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A Digital Learning Platform for Generation Z: Passport to IFRS®

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# IAS® Standard 33 Earnings per Share

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**IAS® Standard 33 Earnings per Share**

Earnings per share (EPS) is the most frequently used ratio to evaluate the financial performance of an entity over different periods and to compare various entities' financial performance. IAS Standard 33 Earnings per share focuses on how an entity's EPS is calculated and how the EPS is disclosed in the financial statements.

## SCOPE

Entities with shares traded in a public market and which try to issue shares in a public market should apply IAS 33 on separate, individual, and consolidated financial statements (IAS 33.2). If an entity presents both consolidated and individual financial statements, the disclosures required by this Standard need to be presented on the basis of the consolidated information only (IAS 33. 4).

## KEY DEFINITIONS

To understand IAS 33, it is necessary to know the meanings of the terms dilution, antidilution, and the difference between ordinary shares and potential ordinary shares.

An ordinary share is an equity instrument subordinate to all other classes of equity instruments. Owners of ordinary shares have the right to vote at a company shareholders' meeting, and they get dividends from profit after the owners of other types of shares (such as preference shares) have received their dividends.

A potential ordinary share is a financial instrument or another contract that may entitle its holder to ordinary shares (IAS 33.5).

Dilution can be defined as a decrease in EPS or an increase in loss per share, assuming that potential ordinary shares are converted into ordinary shares.

Antidilution refers to an increase in EPS or a reduction in loss per share, assuming that potential ordinary shares are converted into ordinary shares.

## MEASUREMENT

In IAS 33, two different definitions of EPS, namely basic EPS and diluted EPS, are discussed. The earning per share figure calculated by taking the number of outstanding ordinary shares of the entity into account is called the basic EPS. EPS calculated by considering both outstanding ordinary shares and potential ordinary shares are called diluted EPS.

Basic EPS can be calculated as follows:

$$Basic\ EPS = \frac{Net\ profit\ or\ loss\ for\ the\ period\ attributable\ to\ ordinary\ equity\ holders}{The\ average\ number\ of\ ordinary\ shares\ for\ the\ period}$$

It is essential to know what to consider when calculating net profit or loss and the average number of ordinary shares for the period to calculate basic EPS.

1- When calculating net profit or loss for the period attributable to ordinary equity holders, adjusted for the after-tax amounts of preference dividends should be deducted from profits or losses from continuing operations attributable to the parent entity.
2- When calculating the average number of ordinary shares, all ordinary shares of the entity during the period should be taken into account. During the period, the entity may have issued or bought back ordinary shares. Newly issued shares are multiplied by a time-weighting factor and added to the outstanding ordinary shares. If an entity bought back shares, in this case, bought back shares multiplied by a time-weighting factor and subtracted from outstanding ordinary shares. The number of shares outstanding at the beginning is thus adjusted; in other words, the average number of ordinary shares is calculated.
The time-weighted factor can be calculated as follows:

$$The\ time-weighted\ factor = \frac{The\ number\ of\ days\ that\ the\ ordinary\ shares\ are\ in\ circulation\ during\ the\ period}{Total\ number\ of\ days\ in\ a\ year}$$

If an entity issues shares for cash or receivables, the day consideration receivable is taken into account when calculating the time-weighted factor (IAS 33. 21).

**EXAMPLE 1**

White Company has CU5,000,000 equity and 5,000,000 shares on January 1, 2022. On July 1, 2022, the entity issued 1,000,000 new shares, and its total equity is now CU6,000,000. White Company bought back 120,000 shares on December 1, 2022.

White Company's profit attributable to ordinary shareholders was CU1,000,000 in 2021 and it is CU1,045,000 in 2022.

Calculation of weighted average number of shares in 2022

| **Date** | **The time-weighted factor (a)** | **Number of shares (b)** | **Adjusted number of shares (axb)** |
|---|---|---|---|
| January 1, 2022 | 12/12 | 5,000,000 | 5,000,000 |
| July 1, 2022 | 6/12 | 1,000,000 | 500,000 |
| December 1, 2022 | 1/12 | -120,000 | -10,000 |
| The weighted average number of shares | | | 5,490,000 |

As seen in the example, White Company issued 1,000,000 shares on July 1, 2022. These shares remained in circulation for six months. The time-weighting factor for these shares is 6/12. The adjusted number of these shares is calculated as 1,000,000x (6/12)= 500,000. This amount should be added to the weighted average number of shares calculated. The company bought back 120,000 shares on December 1, 2022. The time-weighting factor for these shares is 1/12. The adjusted number of these shares is calculated as 120,000x (1/12)= 10,000. This amount should be excluded when weighted average number of shares are being calculated. The weighted average number of shares is 5,490,000.

Calculation of Basic EPS

| Date | December 31, 2021 | December 31, 2022 |
|---|---|---|
| Profit attributable to ordinary shareholder (c) | 1,000,000 | 1,045,000 |
| Average number of shares (d) | 5,000,000 | 5,490,000 |
| Basic EPS (c/d) | 0.2 | 0.19 |

Sometimes entities issue shares (or reduce the number of ordinary shares) without a change in resources. For example, when a bonus issue is issued, the total resources of the entity do not change, but the total number of shares does change. In this case, making comparisons between periods becomes meaningless. To make it possible to compare, earnings per share must be adjusted to the beginning of the earliest period presented, regardless of the actual date of issue (IAS 33. 27-28).

**EXAMPLE 2**

Orange Company has CU5,000,000 equity and 5,000,000 shares on January 1, 2022. On July 1, 2022, the entity issued 1,000,000 new bonus issues using cash reserves.

Orange Company's profit attributable to ordinary shareholders was 1,000,000 in 2021 and it is 1,045,000 in 2022.

In this case, newly issued bonus shares are assumed to be circulating at the beginning of the prior period.

Calculation of Basic EPS

| Date | December 31, 2021 | December 31, 2022 |
|---|---|---|
| Profit attributable to the ordinary shareholder (c) | 1,000,000 | 1,045,000 |
| Average number of shares (d) | 6,000,000 | 6,000,000 |
| Basic EPS (c/d) | 0.167 | 0.174 |

According to IAS 33, entities should present both basic EPS and diluted EPS in their financial statements. Basic EPS expresses how much the company actually earns per share. Whereas diluted EPS enables financial statement users to foresee the entity's future. The existence of potential ordinary shares of the entity indicates the probability of an increase in the number of shares in the future. The realisation of this possibility will lead to a decrease in the partnership rate of those holding the shares in the current period. Diluted earnings per share provide information on how much earnings per share would be if potential ordinary shares were converted to ordinary shares. Because when the diluted earnings share is calculated, potential ordinary shares are taken into account.

Diluted EPS is also calculated by dividing net profit or loss attributable to ordinary shares by the number of ordinary shares. But in this calculation, both the numerator and the denominator should be adjusted by considering the effect of potential ordinary shares. When diluted EPS is being calculated, profit or loss from continuing operations attributable to ordinary equity holders of the parent entity is adjusted for the after-tax effects of the following items (IAS 33. 33):

- 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

- any interest recognised in the period related to dilutive potential ordinary shares; and

- any other changes in income or expense that would result from the conversion of the dilutive potential ordinary shares.

Moreover, the number of shares to be used to calculate diluted EPS (denominator) is equal to the weighted average of the number of ordinary shares plus the weighted average of the number of shares that would be issued if potential dilutive shares were converted to ordinary shares.

Potential ordinary shares can have dilutive or antidilutive effects on EPS. Only if potential shares have dilutive effects on EPS in other words, the presence of potential ordinary shares reduces the EPS or increases the loss per share, they are included in the diluted EPS calculation (IAS 33. 43). In this way, financial statement users are informed about possible adverse events related to EPS.

Examples of potential ordinary shares are (IAS 33.7):

(a) convertible instruments,

(b) options and warrants,

(c) contracts that give the right to buy shares of the entity's

**Options**

Share options are financial contracts that give the holder the right to buy or sell a particular share at a specified price within or at the end of a specified period. A put option gives the holder the right to sell a certain share at a certain price within a certain period or at the end of a certain period, while a call option gives the holder the right to buy a certain share at a certain price within a certain period or at the end of such period.

As long as the price determined in the put options is above the market price, using the option is advantageous for the owner, and exercising the option will have a dilution effect on EPS.

**EXAMPLE 3**

Blue Company sold 10,000 share options at CU3 in 3 years. Share options were sold on January 1, 2022.

If the average market price of Blue Company's share during 2022 were CU2, this option would be disadvantageous for the owner. If options are exercised, there will be an antidilution effect.

If the average market price of Blue Company's share during 2022 was CU4, this option would be advantageous for the owner. If options are exercised, there will be a dilution effect.

When an entity calculates diluted EPS, dilutive options are assumed as they are exercised. When calculating the dilutive effect of options, options issued in previous periods and that have not expired are assumed to have been exercised at the beginning of the period. Similarly, options issued in the current period are deemed to have been exercised at the beginning of the period.

When calculating diluted EPS;

- The income to be obtained in case of exercising the options is calculated.

- The number of shares this income will correspond to if ordinary shares are purchased at the average market price is calculated. These shares have an antidilutive effect.

- The difference between option shares and shares that have antidilutive effects is assumed as an issue of ordinary shares for no consideration. These shares are taken into account to calculate diluted EPS.

**EXAMPLE 4**

Yellow Company has 100,000 ordinary shares. On May 1, 2020, Yellow Company issued and sold 10,000 share options at CU3 in 3 years. The average market price of Yellow Company's shares during 2021 is CU4. Yellow Company's profit attributable to ordinary shareholders was CU100,000 in 2021.

These share options are dilutive because the average market price (CU4) is higher than the exercise price of the option.

In this case,

Basic EPS is 1 (100,000/100,000).

When diluted EPS is calculated, the effect of options (potential ordinary shares) should be considered.

Income from the exercise of options is CU30,000 (10,000x3).

The number of ordinary shares that can be purchased from the market at the average market price in case the option is exercised is 7,500 (30,000/4). These shares are antidilutive and are not taken into consideration in calculating diluted EPS.

10,000-7,500= 2,500 shares shall be treated as an issue of ordinary shares for no consideration. They are taken into account in calculating diluted EPS.

In this case, diluted EPS is 0.976 (100,000/ (100,000+2,500)).

**Convertible Instruments**

If the business owns convertible instruments, such as convertible bonds and convertible preferred shares, these instruments should also be considered when calculating diluted EPS. Convertible bonds are financial instruments that give the holder the right to convert their bonds into shares for a certain period of time. Those who own these financial instruments both benefit from the bond interest yield and can exchange their bonds for shares if they wish (in this respect, they are advantageous if the share price increases). When calculating diluted EPS, the after-tax value of the interest paid on the bonds must be added to the profit.

Convertible preferred shares have priority over ordinary shares in receiving dividends. In other words, when an entity has profit for the period, dividends are paid primarily to the owners of preferred shares. These paid dividends are subtracted from the profit for the period. Ordinary shareholders' dividends are calculated from the remaining profit figure. When calculating diluted earnings per share, dividends paid on preferred shares should be added to the profit or loss attributable to ordinary equity holders. In addition, the increase in the number of ordinary shares due to the conversion of preferred shares to ordinary shares should be taken into account. When the number of ordinary shares emerging from the conversion of convertible instruments is being calculated, the time-weighting factor is taken into consideration.

**EXAMPLE 5**

Red Company has 100,000 ordinary shares. On May 1, 2020, Red Company issued and sold 10,000 convertible bonds. A bond can be converted into six ordinary shares. In 2022,interest worth CU20,000 was paid on convertible bonds. Red Company made profit worth CU100,000 in 2022. The corporate tax rate is 20%.

Basic EPS is 1 (100,000/100,000).

The after-tax value of the interest paid on the bonds is CU16,000 (20,000x (1-0.2).

Weighted average number of potential shares is 40,000 (10,000x6x(8/12)).

Diluted EPS is 0,83 ((100,000+16,000)/(100,000+40,000)).

**Contingently Issuable Shares**

Contingently issuable shares are shares that will be issued free of charge or for a low price if the conditions specified in the contingent share agreement are met. Conditions in the contingently issuable shares agreement may be factors such as realising a certain sales volume, obtaining a certain amount of profit, etc.

Contingently issuable shares are taken into account in the calculation of basic EPS only when the relevant condition is fulfilled. If the condition is related to future periods, it is not taken into account in the calculation of basic earnings per share. While calculating diluted earnings per share, contingently issuable ordinary shares are included in the calculation if the condition is met in the current period, even if it is related to future periods. If the contingently issuable ordinary shares agreement is made in the prior period, the contingently ordinary shares are considered to have existed since the beginning of the current period when calculating the current period's diluted earnings per share. If the contingent share agreement is made in the current period, the contingent shares are considered to exist as of the contract date.

**EXAMPLE 6**

Black Company has a contingent share agreement stating that 1% of the profit for the period will be distributed to the managers of the enterprise in case the net profit exceeds CU500,000. This agreement was made in 2020 and covered a period of ten years. The entity made a profit of CU600,000 at the end of 2021. The entity has 100,000 ordinary shares in 2021. The average market price of ordinary shares is CU2 in 2021.

Basic EPS is 6 (600,000/100,000).

The number of shares to be distributed to managers is 3,000 ((600,000x0.01)/2).

Diluted EPS is 5.82 (600,000/ (100,000+3,000).

An entity should present the following information in the statement of comprehensive income for all periods presented:

- Basic and diluted earnings for profit or loss from continuing operations attributable to the ordinary equity holders of the parent entity
- Earnings per share is presented for every period for which a statement of comprehensive income is presented
- If the entity has a discontinued operation, it should also present basic earnings per share and diluted earnings per share for profit or loss from discontinued operations.

**DISCLOSURE**

Basic and diluted EPS figures should be presented in the statement of comprehensive income. In the notes, the entity should provide information on how these figures were calculated. In this context, it is necessary to explain how the figures in the numerator and denominator of the fraction are calculated when calculating the EPS.

Moreover, if there are financial instruments that are not considered in the diluted EPS calculation because they did not have a dilutive effect in the current period, they should be disclosed in the notes. Thus, financial statement users are informed about the instruments that have the dilutive potential for EPS in the future.

**EXAMPLE 7**

Rainbow Company has CU200,000 equity and 200,000 shares on January 1, 2022.

The entity sold 500 share options at CU2 in 4 years. Share options were sold on February 1, 2022.

According to the entity's contingent share agreement, 2% of the profit will be distributed to the managers in case the net profit exceeds CU100,000.

The entity sold 1,500 convertible bonds on November 1, 2022. A bond can be convertible into 3 ordinary shares. In 2022, interest worth CU5,000 was paid for convertible bonds. The corporate tax rate is 20%.

The average market price is CU4 during 2022.

The entity's profit for the period is CU300,000.

**Solution**

Basic EPS is 1.5 (300,000/200,000).

Options

Income from the exercise of the options is CU1,000 (500x2).

The number of ordinary shares that can be purchased from the market at the average market price is 250 (1,000/4). These shares are antidilutive. 750 (1,000-250) shares should be taken into account when earnings per share are calculated.

Diluted EPS is 1.49 (300,000/(200,000+750)). The options should be taken into consideration when the diluted EPS is calculated, since the basic EPS (1.5) is higher than the diluted EPS (1.49).

Contingently issuable shares:

The number of shares to be distributed to the managers is 1,500 ((300,000x0.02)/4).

Diluted EPS is 1.48 (300,000/(200,750+1,500)). With the issue of the contingently issuable shares, the diluted EPS decreased from 1.49 to 1.48. Thus contingently issuable shares should be taken into account when the diluted EPS is calculated.

Convertible bonds:

The after-tax value of the interest paid for the bonds is CU4,000 (5,000(1-0.2)).

The weighted average number of potential shares is 750 (1,500x3x(2/12)).

Diluted EPS is 1.497 ((300,000+4,000)/(202,250+750)). With the issue of the convertible bonds, the diluted EPS increased from 1.48 to 1.497. Thus convertible bonds should not be taken into account when the diluted EPS is calculated.