Exercise 19-19

On December 31, 2020, Berclair Inc., had 200 million shares of common stock and 3 million shares of 9%, $100 par value cumulative preferred stock issued and outstanding. On March 1, 2021, Berclair purchased 24 million shares of its common stock as treasury stock. Berclair issued a 5% common stock dividend on July 1, 2021. Four million treasury shares were sold on October 1. Net income for the year ended December 31, 2021 was $150 million. Income tax rate is 25%.

Also outstanding at December 31 were incentive stock options granted to key executives on September 13, 2016. The options are exercisable as of September 13, 2020, for 30 million common shares at an exercise price of $56 per share. During 2021, the market price of the common shares averaged $70 per share.

In 2017, $50 million of 8% bonds convertible into 6 million common shares, were issued at face value.

Compute Berclair's basic and diluted earnings per share for the year ended December 31, 2021.

Exercise 19-19 (continued)

Numerator (Basic EPS): Net income = $150 million; Preferred dividends = $27 million (9% x $100 = $9/share x 3 million; since the preferred stock is cumulative, the dividend is deducted whether or not paid)

Denominator (Basic EPS): Weighted average # shares of common stock outstanding

\[
\begin{align*}
&\text{1/1 – 12/31: } 200 \times (12/12) = 200 \times 1.05 = 210 \\
&\text{3/1 – 12/31: (24) \times (10/12) = (20) \times 1.05 = (21)} \\
&\text{10/1 – 12/31: } 4 \times (3/12) = 1 \\
&\text{Weighted average # shares } = 190 \\
\end{align*}
\]

Basic EPS = ($150 - $27) / 190 = $0.65
Exercise 19-19 (continued)

**Exercisable Securities, Stock Options**
Are they dilutive? Yes because the exercise price of $56/share < the market price of $70/share.

Use the Treasury Stock Method
1. Exercise is assumed to take place at the later of the date of issue (9/13/16) or the beginning of the year (1/1/21).
   Assume exercise 1/1/21
2. The Treasury Stock Method assumes that the proceeds received upon exercise of $1,680 (30 million x $56) are used to buy back stock at the average market price, i.e., $1,680 ÷ $70 = 24
3. The net increase in the number of shares = 6 million (30 million issued upon exercise – 24 million repurchased)

Exercise 19-19 (continued)

**Convertible Securities, Bonds**
Are they dilutive? Is interest net of tax divided by the # shares issued on conversion ≤ EPS without assumed conversion?
Interest not paid, net of tax = $3 [(8% x $50) x 75%]
# shares issued on conversion = 6 million
$3 ÷ 6 = $0.5
EPS without assumed conversion = ($150 - $27 + $3) ÷ (190 + 6) = $0.63
The convertible bonds are dilutive because $0.5 ≤ $0.63
If Converted Method.
1. Assume conversion at the later of the date of issue (2020) or the beginning of the period (1/1/21). Assume conversion 1/1/21
2. Add back to the numerator the interest, net of tax
3. Add to the denominator the weighted average # shares issued on assumed conversion.
   **Diluted EPS** = ($150 - $27 + $3) ÷ (190 + 6 + 6) = **$0.62**