Earnings per share errors

Although investors and analysts continue to seek better methods for selecting successful stocks, earnings per share (EPS) continues to be one of the top indicators. Given the attention focused on this ratio, proper calculation and presentation is critical. Hong Kong Accounting Standard 33 (HKAS 33) guides preparers and auditors through the fundamentals of the topic:

"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.

The objective of diluted earnings per share is consistent with that of basic earnings per share... while giving effect to all dilutive potential ordinary shares outstanding during the period..."
(HKAS 33)

Basic EPS is calculated by dividing profit or loss attributable to ordinary equity holders of the parent entity (the numerator) by the weighted average of ordinary shares outstanding (the denominator) during the period.

When calculating diluted EPS the numerator and denominator will be adjusted for the effects of all dilutive instruments. These include outstanding convertible preference shares, convertible debentures, stock options and warrants.

The textbook calculation of EPS appears to be simple; however, the determination of the numerator and denominator can complicate the calculation in practice. Members should be aware of the complicating factors and exercise due care when checking the calculation of EPS figures. Reference should be made to HKAS 33 for details of the relevant requirements. Below are simplified versions of real cases to help members understand the root cause of the error.

Share split/share subdivision

One case involved a share split after the reporting period but before the issue date of the financial statements. A similar case involved share subdivision.

For both cases, the calculation of basic and diluted EPS figures, which was presented on the face of the consolidated statement of comprehensive income, was not based on the number of shares after the share split/share subdivision.

For the first case, the adjusted basic and diluted EPS figures (using the number of shares after the share split) were disclosed in the subsequent event section of the financial statements. For the case involving share subdivision, the EPS figures were corrected shortly after the errors were discovered and disclosed in an announcement.

Paragraph 66 of HKAS 33 requires an entity to present the basic and diluted EPS figures in the statement of comprehensive income. Including a disclosure in a separate section of the financial statements is not an alternative of presenting the correct EPS figures on the face of the consolidated statement of comprehensive income.

Paragraph 64 of HKAS 33 requires specific treatment for changes resulting from a capitalization, bonus issue, share split, or reverse share split, which occurs after the reporting period but before the financial statements are authorized for issue. In those cases, the per share calculations for those and any prior period financial statements presented shall be based on the new number of shares.

Share capitalization

The next case involves a share capitalization that occurred after the reporting period but before the issue date of the relevant financial statements. The company incorrectly calculated both the basic and diluted EPS figures based on the weighted average number of shares without taking into account the share capitalization, and the audited financial statements contained this error. In the subsequent year financial statements, the current period's EPS figures were correctly presented by taking into account the share capitalization whereas the EPS figures for the corresponding period were not adjusted.

Paragraph 28 of HKAS 33 requires that the EPS figures be calculated as if the share capitalization had occurred at the beginning of the earliest period presented.

Share consolidation
A share consolidation was completed during the reporting period. The financial statements disclosed that the weighted average number of ordinary shares for the purpose of calculating the basic and diluted loss per share for the current period and earnings per share for the corresponding period had been retrospectively adjusted for the effect of the share consolidation completed.

However, the weighted average number of ordinary shares for calculating the current period EPS figures was not correctly calculated, as the effect of the share consolidation had been overlooked.

Wrong denominator used
In one case, the number of shares used for calculating the basic EPS was more than the maximum number of ordinary shares in issue during the period. In addition, when calculating the diluted EPS, conversions of convertible notes during the period were not taken into account for calculating the dilutive potential ordinary shares.

Paragraphs 19 and 36 of HKAS 33 require the denominator for EPS calculations be a weighted average number of ordinary shares/dilutive potential ordinary shares for the period during which they are outstanding. Paragraph 38 of HKAS 33 states that potential ordinary shares that are converted into ordinary shares during the period shall be included in the calculation of diluted EPS from the beginning of the period to the date of conversion.

In another case, a share consolidation was completed during the reporting period. The weighted average number of ordinary shares issued before the share consolidation was included in the weighted average number of ordinary shares for calculating both the basic and diluted loss per share. This happened twice and resulted in significant understatement of both figures.

Share consolidation and rights issue
In this case, the EPS figures were wrongly calculated twice.

There was a share consolidation and rights issue after the reporting period but before the issue date of the financial statements. In calculating the weighted number of shares for the EPS figures, the number of shares after the share consolidation and rights issue was used, without applying the adjustment factor.

The EPS figures were amended several months after the financial statements were published and disclosed in an announcement. However, the EPS figures, together with those disclosed in the subsequent period's interim financial statements, were further amended a couple of months later and disclosed in another announcement. The error arose from the company's use of the wrong fair value per share immediately before the exercise of rights in the calculation of the adjustment factor – i.e. the closing price on an ex-rights basis was used, instead of on a cum-rights basis.

The above are a few examples illustrating how errors in calculating EPS figures could have occurred easily. There are other complications that could have made the calculation of EPS figures challenging. Members should ensure that EPS figures are properly calculated in accordance with HKAS 33.

This article is contributed by the Institute's Compliance Department.