

EPS

- E P S provides insight to shareholders about
 - How much of a company's available income can be attributed to the shares they own
 - Assessing future dividend pay-outs
 - Assessing the value of each share
- E P S disclosures help by indicating the amount of income earned by each share
- Basic E P S: Actual earnings; actual number of common shares outstanding (prorated for time)
- Diluted E PS: "what if" calculation; considers possible negative impact on common shares from convertible debt and options

$$\text{EPS} = \frac{\text{Income available to common shareholders}}{\text{Weighted average number of common shares}}$$

Presentation and Disclosure

Basic earnings per share:

Income before discontinued operations	\$3.80
Discontinued operations	<u>(0.80)</u>
Net income	<u>\$3.00</u>

Diluted earnings per share:

Income before discontinued operations	\$3.35
Discontinued operations	<u>(0.65)</u>
Net income	<u>\$2.70</u>

- Simple capital structure:
 - Common shares and non-convertible securities
 - Only need to calculate and present basic E P S
- Complex capital structure:
 - Common shares and securities that have a dilutive effect on earnings per common share
 - Debt and equity instruments (preferred shares), warrants, options, and contingently issuable shares
 - Calculate and present basic and diluted E P S

Basic EPS

$$\text{EPS} = \frac{\text{Income available to common shareholders}}{\text{Weighted average number of common shares}}$$

If the preferred shares are **non-cumulative**

- Deduct only **declared dividends**

If the preferred shares are **cumulative**

- Deduct only **declared dividends**, or
- If no dividends declared, deduct only one year's dividends

Given:

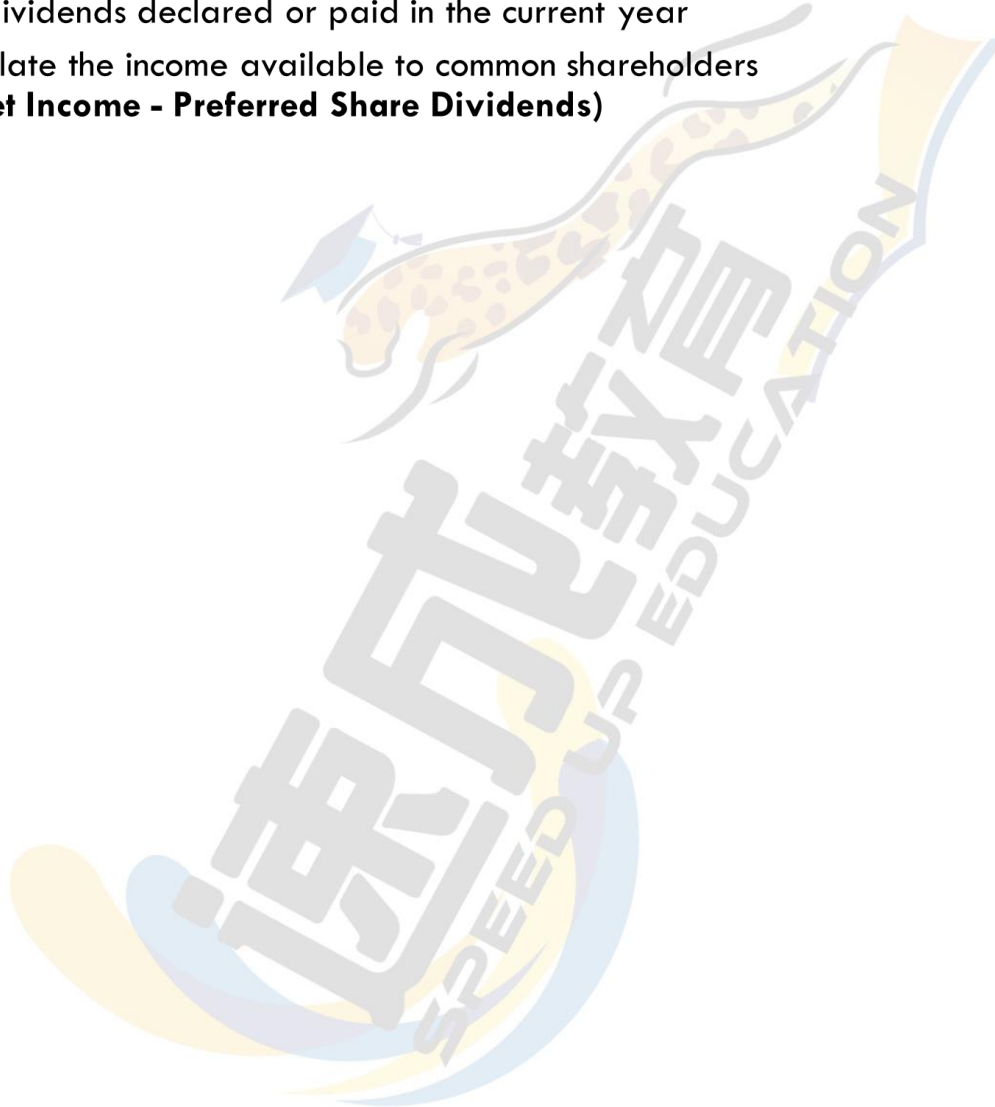
Michael Limited's Net Income: \$3,000,000

Shares

- 100,000 Class A preferred, cumulative shares, dividend amount \$4.00 per share
- 100,000 Class B preferred, non-cumulative shares, dividend amount \$3.00 per share

No dividends declared or paid in the current year

Calculate the income available to common shareholders
(= **Net Income - Preferred Share Dividends**)



Weighted average number of share

Example 17.2 | Weighted Average Common/Ordinary Shares

Facts Salomski Inc. has the following information about changes in its outstanding common shares for the period.

<u>Date</u>	<u>Share Changes</u>	<u>Shares Outstanding</u>
Jan. 1	Beginning balance	90,000
Apr. 1	Issued 30,000 shares for cash	<u>30,000</u>
		120,000
July 1	Repurchased 39,000 shares	<u>(39,000)</u>
		81,000
Nov. 1	Issued 60,000 shares for cash	60,000
Dec. 31	Ending balance	<u>141,000</u>

Stock splits and stock dividends require restatement of the weighted average number of shares outstanding from the beginning of the year

Given – Baiye Limited:

January 1: 100,000 shares outstanding
March 1: Issued 20,000 shares
June 1: 50% Stock dividend (60,000 additional shares issued)
November 1: Issued 30,000 shares
December 31: Ending Balance = 210,000 shares outstanding

Diluted EPS

Dilution is the reduction in EPS if:

- Securities, potentially convertible into common stock, are converted (assumed at beginning of the year)

Anti-dilutive securities

- Securities, when converted, increase EPS
- Anti-dilutive EPS is not reported, only basic EPS

If-converted method used to measure the dilutive effects of a potential conversion (such as convertible debt and preferred shares)

- Assumes instruments are converted at the beginning of the year (or issue date, if later)
- Assumes any related interest (net of tax) or dividend is avoided

Given:

Net income for the year: \$410,000

Common shares outstanding during the period: 100,000

Additional securities outstanding:

- 6% convertible debenture bond sold at 100 for \$1,000,000, convertible to 20,000 common shares
- 10% convertible debenture bond sold at 100 for \$500,000, convertible to 32,000 common shares and issued April 1st of current year

Calculate Basic EPS.

Calculate diluted EPS assuming a tax rate of 30%

Diluted E P S: Options and Warrants

Options-gives the holder a right to acquire/sell underlying instrument at a fixed price

1. Call Option

- Holder has the right, but not the obligation, to buy the “underlying” at a preset (strike or exercise) price

2. Put Option

- Holder has the right, but not the obligation, to sell the “underlying” at a preset price

- The treasury stock method looks at the impact of written **call** options on E P S numbers
- It assumes that
 - Options are exercised at the beginning of the year (or date issued if issued during the year)
 - the money is used to buy back shares for the treasury at the average market price during the year
- Incremental number of shares to be issued above the number purchased is added to the W A C S outstanding

There is no adjustment to the numerator

A company has net income for the year of \$220,000, with W A C S of 100,000 outstanding. Although not exercisable at this time, written call options exist for 5,000 shares at \$20 each. Market price of shares during the year was \$28.

- The reverse treasury stock method looks at the impact of written **put** options on E P S numbers
- It assumes that
 - Options are exercised at the beginning of the year
 - The company first issues shares in the market to obtain funds to buy the shares under the option
- When average market price < exercise price, option considered in the money; dilutive

Assume 1,500 written put options are outstanding at an exercise price of \$30 for a common share. Average market price is \$20.

