in section 4.3.1 above (paragraphs 45-48 of HKAS 33), the provisions for convertible instruments in section 4.3.3 above (paragraphs 49-51 of HKAS 33), the provisions for contracts that may be settled in ordinary shares or cash in section 4.3.5 below (paragraphs 58-61 of HKAS 33), or other provisions, as appropriate.

However, exercise or conversion is not assumed for the purpose of calculating diluted earnings per share unless exercise or conversion of similar outstanding potential ordinary shares that are not contingently issuable is assumed.

4.3.5 Contracts that may be settled in ordinary shares or cash

When an entity has issued a contract that may be settled in ordinary shares or in cash at the entity's option, the entity shall presume that the contract will be settled in ordinary shares,

and the resulting potential ordinary shares shall be included in diluted earnings per share if the effect is dilutive. (HKAS 33 para. 58)

When such a contract is presented for accounting purposes as an asset or a liability, or has an equity component and a liability component, the entity shall adjust the numerator for any changes in profit or loss that would have resulted during the period if the contract had been classified wholly as an equity instrument. That adjustment is similar to the adjustments required in section 4.1 above (paragraph 33 of HKAS 33).

For contracts that may be settled in ordinary shares or cash at the holder's option, the more dilutive of cash settlement and share settlement shall be used in calculating diluted earnings per share.

An example of a contract that may be settled in ordinary shares or cash is a debt instrument that, on maturity, gives the entity the unrestricted right to settle the principal amount in cash or in its own ordinary shares. Another example is a written put option that gives the holder a choice of settling in ordinary shares or cash.

4.3.6 Purchased options

Contracts such as purchased put options and purchased call options (i.e. options held by the entity on its own ordinary shares) are not included in the calculation of diluted earnings per share because including them would be antidilutive. The put option would be exercised only if the exercise price were higher than the market price and the call option would be exercised only if the exercise price were lower than the market price.

4.3.7 Written put options

Contracts that require the entity to repurchase its own shares, such as written put options and forward purchase contracts, are reflected in the calculation of diluted earnings per share if the effect is dilutive. If these contracts are 'in the money' during the period (ie the exercise or settlement price is above the average market price for that period), the potential dilutive effect on earnings per share shall be calculated as follows:

- (a) *it shall be assumed that at the beginning of the period sufficient ordinary shares will be issued (at the average market price during the period) to raise proceeds to satisfy the contract;*
- (b) *it shall be assumed that the proceeds from the issue are used to satisfy the contract (ie to buy back ordinary shares); and*
- (c) *the incremental ordinary shares (the difference between the number of ordinary shares assumed issued and the number of ordinary shares received from satisfying the contract) shall be included in the calculation of diluted earnings per share.* (HKAS 33 para. 63)

Example: Diluted EPS

Source from ACCA Student Accountants

Net profit for the year	\$120,000
Number of ordinary shares in issue	500,000
Average fair value of one ordinary share	\$2.00
Shares under the option during the year	100,000
Exercise price of shares under option	\$1.50

Requirement: Calculate the basic and fully diluted earning per share.

Answers

	<u>Earnings</u>	<u>Shares</u>	<u>EPS</u>
Basic EPS	\$120,000	500,000	24.0p
Additional shares (100,000 – 75,000) (100,000 x 1.5 / 2 = 75,000)		25,000	
Diluted EPS	120,000	525,000	22.9p

5. Retrospective Adjustments

If the number of ordinary or potential ordinary shares outstanding increases as a result of a capitalisation, bonus issue or share split, or decreases as a result of a reverse share split, the calculation of basic and diluted earnings per share for all periods presented shall be adjusted retrospectively.

If these changes occur after the balance sheet date but before the financial statements are authorised for issue, the per share calculations for those and any prior period financial statements presented shall be based on the new number of shares. The fact that per share calculations reflect such changes in the number of shares shall be disclosed.

In addition, basic and diluted earnings per share of all periods presented shall be adjusted for the effects of errors and adjustments resulting from changes in accounting policies accounted for retrospectively. (HKAS 33 para. 64)

An entity does not restate diluted earnings per share of any prior period presented for changes in the assumptions used in earnings per share calculations or for the conversion of potential ordinary shares into ordinary shares.

6. Presentation

An entity shall present on the face of the income statement basic and diluted earnings per share for profit or loss from continuing operations attributable to the ordinary equity holders of the parent entity and for profit or loss attributable to the ordinary equity holders of the parent entity for the period for each class of ordinary shares that has a different right to share in profit for the period.

An entity shall present basic and diluted earnings per share with equal prominence for all periods presented. (HKAS 33 para. 66)

Earnings per share is presented for every period for which an income statement is presented. If diluted earnings per share is reported for at least one period, it shall be reported for all periods presented, even if it equals basic earnings per share. If basic and diluted earnings per share are equal, dual presentation can be accomplished in one line on the income statement.

An entity that reports a discontinuing operation shall disclose the basic and diluted amounts per share for the discontinuing operation either on the face of the income statement or in the notes to the financial statements. (HKAS 33 para. 68)

An entity shall present basic and diluted earnings per share, even if the amounts are negative (ie a loss per share). (HKAS 33 para. 69)

7. Disclosure

An entity shall disclose the following:

- (a) the amounts used as the numerators in calculating basic and diluted earnings per share, and a reconciliation of those amounts to profit or loss attributable to the parent entity for the period. The reconciliation shall include the individual effect of each class of instruments that affects earnings per share.*
- (b) the weighted average number of ordinary shares used as the denominator in calculating basic and diluted earnings per share, and a reconciliation of these denominators to each other. The reconciliation shall include the individual effect of each class of instruments that affects earnings per share.*
- (c) instruments (including contingently issuable shares) that could potentially dilute basic earnings per share in the future, but were not included in the calculation of diluted earnings per share because they are antidilutive for the period(s) presented.*

- (d) a description of ordinary share transactions or potential ordinary share transactions, other than those accounted for in accordance with paragraph 64, that occur after the balance sheet and that would have changed significantly the number of ordinary shares or potential ordinary shares outstanding at the end of the period if those transactions had occurred before the end of the reporting period. (HKAS 33 para. 70)*

Examples of transactions in paragraph d above include:

- (a) an issue of shares for cash;
- (b) an issue of shares when the proceeds are used to repay debt or preference shares outstanding at the balance sheet date;
- (c) the redemption of ordinary shares outstanding;
- (d) the conversion or exercise of potential ordinary shares outstanding at the balance sheet date into ordinary shares;
- (e) an issue of options, warrants, or convertible instruments; and
- (f) the achievement of conditions that would result in the issue of contingently issuable shares.

Earnings per share amounts are not adjusted for such transactions occurring after the balance sheet date because such transactions do not affect the amount of capital used to produce profit or loss for the period.

Financial instruments and other contracts generating potential ordinary shares may incorporate terms and conditions that affect the measurement of basic and diluted earnings per share. These terms and conditions may determine whether any potential ordinary shares are dilutive and, if so, the effect on the weighted average number of shares outstanding and any consequent adjustments to profit or loss attributable to ordinary equity holders. The disclosure of the terms and conditions of such financial instruments and other contracts is encouraged, if not otherwise required (see HKAS 32).

If an entity discloses, in addition to basic and diluted earnings per share, amounts per share using a reported component of the income statement other than one required by HKAS 33, such amounts shall be calculated using the weighted average number of ordinary shares determined in accordance with HKAS 33.

Basic and diluted amounts per share relating to such a component shall be disclosed with equal prominence and presented in the notes to the financial statements. An entity shall indicate the basis on which the numerator(s) is (are) determined, including whether amounts per share are before tax or after tax. If a component of the income statement is used that is not reported as a line item in the income statement, a reconciliation shall be provided between the component used and a line item that is reported in the income statement. (HKAS 33 para. 73)

8. Effective Date

An entity shall apply HKAS 33 for annual periods beginning on or after 1 January 2005. Earlier application is encouraged. If an entity applies HKAS 33 for a period beginning before 1 January 2005, it shall disclose that fact. (HKAS 33 para. 74)

If an entity decides to apply HKAS 33 for an earlier period, it is not required to apply all the HKASs with the same effective date for that same period. However, it is required to apply the amendments set out in the appendix on amendments to other pronouncements for that earlier period.

9. Withdrawal of Other Pronouncements

HKAS 33 supersedes SSAP 5 *Earnings Per Share* revised in 1998 and Interpretation 10 *Earnings Per Share — Financial Instruments and Other Contracts that May Be Settled in Shares*.

Example: Diluted EPS – Comprehensive Question*Source from ACCA Student Accountants*

Issued share capital as at 31 Dec. 96 and 97: 2 million ordinary shares of 10p each

- The average market price of the shares during the year was \$0.75.
- Options have been granted to the directors and certain senior executives giving them the right to subscribe for 100,000 ordinary shares between 2002 and 2005 at \$0.60 per share.
- 800,000 8% convertible cumulative preference shares of \$1 each. Each preference share is convertible into 2 ordinary shares.
- \$1,000,000 of 5% Convertible bonds. Each \$1 bond is convertible into 2 ordinary shares.
- The price of 2.5% Consolidated Stock on the 1 Jan. 97 for the purpose of this question is to be taken at \$25.
- Net profit attributable to ordinary shareholders for the year ended 31 Dec. 1997 is \$100,000 all of which relates to continuing operations.
- Corporation tax at 35%

Calculate the diluted earnings per share.

Answers

Adjustments to earnings

Preference dividends	8% x 800,000 = 64,000
Convertible loan stock interest	5% x 1,000,000 @ 65% = 32,500
Options	No adjustment to earnings

Potential ordinary shares

Convertible preference shares	800,000 x 2 = 1,600,000
Convertible loan stock	1,000,000 x 2 = 2,000,000
Options – additional shares	100,000 – 100,000 x 0.6 / 0.75 = 20,000

To rank them

	<u>Earnings</u>	<u>Shares</u>	<u>EPS</u>	<u>Rank</u>
Convertible preference shares	64,000	1,600,000	\$0.040	3
Convertible loan stock	32,500	2,000,000	\$0.016	2
Options – additional shares	Nil	20,000	Nil	1

	<u>Earnings</u>	<u>Shares</u>	<u>EPS</u>	
Basic	100,000	2,000,000	\$0.0500	
Options – additional shares	<u>Nil</u>	<u>20,000</u>		
	100,000	2,020,000	\$0.0495	
Convertible loan stock	<u>32,500</u>	<u>2,000,000</u>		
	132,500	4,020,000	\$0.0330	
Convertible preference shares	<u>64,000</u>	<u>1,600,000</u>		
	196,500	5,620,000	\$0.0350	<i>Antidilution</i>

Antidilution is an increase in EPS or a reduction in loss per share resulting from the assumption that convertible instruments are converted, that options or warrants are exercised, or that ordinary shares are issued upon the satisfaction of specified conditions.

In this case, the Diluted EPS (most dilution) would be \$0.033, not \$0.035.