Chapter 18 – Dilutive Securities and EPS

Learning Objectives
- Understand and account for dilutive securities
- Understand how to account for stock options
- Understand the difference between a simple and complex capital structure
- Calculate basic and diluted EPS
- Develop a Statement of Stockholders’ Equity

Dilutive Securities
Financial instruments that do not represent stock when they are issued but could become stock at any time

- Convertible bonds
- Warrants
- Convertible preferred stock
- Stock options

Convertible Bonds and Convertible Preferred Stock
- Convertible bonds are a liability at time of issuance while convertible preferred stock is equity.
- When convertible bonds or convertible preferred stock is converted, additional shares of common stock will be outstanding and the reported earnings per share will be reduced (diluted).
Warrants
- Stock warrants—represent the right to purchase additional shares of common stock at an established price, referred to as the exercise price.
- Sometimes warrants are issued in conjunction with other securities, referred to as detachable warrants.
- When accounting for detachable warrants, the issue price should be allocated to the two instruments according to the proportionate fair market values of the two instruments as of the issue date.
- Ex. 2

Detachable Warrants
- Issue price should be allocated to the two instruments according to the proportionate fair market values of the two instruments as of the issue date.
- Ex. 2

Paid-in Capital from Warrants
- Because warrants are treated as a separate instrument, the account Paid-in Capital from Warrants is used.
- The account appears in the contributed capital portion of stockholders’ equity on the balance sheet.
- When warrants are exercised, the Paid-in Capital from Warrants account is eliminated.
Stock Options

- Represent the right of an employee to purchase shares of common stock at an established price, or the option price.
- FAS 132(R) requires fair value accounting for stock options such that compensation is measured as the fair value of the option on the date of grant, using a fair value method.

Disclosure of Stock Options

- SFAS No. 123(R) requires the following note disclosures:
  1. Description of plan, including general term of awards
  2. Number and weighted-average exercise price of options, in various classifications
  3. Weighted-average grant-date fair value of options granted during the year
  4. Description of the methods and significant assumptions used in estimating fair value
  5. Total compensation cost recognized in income for the period
  6. Terms of significant modifications of outstanding awards
  7. For outstanding options, the range of exercise prices and the weighted-average remaining contractual life of the options

Earnings per Share (EPS)

Amount of earnings associated with each common share of a company's stock

- EPS is an important measurement in the investment community.
- Any change in EPS or an unexpected fluctuation in past or projected EPS can cause stock prices to respond immediately.
- SFAS No. 128 indicates how EPS should be calculated and presented for both a simple and complex capital structure.
Capital Structures

Simple:
- Capital structure in which no dilutive securities are present

Complex:
- Capital structure in which dilutive securities are present; company must then present two EPS amounts (basic and diluted)
  
  Dilutive securities might include convertible bonds, convertible preferred stock, warrants, or stock options.

Computing EPS—Simple Capital Structure

Basic EPS =
\[
\frac{\text{Net Income} - \text{Preferred Stock Dividends}}{\text{Weighted Average Shares of Common Stock Outstanding}}
\]

- The numerator: Should represent the amount of income that is available to common stockholders. Preferred stock dividends that have been declared during the current period should be deducted. If preferred stock is cumulative, the dividend for the current period should be deducted even though it has not been declared.
- The denominator: Should reflect the weighted-average of shares outstanding, not just the number of shares outstanding.

Calculation of Weighted Average Denominator for Basic EPS

Illustration: Earnford Co. had 12,000 shares of common stock outstanding on 1/1/05. On 3/1, the company issued 6,000 shares for cash. On 4/1, 3,000 shares of treasury stock were purchased. On 9/1, the company issued another 9,000 shares for cash. The calculation of the weighted average follows:
Weighted Average Computation if Stock Dividend or Stock Split Is Present

- Weighting should treat the increase in shares as though it occurred at the beginning of the period.
- Shares issued as a result of a stock dividend or a stock split are weighted for the entire period, regardless of when they were issued in the period.

Presentation of EPS

- Present EPS for these line items on the income statement:

<table>
<thead>
<tr>
<th>Line Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from continued operations</td>
<td>xxx</td>
</tr>
<tr>
<td>Discontinued operations (net of tax)</td>
<td>xxx</td>
</tr>
<tr>
<td>Income or loss from operations (net of tax)</td>
<td>xxx</td>
</tr>
<tr>
<td>Gain or loss from disposal (net of tax)</td>
<td>xxx</td>
</tr>
<tr>
<td>Income before extraordinary items</td>
<td>xxx</td>
</tr>
<tr>
<td>Extraordinary items (net of tax)</td>
<td>xxx</td>
</tr>
<tr>
<td>Net income</td>
<td>xxx</td>
</tr>
</tbody>
</table>

Computing EPS—Complex Capital Structure

\[
\text{Diluted EPS} = \frac{\text{Net Income} - \text{Preferred Stock Dividends} +/\text{- Effect of Dilutive Securities}}{\text{Weighted-Average Shares of Common St. Outstanding} + \text{Effect of Dilutive Securities}}
\]

- The calculation of diluted EPS is a calculation of what would happen to EPS if all dilutive securities were to become common stock.
Diluted EPS for Convertible Bonds

If-converted method
- Calculate the impact on EPS as if the bonds had been converted as of the beginning of the period (if issued prior to beg. of period) or as of the issue date (if issued during period).
- Numerator increases by
- Denominator increases by

Diluted EPS

Illustration: Freefall Co. has a basic EPS for the year ended 12/31/05 of $5 per share, based on a net income of $500,000 and 100,000 shares of common stock. The company has convertible bonds outstanding. Prior to 1/1/05, the company issued at face value $600,000 of convertible bonds that pay interest of 10 percent. Each $1,000 bond can be converted into 20 shares of common stock. Assume a 40 percent tax rate. No bonds were actually converted during this period.

How is the impact of the convertible bonds on diluted EPS calculated?

Diluted EPS for Convertible Preferred Stock

Calculation of diluted EPS when convertible preferred stock has been issued is similar to the calculation for convertible bonds.

However, for preferred stock, it is not necessary to consider the tax impact. The numerator increases by no longer subtracting the preferred dividend.
Diluted EPS for Options or Warrants

- Options and warrants do not affect the numerator of the EPS calculation.
- When calculating the denominator, use the treasury stock method.
- This method assumes that outstanding options or warrants are exercised at the beginning of the period (or at issuance, if that is later) and common stock is issued at the exercise price.
- The proceeds (hypothetically) received from the exercise are assumed to be used to purchase common stock as treasury stock.

Diluted EPS for Options or Warrants

- The net increase (difference between the number of shares assumed to have been issued upon exercise and the number of shares assumed to have purchased as treasury stock), is the amount included in the denominator.

Diluted EPS for Options

- Illustration: Freefall Co. has a basic EPS for the year ended 12/31/05 of $5 per share, based on a net income of $500,000 and 100,000 shares of common stock. The company has 20,000 options outstanding. Each option can be exercised to purchase one share of common stock. Assume that the options were issued prior to 1/1/05 and allow the holder to purchase stock at $20 per share. The average market price of the common stock during 2005 was $25 per share.
- Apply the treasury method as follows:
Antidulutive Securities

- Options and warrants that are antidilutive should not be included in the calculation of EPS.
- If the treasury stock method is applied and the result is a net decrease in shares instead of a net increase, the warrant or option is antidilutive.
- If the exercise price is higher than the average market price of the stock, the option or warrant is antidilutive.
- For convertible preferred stock and convertible bonds, any security whose inclusion causes diluted EPS to increase should be considered antidilutive and should not be included.

Multiple Antidilutive Securities

- The following steps should be taken to calculate diluted EPS when more than one dilutive security is present:
  1. Calculate basic EPS.
  2. Calculate earnings per incremental share for each of the dilutive securities.
  3. Rank the securities in the EPS calculation in that order if their inclusion causes EPS to decline.
  4. If a security’s inclusion causes EPS to increase, then the security is considered antidilutive and is not included in the calculation of diluted EPS.

Additional EPS Disclosure Requirements

Reconciliation of the numerator and denominator of the basic and diluted earnings per share computations for income from continuing operations.

The effect that has been given to preferred dividends in arriving at income available to common stockholders.

Securities that could potentially dilute EPS in the future that were not included in the computation of EPS because doing so would have been antidilutive.
Considerations on Pro Forma EPS

- The meaning of pro forma earnings varies from company to company.
- Usually, it represents an attempt to exclude nonrecurring items, write-offs, restructuring charges, and similar negative amounts from EPS, since they are one-time costs.
- Some analysts feel that companies have used pro forma earnings to improve the appearance of their financial status.

Cash Flow and EPS

- Cash flow is not an alternative to net income as an indicator of a firm's performance.
- The FASB holds that reporting cash flow data in regard to EPS invites the danger that investors, creditors, and others may confuse those measures with the conventional accounting measure of EPS.

Statement of Stockholders' Equity

- The SEC requires large public companies to provide a picture of the changes in stockholders' equity.
- Changes in accounts like Retained Earnings, Common Stock, Preferred Stock, and Treasury Stock are shown. The statement also usually provides a column for Accumulated Other Comprehensive Income (Loss).