Problem 19-14

Information from the financial statements of Henderson-Niles Industries included the following at December 31, 2021:

- Common shares outstanding throughout the year: 100 million
- Convertible preferred shares (convertible into 32 million shares of common): 60 million
- Convertible 8% bonds (convertible into 13.5 million shares of common): $900 million

Henderson-Niles’ net income for the year ended December 31, 2021, is $520 million. The income tax rate is 25%. Henderson-Niles paid dividends of $2 per share on its preferred stock during 2021.

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

Problem 19-14 (continued)

Numerator (Basic EPS): Net income = $520 million; Preferred dividends = $120 million ($2 x 60 million)

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

\[
\text{Weighted average # shares} = 100 \text{ million} \times \frac{12}{12} = 100 \text{ million}
\]

Basic EPS = \( \frac{($520 - $120)}{100} = $4.00 \)
Problem 19-14 (continued)

Convertible Securities: Use the If Converted Method.

Convertible Preferred Stock:
1. Assume conversion at later of date of issue (?) or beginning of year (1/1/21). Assume conversion on 1/1/21
2. Dividend not paid = $120 million
3. # additional shares on conversion = 32 million
4. Conversion ratio = $120 ÷ 32 = $3.75

Convertible Bonds:
1. Assume conversion at later of date of issue (?) or beginning of year (1/1/21). Assume conversion on 1/1/21
2. Interest not paid, net of tax = $54 million \[\text{[(8\% \times \$900 million) \times 75\%]}\]
3. # additional shares on conversion = 13.5 million
4. Conversion ratio = $54 ÷ 13.5 = $4.00

Order of inclusion in diluted EPS

1. Convertible preferred stock with conversion ratio of $3.75.
\[\left(\frac{\$520 - \$120 + \$120}{100 + 32}\right) = \$3.94\]
$3.94 < $4.00 (EPS without including conversion). Therefore, the convertible preferred stock is dilutive.

2. Convertible bonds with conversion ratio of $4.00. Because $4.00 is greater than $3.94, the convertible bonds are anti-dilutive and should be ignored.

**Basic EPS** = \(\frac{\$520 - \$120}{100} = \$4.00\)

**Diluted EPS** = \(\frac{\$520 - \$120 + \$120}{100 + 32} = \$3.94\)