Exercises

E15-1. Issuing common stock

Common stock–par value (600,000 shares issued × $3 par) $1,800,000
Additional paid-in capital (600,000 shares × $4) 2,400,000
Stockholders’ equity $4,200,000

E15-2. Stockholders’ equity
(AICPA adapted)

Because the shares are “retired” rather than “held in treasury,” they are removed from the books of Peter Corporation. No gain or loss is recorded because the transaction involves owners, not “outsiders.” The journal entry to record the repurchase is:

\[
\begin{align*}
\text{DR} & \quad \text{Common stock par} (100,000 \text{ shares} \times $10) \quad 1,000,000 \\
\text{DR} & \quad \text{Additional paid-in capital} \quad 800,000 \\
\text{CR} & \quad \text{Cash} \quad 1,800,000
\end{align*}
\]

The account balances after this entry are:

Common stock par (800,000 shares × $10) $8,000,000
Additional paid-in capital 1,900,000
Retained earnings (unchanged) 1,300,000

E15-3. Entity and proprietary views

Requirement 1:
The bond will be recorded as a $10 million long-term liability with annual interest expense of $1.1 million (11% × $10 million) charged to the income statement. The preferred stock will be shown as a $1 million item on the balance sheet, after long-term debt but before common stockholders’ equity. The $75,000 annual payment to stockholders will be classified as a dividend (not an expense). The mandatory redemption feature of the preferred stock dictates its balance sheet classification in a “gray area” between liabilities and equities.
Requirement 2:
GAAP treats the bond as a transaction with “outsiders”—hence it is recorded as a liability and the interest payments are treated as an expense of the company. The preferred stock is viewed as a transaction with quasi-insiders—the financial instrument is classified (almost) as an equity and the dividend payments are not treated as an expense of the company.

E15-4. Various stock transactions
(AICPA adapted)

The capital transactions are described in the following schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
<th>Common Stock Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/5/01:</td>
<td>issued 100,000 shares at $5 each</td>
<td>Cash: $500,000</td>
</tr>
<tr>
<td>4/6/01:</td>
<td>issued 50,000 shares at $7 each</td>
<td>Par: 250,000 APIC: $100,000</td>
</tr>
<tr>
<td>6/8/01:</td>
<td>issued 15,000 shares at $10 each</td>
<td>Treasury: 75,000</td>
</tr>
<tr>
<td>7/28/01:</td>
<td>purchased 25,000 shares at $4 each</td>
<td>($100,000)</td>
</tr>
<tr>
<td>12/31/01:</td>
<td>sold 25,000 treasury shares at $8 each</td>
<td>200,000 Treasury: 100,000</td>
</tr>
</tbody>
</table>

Balance at 12/31/01 $1,100,000 $825,000 $275,000 $0

E15-5. Return on common equity
(AICPA adapted)

<table>
<thead>
<tr>
<th>December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
</tr>
<tr>
<td>2001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Common stock</th>
<th>$300,000</th>
<th>$400,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained earnings</td>
<td>75,000</td>
<td>185,000</td>
</tr>
</tbody>
</table>

Common equity $375,000 $585,000

Average common equity = ($375,000 + $585,000)/2 = $480,000

Return on common equity = (Net income - Preferred dividends)/average common equity

= ($120,000 - $10,000)/$480,000 = 23%
E15-6. How many shares?
(AICPA adapted)

The number of preferred shares issued can be found by dividing the balance in the preferred stock, par value account by the $15 per share par value:

\[ \frac{255,000}{15} = 17,000 \text{ shares issued} \]

The number of common stock shares issued can be found by dividing the balance in the common stock account by the $5 per share stated value:

\[ \frac{300,000}{5} = 60,000 \text{ shares} \]

assuming the shares were issued at this stated value.

E15-7. Stockholders’ equity after a stock repurchase
(AICPA adapted)

<table>
<thead>
<tr>
<th>Common Stock Accounts</th>
<th>Par</th>
<th>APIC</th>
<th>Treasury</th>
<th>Retained Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/01: Issued 200,000 $10 par stock at $15 per share</td>
<td>$2,000,000</td>
<td>$1,000,000</td>
<td></td>
<td>$750,000</td>
</tr>
<tr>
<td>Net income for 2001–2003</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividends for 2001–2003</td>
<td></td>
<td></td>
<td></td>
<td>($380,000)</td>
</tr>
<tr>
<td>1/5/03: Purchased 12,000 shares at $12 for treasury</td>
<td></td>
<td></td>
<td></td>
<td>($144,000)</td>
</tr>
<tr>
<td>12/31/03: Sold 8,000 treasury shares at $8 each</td>
<td>(32,000)</td>
<td>96,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at 12/31/03</td>
<td>$2,000,000</td>
<td>$968,000</td>
<td>($48,000)</td>
<td>$370,000</td>
</tr>
</tbody>
</table>

Total shareholders’ equity at 12/31/03 is $3,290,000.
E15-8. Stock dividends and retained earnings
(AICPA adapted)

The entry to record the stock dividend (900 shares \( \times \$8 = \$7,200 \)) is:

\[
\begin{array}{ll}
\text{DR} & \text{Dividend} \quad \$7,200 \\
\text{CR} & \text{Common stock, par} \quad \$4,500 \\
& \text{Additional paid-in capital} \quad 2,700 \\
\end{array}
\]

The retained earnings balance on April 1, 2002, is:

\[
\begin{array}{l}
\text{Balance on 12/31/01} \quad \$73,000 \\
\text{Loss for quarter} \quad (16,000) \\
\text{Stock dividend} \quad (7,200) \\
\text{Balance on 4/1/02} \quad \$49,800 \\
\end{array}
\]

E15-9. Stock dividends and market prices
(AICPA adapted)

Two issues need to be resolved here: 1) how many shares of stock will be issued? and 2) what market price should be used?

The 5% common stock dividend is based on shares outstanding (not authorized shares), so 15,000 new shares (5% \( \times \) 300,000 shares outstanding) will be issued. The market price used in the journal entry is the price at the distribution date—August 10, 2001. The entry to record the 5% stock dividend—15,000 shares at $32 per share is:

\[
\begin{array}{ll}
\text{DR} & \text{Dividend} \quad \$480,000 \\
\text{CR} & \text{Common stock, par} \quad \$375,000 \\
& \text{Additional paid-in capital} \quad 105,000 \\
\end{array}
\]

Some students may prepare an entry at the declaration date (July 1, 2001) using the $30 share price. This approach would require a second entry at the distribution date to adjust the market price to $32 per share.
E15-10. Stockholders’ equity after a stock split  
(AICPA adapted)

The stockholders’ equity accounts on June 30, 2001, after the split would show:

- Common stock, par value $10; 200,000 shares authorized; 
  100,000 shares outstanding $1,000,000
- Additional paid-in capital 150,000
- Retained earnings 1,350,000

E15-11. Employee stock options  
(AICPA adapted)

Because the options have an exercise price equal to the stock’s market price on the grant date, no compensation expense is recorded by Austin Company when the options are issued. In fact, the company makes no journal entry at that time, although a memorandum entry is made to note that options were granted.

On October 1, 2001 when the 500 options are exercised and stock is issued to the employee, Austin Company makes the following entry:

<table>
<thead>
<tr>
<th>DR</th>
<th>Cash</th>
<th>$2,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR</td>
<td>Common stock</td>
<td>$2,500</td>
</tr>
</tbody>
</table>

where $2,500 = ($35 - $30) \times 500 \text{ shares}.

Notice that no compensation expense is recorded when the options are exercised. When the employee sells the stock on December 2, 2001, there is no entry made on the books of Austin Company (unless Austin is the buyer, in which case a treasury stock purchase is recorded).

E15-12. Computing basic EPS  
(AICPA adapted)

Basic EPS = \frac{\text{Net income - Preferred dividends}}{\text{Weighted-Average common shares outstanding}}

10,000 common shares were issued and outstanding the full year, and another 2,000 shares were issued on July 1. So the weighted-average common shares outstanding is 10,000 + 2,000 \times 1/2 \text{ year} = 11,000 \text{ shares.}
This means:

Basic EPS = \(\frac{\$10,000 - \$1,000}{11,000 \text{ shares}}\) = \$0.82 per share

**E15-13. Finding the number of shares for EPS**  
(AICPA adapted)

<table>
<thead>
<tr>
<th>Number of shares</th>
<th>Weight % of year</th>
<th>Basic EPS</th>
<th>Diluted EPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common shares outstanding 1/1/01</td>
<td>5,000,000</td>
<td>100%</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Common shares issued 4/1/01</td>
<td>1,000,000</td>
<td>75%</td>
<td>750,000</td>
</tr>
<tr>
<td>Common shares issued 7/1/01</td>
<td>500,000</td>
<td>50%</td>
<td>250,000</td>
</tr>
<tr>
<td>Dilution from convertible debt</td>
<td>400,000</td>
<td>25%</td>
<td></td>
</tr>
</tbody>
</table>

Number of shares used in EPS computation: 6,000,000

**E15-14. Earnings per share**  
(AICPA adapted)

**Requirements 1 and 2:**

<table>
<thead>
<tr>
<th>EPS for 2001</th>
<th>Basic</th>
<th>Diluted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common shares outstanding</td>
<td>90,000</td>
<td>90,000</td>
</tr>
<tr>
<td>Conversion of bonds</td>
<td>30,000</td>
<td></td>
</tr>
<tr>
<td>Conversion of preferred stock</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>Number of shares used in EPS computation</td>
<td>90,000</td>
<td>140,000</td>
</tr>
</tbody>
</table>

Net income as reported:  
- $285,000
- After-tax interest on the bonds ($80,000 \times .60) $0
- Preferred dividends ($2.40 \times 10,000 shares) \($24,000\)

Earnings used in EPS computation: $261,000

Earnings per share: $2.90 $2.38
E15-15. Employee stock options  
(AICPA adapted)

When the options are granted (July 18, 2001), Amos Corporation would record compensation expense equal to the excess of share market price over option exercise price at the grant date, multiplied by the number of options granted. That means Amos would record 2001 compensation expense of:

\[(42 - 30) \times 20,000 \text{ options} = 240,000\]

No compensation expense is recorded in 2002 when the options are exercised.

E15-16. Incentives for stock repurchases

Requirements 1 and 2:
The answer to this question depends on when, during the year, shares are repurchased. The most straightforward calculation assumes shares are repurchased at the beginning of each year:

Target 2002 EPS = $5.25 = $10 million/shares

There must be 1,904,761 shares outstanding, so 95,239 shares must be repurchased at the beginning of 2002.

Target 2003 EPS = $5.50 = $10 million/shares

There must be 1,818,181 shares outstanding, so 86,580 shares must be repurchased at the beginning of 2003.

Requirement 3:
There are several reasons Keystone’s management may want to maintain the company’s record of earnings growth:

- Management compensation and loan agreements may be tied to specific earnings targets or growth levels;
- Maintain credibility with analysts and investors by delivering earnings consistent with management forecasts;

Student answers will vary.
Requirement 1:
When Procter & Gamble’s ESOP trust borrows money, the cash is used to buy preferred stock from the company. Consequently, the company makes two entries on its books—one to record the issuance of preferred stock, and a second entry to record the ESOP debt. Here are the entries made by Procter & Gamble for the $1,000 borrowed by the trust in 1989:

\[ \begin{align*}
\text{DR} & \quad \text{Employee stock plan (deferred compensation)} \quad $1,000 \\
& \quad \text{ESOP debt} \\
\text{CR} & \quad \text{ESOP debt} \\
& \quad \text{Preferred stock} \\
\text{DR} & \quad \text{Cash} \quad $1,000 \\
& \quad \text{Preferred stock} \\
\text{CR} & \quad \text{Preferred stock} \quad $1,000
\end{align*} \]

Requirement 2:
The ESOP debt is guaranteed by Procter & Gamble, and debt principal and interest payments are funded by dividends on the preferred stock and/or other cash flows from the company to the trust. As a result, Procter & Gamble is obligated to send enough cash to the ESOP trust each year so that it can make the required debt payments. The amounts are $117 per year for the 1989 ESOP debt plus another $94 per year for the 1991 ESOP debt.

Requirement 3:
The company will record interest expense on the ESOP in the usual manner. In addition, Procter & Gamble will record compensation expense for any cash contribution in excess of preferred dividends needed to cover the required principal payments on the debt.
Problems

P15-1. Cash and stock dividends

Requirement 1:
Journal entries for the three dividend events are:

Preferred dividends: $10 per share × 50,000 shares.

\[ \begin{align*}
\text{DR} & \quad \text{Retained earnings} & \quad $500,000 \\
\text{CR} & \quad \text{Cash} & \quad $500,000
\end{align*} \]

Common stock cash dividend: $0.25 per share × 1,000,000 shares.

\[ \begin{align*}
\text{DR} & \quad \text{Retained earnings} & \quad $250,000 \\
\text{CR} & \quad \text{Cash} & \quad $250,000
\end{align*} \]

Stock dividend: Since the dividend is less than 25%, it is recorded at the market price of the company’s stock. This means that retained earnings is reduced by $135 \times 100,000 (i.e., 10% of 1,000,000) or $13,500,000, that common stock is credited for $600,000, and that additional paid-in capital is credited for $12,900,000 or ($135 - $6) \times 100,000.

\[ \begin{align*}
\text{DR} & \quad \text{Retained earnings} & \quad $13,500,000 \\
\text{CR} & \quad \text{Common stock} & \quad $600,000 \\
\text{CR} & \quad \text{Additional paid-in capital} & \quad 12,900,000
\end{align*} \]

Requirement 2:
The market value of the company’s common stock at the time the stock dividend was declared is $135 \times 1,000,000 (number of shares outstanding) which equals $135,000,000. After the stock dividend is paid, there are 1,100,000 common shares outstanding, but the market value of equity will be unchanged. As a result, the share price will fall from $135 to $122.73 ($135,000,000/1,100,000).

P15-2. Splits, dividends, and retained earnings

Requirement 1:
Both options allow the company to avoid violating the limit on cash dividend payments. With regard to option A, a stock split of 12 for 10 means investors exchange 10 shares of common stock for 12 shares of “new” common stock.
This option has no effect on the balance in the retained earnings account. All that would occur is that the par value of the stock would be reduced from $6 to $5 (i.e., 10/12 × $6), and additional shares would be issued to stockholders.

Option B also allows the company to avoid violating the limit on cash dividend payments. By increasing the size of the stock dividend from 20% to 30%, the company can use the par-value method rather than the market-value method of recording the dividend. Retained earnings would be reduced by the par-value of stock issued, or $1,980,000 (30% × 100,000 shares × $6 per share) but this will not violate the dividend constraint.

Requirement 2:
Stockholders prefer cash dividends and stock price appreciation to just more pieces of paper. All three of these options—20% stock dividend, a 12-for-10 stock split, and a 30% stock dividend—increase the number of shares held but don’t add real value to the investment portfolio. The stock split, at least, doesn’t reduce retained earnings, so it leaves open the possibility of higher cash dividend payments in the future. Otherwise, it is not clear that stockholders will have a strong preference for any of these options.

P15-3. Convertible debt
(AICPA adapted)

Requirement 1:
Journal entry to record the original issuance of the $10 million convertible bond at par:

\[
\begin{align*}
\text{DR} & \quad \text{Cash} & \quad $10,000,000 \\
\text{CR} & \quad \text{Convertible bond payable} & \quad $10,000,000
\end{align*}
\]

Notice that this entry does not assign any value to the conversion option.

Requirement 2:
Interest expense on the bond would be computed and recorded in the usual manner using the effective-interest method described in Chapter 11. Since the bond was issued at par, its effective interest rate is its stated interest rate of 4%, so interest expense would be $400,000 (or $10 million × 4%).
**Requirement 3:**
When issued, each $1,000 bond certificate could be converted into 5 shares of common stock. After the three-for-one stock split, the conversion rate would be adjusted to 15 shares for each certificate. Since there are 10,000 certificates outstanding but only 40% are converted, there will be 60,000 new shares issued (10,000 certificates × 5 shares × 40%). The journal entry to record the conversion (assuming all interest has been accrued to the conversion date) using the book value method is:

<table>
<thead>
<tr>
<th>DR</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convertible bond payable</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>CR Common stock, par</td>
<td>$600,000</td>
</tr>
<tr>
<td>CR Additional paid-in capital</td>
<td>3,400,000</td>
</tr>
</tbody>
</table>

Students may have used the market value-method described in Requirement 4.

**Requirement 4:**
The preceding entry used the book-value method to record the conversion—the issued stock was recorded at the book value of the debt retired. Had the market-value method been used, the following entry would have been made:

<table>
<thead>
<tr>
<th>DR</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convertible bond payable</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>DR Loss on debt conversion</td>
<td>1,400,000</td>
</tr>
<tr>
<td>CR Common stock, par</td>
<td>$600,000</td>
</tr>
<tr>
<td>CR Additional paid-in capital</td>
<td>4,800,000</td>
</tr>
</tbody>
</table>

Notice that this entry records the stock at its market value ($90 per share) at the conversion date, a total of $5,400,000 for the 60,000 shares issued. This results in a loss on debt conversion being recorded. Managers avoid this accounting loss when the book-value method is used.
P15-4. EPS computations

Requirement 1:
Calculation of basic earnings per share:

\[
\text{Basic earnings per share} = \frac{\text{Net income} - \text{Preferred dividends}}{\text{Weighted average number of dividends of common shares}}
\]

\[
= \frac{1,700,000 - 200,000}{230,000}^* 
\]

\[
= \$6.52
\]

*Calculation of weighted-average number of common shares:

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Shares Outstanding</th>
<th>% of the Year</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/01–6/30/01</td>
<td>200,000</td>
<td>50%</td>
<td>100,000</td>
</tr>
<tr>
<td>7/1/01–12/31/01</td>
<td>260,000</td>
<td>50%</td>
<td>130,000</td>
</tr>
<tr>
<td>Total</td>
<td>230,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Requirement 2:
Calculation of diluted earnings per share:

\[
\text{Net income} - \text{Preferred dividends} + \text{Income effect of dilutive securities} \\
\text{Weighted average number of common shares} + \text{Shares for dilutive securities}
\]

\[
= \frac{1,700,000 - 200,000 + 33,000^*}{230,000^{**} + 50,000^{***}}
\]

\[
= \$5.48
\]

* \((500,000 \times 0.10) \times (1.0 - 0.34) = 33,000\)
** From Requirement 1 above.
*** \((500,000/1,000) \times 100 = 50,000\)

Requirement 3:
Stock options, warrants, convertible preferred stock.
P15-5. Limits on dividends

Requirement 1:
Lenders restrict a subsidiary’s ability to pay dividends to the parent corporation so that the subsidiary’s cash flows are available to repay its debt. This reduces the lender’s credit risk and lowers the interest rate charged the subsidiary. These restrictions are written into the subsidiary’s loan agreement and may take the form of an explicit prohibition against dividend payments (as seems to be the case for three of the subsidiaries) or an implicit restriction tied to earnings (as is the case for General Chemical).

Requirement 2:
The parent company’s dividend payout ratio was just over 7.05% (i.e., dividends of $3,176 divided by net income of $45,035).

Requirement 3:
At the end of the year, Tredegar Industries still had about $51,000 available for dividends, so the maximum dividend payment must have been this amount plus dividends paid for the year, or $54,176.

Requirement 4:
The year-end balance in retained earnings is $99,027 so the maximum legal dividend would be this amount plus dividends paid for the year, or $102,203, assuming the 1984 Revised Model Business Corporation Act does not apply.

Requirement 5:
The company declared dividends of $3,176 in 1996, far short of the amount it could have distributed.

P15-6. Stock options

Requirement 1:
Stock options are usually granted as part of a long-term incentive compensation program for employees and executives of the company. The vesting period serves as a way of retaining valued employees—they lose the rights to the stock options if they leave the company before the options are fully vested. Shortening the vesting period lessens the usefulness of stock options as an employee retention device. The term of the options—10 years, in this case—helps lengthen the decision horizons of employees and executives. With a 10-year term, employees know that they will be rewarded for actions taken today that show up on share prices 10 years from now. Shortening the term can also shorten decision horizons.
**Requirement 2:**
There were 4,131,000 options granted during 1996. If the exercise price was $2 below the market price at the grant date, the company would have been required to record compensation expense of $8,262,000 or $2 times the number of options granted.

**Requirement 3:**
Employees receiving the option grants would have been taxed on the $8,262,000 ($2 times number of options received) as additional compensation for the year. The cost depends on each employee’s marginal tax rate, but a rate of 34% does not seem unreasonable.

**Requirement 4:**
The company would have recorded compensation expense equal to the number of options granted (4,131,000) in 1996 times the fair value of the options at the grant date ($21.07 from the footnote), or $87,040,170. We then take this amount times 20% (for each year of the five year vesting period), or $17,408,034.

The journal entry would be:

- **DR** Compensation expense $17,408,034
- **CR** Outstanding stock option $17,408,034

**Requirement 5:**
The Schlumberger footnote at the bottom of page 796 says that pro forma EPS includes the effect of stock option grants made during 1996 and 1995. But what about grants made in 1994 or earlier? The compensation expense associated with those grants is NOT reflected in pro forma EPS (and this omission is consistent with SFAS No. 23’s transition rules).

So, what’s the problem with the reported pro forma EPS amount? Suppose the firm grants options with a four-year vesting period. SFAS No. 23 says that the compensation expense for these options must be spread over the entire four years. Pro forma compensation expense for 1996 should thus include an amount for options granted in each year from 1993 through 1996. But the SFAS No. 23 transition rules did not require firms to go back that far—just to the effective date of SFAS No. 23 adoption. The result is that 1996 pro forma EPS at Schlumberger includes only two years of option compensation. This “overstates” pro forma earnings if the vesting period is more than two years (and it is at most companies) because compensation expense is understated.

This problem gets less serious over time. For example, Schlumberger’s pro forma EPS for 2001 would potentially include compensation expense from options granted since 1995 (the SFAS No. 23 transition year). With a four-
year vesting period, only the option grants made during 1998 through 2001 matter anyway. But you need to be aware of this potential omission and understatement when comparing pro forma EPS numbers from financial statements produced in the mid-1990’s.

P15-7. Equity management

Requirement 1:
Calculations for earnings per share (EPS) and the debt-to-equity ratio are detailed in the following schedule:

<table>
<thead>
<tr>
<th>Financing Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue</td>
</tr>
<tr>
<td>Debt</td>
</tr>
<tr>
<td>Issue preferred</td>
</tr>
<tr>
<td>Issue common</td>
</tr>
</tbody>
</table>

Impact on basic EPS:
- Net income next year before financing alternatives: $10,000,000, $10,000,000, $10,000,000
- After-tax interest on new debt ($8 million × 60%): ($4,800,000), -, -
- Preferred dividend: -, (6,000,000), -
- Net income used in EPS computation: $5,200,000, $4,000,000, $10,000,000

Impact on debt-to-equity ratio:
- Debt outstanding before financing alternatives: $425,000,000, $425,000,000, $425,000,000
- New debt issued: 100,000,000, -, -
- Shareholders’ equity before financing alternatives: $250,000,000, $250,000,000, $250,000,000
- Preferred stock issued: -, 100,000,000, -
- Common stock issued: -, -, 100,000,000
- After-tax interest on debt: (4,800,000), -, -
- Preferred stock dividend: -, (6,000,000), -
- Debt-to-equity ratio: 2.14, 1.24, 1.21

Basic earnings per share: $0.52, $0.40, $0.91

Requirement 2:
Considering only the effects of each alternative on EPS and the debt-to-equity ratio, issuing common stock would seem to be the best option. Financing the project with debt will violate the company’s lending agreement because the debt-to-equity ratio rises above 2. Financing with preferred stock keeps the debt-to-equity ratio at a comfortable level, but EPS falls substantially.
P15-8. Stock repurchases and EPS

**Requirement 1:**
If the stock buyback had not occurred, an additional 1,237,000 shares would have been outstanding for ten months during 2000 (January through October) and 12 months during 2001. Thus, EPS would have been:

<table>
<thead>
<tr>
<th>Year Ended October 31</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings available for common</td>
<td>$2,376</td>
<td>$4,018</td>
<td>$8,458</td>
<td>$3,763</td>
</tr>
<tr>
<td>Average common shares outstanding (as reported)</td>
<td>4,752</td>
<td>5,023</td>
<td>3,383</td>
<td>3,330</td>
</tr>
<tr>
<td>Shares eliminated by stock purchase</td>
<td></td>
<td></td>
<td>1,031</td>
<td>1,237</td>
</tr>
<tr>
<td>Shares used in EPS computation</td>
<td>4,752</td>
<td>5,023</td>
<td>4,414</td>
<td>4,567</td>
</tr>
<tr>
<td>Earnings per share as reported</td>
<td>$0.50</td>
<td>$0.80</td>
<td>$2.50</td>
<td>$1.13</td>
</tr>
<tr>
<td>Earnings per share without share repurchase</td>
<td>$0.50</td>
<td>$0.80</td>
<td>$1.92</td>
<td>$0.82</td>
</tr>
</tbody>
</table>

**Requirement 2:**
After adjusting for the stock repurchase, it becomes clear that performance in 2001 has fallen back to 1999 levels.

**Requirement 3:**
Other reasons for the decline in average common shares include the elimination of dilutive securities (convertible debt, preferred stock, warrants and options) or a reduction in the dilution effect of these same securities.
P15-9. Earnings management

The following schedule shows the answers to Requirements 1 and 2:

<table>
<thead>
<tr>
<th></th>
<th>Earnings Available for Common</th>
<th>Restructuring Charges</th>
<th>Special Gains</th>
<th>Average Common Shares Outstanding</th>
<th>Earnings Per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>As Reported</td>
</tr>
<tr>
<td>1999</td>
<td>$10,717</td>
<td>($265)</td>
<td>$653</td>
<td>9,834</td>
<td>$1.07</td>
</tr>
<tr>
<td>1998</td>
<td>9,296</td>
<td></td>
<td>9,807</td>
<td></td>
<td>.93</td>
</tr>
<tr>
<td>1997</td>
<td>8,203</td>
<td>(2,322)</td>
<td>1538</td>
<td>9,824</td>
<td>.82</td>
</tr>
<tr>
<td>1996</td>
<td>7,280</td>
<td></td>
<td>9,922</td>
<td></td>
<td>.72</td>
</tr>
<tr>
<td>1995</td>
<td>6,573</td>
<td></td>
<td>10,102</td>
<td></td>
<td>.64</td>
</tr>
<tr>
<td>1994</td>
<td>5,905</td>
<td>(1,189)</td>
<td>10,252</td>
<td></td>
<td>.57</td>
</tr>
<tr>
<td>1993</td>
<td>4,424</td>
<td>(1,101)</td>
<td>1,430</td>
<td>10,240</td>
<td>.42</td>
</tr>
<tr>
<td>1992</td>
<td>4,305</td>
<td></td>
<td>10,282</td>
<td></td>
<td>.41</td>
</tr>
<tr>
<td>1991</td>
<td>4,435</td>
<td></td>
<td>10,426</td>
<td></td>
<td>.42</td>
</tr>
<tr>
<td>1990</td>
<td>4,303</td>
<td></td>
<td>10,659</td>
<td></td>
<td>.40</td>
</tr>
<tr>
<td>1989</td>
<td>3,939</td>
<td></td>
<td>10,833</td>
<td></td>
<td>.36</td>
</tr>
<tr>
<td>1988</td>
<td>3,386</td>
<td></td>
<td>10,797</td>
<td></td>
<td>.31</td>
</tr>
<tr>
<td>1987</td>
<td>2,119</td>
<td>(1,027)</td>
<td>850</td>
<td>10,953</td>
<td>.19</td>
</tr>
<tr>
<td>1986</td>
<td>2,492</td>
<td>(311)</td>
<td>50</td>
<td>10,905</td>
<td>.22</td>
</tr>
</tbody>
</table>

A chart depicting the behavior of these three EPS amounts over time appears on the next page.
Requirement 3:
Several trends are evident from these data. First, some restructuring charges (as in 1997 and 1999) occur in otherwise very good years. Most, as in 1993, are accompanied by special gains that dampen the impact of the restructuring charge. Still others, as in 1986 through 1987, are spread over multiple years and dampened by special gains. The net result is that GE has reported EPS increases in all but two of the years 1986 through 1999. Of course, the timing of both the restructuring charges and the special gains may just be coincidental.

Requirement 4:
Changes in accounting methods, changes in allowances and reserves such as bad debts, and changes in some expense items like R&D or maintenance can be used to manage reported earnings, the numerator in the EPS calculation. EPS can also be managed through stock buybacks that reduce the denominator of the EPS calculation. Notice that GE has reduced the average number of shares outstanding over the period covered by the problem. This reduction has contributed to the company’s EPS increases.
Requirement 5:

GE’s earnings per share for 2000 was $1.27 and there do not appear to have been any restructuring charges or special gains / losses included in the EPS figure. A copy of the company’s earnings press release for 2000 is reproduced below.

Analysts should also examine the quarterly earnings releases for GE along with the company’s 10-Q and 10-K filings to spot possible special items (gains or charges) that may contaminate the reported EPS figure.

---

GE Reports Record Results; 2000 EPS $1.27, Up 19%; 2000 Revenues Grow 16% to $130 Billion; Earnings Up 19% to $12.7 Billion

01/17/2001
Business Wire
(Copyright (c) 2001, Business Wire)


Highlights of the Company's preliminary 2000 results include:
- Revenues rose 16% to a record $129.9 billion, reflecting continued growth from global activities and product services.

- Earnings per share increased 19% to $1.27, up from last year's $1.07, and earnings increased 19% to a record $12.7 billion.

- GE's total year ongoing operating margin was a record 18.9% of sales, up from last year's comparable 17.8%. The growth in margin reflects the increasing benefits from GE's focus on product services, Six Sigma quality and e-Business initiatives.

- GE's industrial businesses achieved revenue growth of 14% over 1999. Operating profit for five of GE's seven segments increased by double digits -- led by Power Systems, Plastics, Medical Systems, and Aircraft Engines.

- GE Capital Services' earnings for 2000 were $5.192 billion, 17% above last year's $4.443 billion. These record results reflect the globalization and diversity of GE Capital's businesses with strong double-digit increases in its Consumer Services, Specialized Financing, Equipment Management, and Mid-Market Financing segments.
Cash generated from GE's operating activities for 2000 was a record $15.4 billion, up 31% from last year's $11.8 billion. After the Honeywell shareowner approval of the proposed Honeywell merger, GE last week resumed and accelerated the purchase of its shares as part of the $22 billion share repurchase program under which GE has purchased a cumulative $17.4 billion -- 950.5 million shares -- since December 1994.

Fourth-quarter earnings per share increased 16% to $.36, up from last year's $.31, and earnings increased 16% to $3.585 billion, both records for the quarter. Revenues in the fourth quarter were a record $35.0 billion, 6% higher than last year's $32.9 billion.

GE continued to use the Internet to revitalize the Company. Online sales exceeded $7 billion with a fourth quarter running rate of $11 billion, up from less than $1 billion in 1999. GE conducted $6.4 billion in online auctions in 2000, providing annualized savings of $480 million. GE initiated digitization that will generate more than $1.5 billion of operating margin benefit in 2001.

At its December meeting, the GE Board of Directors increased the Company's quarterly dividend 17% to $.16 per share, the 25th consecutive year of increased dividends by GE.

Highlights of recent activities include:

Honeywell shareowners overwhelmingly approved (99% of those who voted) the proposed merger between GE and Honeywell. The vast majority of Honeywell's revenues are a complementary fit with GE's Aircraft Engine, Industrial Systems and Plastics businesses. The acquisition planning continues on track with over $2.5 billion of synergies identified. GE is working closely with regulatory agencies to close the proposed deal as soon as possible.

Strong demand for GE Power Systems' (GEPS) new power generation equipment in the U.S. market continued to drive orders to record levels - $7.2 billion in the fourth quarter of 2000 and $23.6 billion for 2000. Major orders announced in the quarter include 23 gas turbines and seven large steam turbines from New Jersey based PSEG Power, as well as 48 gas turbines and eight large steam turbines from Southern Energy Incorporated. Power Systems closed 46 new long-term service agreements during 2000 bringing the total value of such long-term commitments to more than $16 billion. In 2000 GEPS generated $1.165 billion in parts orders using PartsEdge.com on-line ordering, completed $1.5 billion purchases of goods and services through on-line auctions, and grew on-line Outage Optimizer orders to $410 million.

GE Aircraft Engines (GEAE) won more than $1 billion of equipment orders in the fourth quarter, continuing its share of more than 50 percent of the world's airline jet engine orders. Significant wins included Alitalia, Air Canada, and Atlas. The GE90 engine has become the best selling engine in the Boeing 777 family with orders since inception valued at more than $6.5 billion. The growth in regional jets, the fastest growing sector of commercial aviation, continued in the fourth quarter driving GE orders for 2000 to more than $1 billion. More than 360 airline customers are now linked to GEAE's internet-based Customer Web Center.

NBC continued to attract the key demographic, adults 18 to 49, winning the first three months of the 2000/01 season with seven of the top ten shows. NBC also won the November sweeps in households and key demographics and was the only network to grow ratings over the 1999 sweeps. Today Show, Meet the Press and Nightly News finished the year #1 as they have for several years. Today Show was extended to three hours in October, growing ratings 65% above previous programming. NBC continued to win late night ratings with the Tonight Show with Jay Leno and Late Night, both finishing the year a strong #1. MSNBC enjoyed tremendous ratings during the election period and CNBC grew pre-tax profit more than 40% in 2000.
GE Medical Systems (GEMS) products and services showed continued strong momentum with orders up 19% in the quarter. X-Ray orders, led by new digital x-ray systems, increased 41%; PET orders were up 127%. GEMS accelerated customer productivity using the Internet as more than $10 million of software was downloaded by GEMS customers through the new e-Flex-trial offering in the fourth quarter. GEMS also closed eight acquisitions in the quarter including Sopha Medical Vision, a leader in Nuclear Imaging technology, and Critikon, a leader in patient monitoring devices. At GE Capital Services, the UBS acquisition of PaineWebber, Inc. resulted in a pre-tax gain of $1.3 billion during 2000. This gain was more than offset by one-time charges, including costs of the Montgomery Wards bankruptcy filing, costs of restructuring the Information Technology Services operations, and losses associated with disposition of the mortgage services business. During the fourth quarter, Commercial Finance purchased a $627 million loan portfolio from First Source Financial. Japan Leasing acquired Fukugin Leasing Company stock providing a partnership with a leading regional bank. Vendor Financial Services provided $435 million of secured financing to Xerox. Penske Truck Leasing acquired Comcar Leasing. GE Americom successfully launched two new satellites. Aviation Services expanded its simulator training business through agreements with British Midland, Embraer and Britannia Airways. GE Plastics exceeded $1.5 billion in on-line sales in 2000 with the launch of GEPolymerland.com, a global portal to the plastics industry. In the fourth quarter, GE Plastics completed its acquisition of Commercial Plastics and Supply, a global distributor.

Mr. Welch concluded: "GE employees around the globe have once again delivered record results in 2000. We have built a Company with a business mix and operating system that will allow us to deliver record results in any foreseeable economic climate. We have just completed a very successful management transition and I've never been more confident about the Company's future. The strength of our long-cycle businesses combined with our ongoing initiatives - globalization, Six Sigma, product services and e-business - and our new leadership give us enormous confidence that 2001 will be another record year of double-digit earnings increases."

GE (NYSE: GE) is a diversified services, technology and manufacturing company with a commitment to achieving customer success and worldwide leadership in each of its businesses. For more information, visit the company's Web site at http://www.ge.com.

P15-10. Stock buyback incentives

**Requirement 1:**
Hershey Food Corporation has issued dual class common stock to preserve family control of the company. Each share of common stock carries one vote, but each share of Class B common has 10 votes. There are about 75 million common shares outstanding (75 million votes) and 15 million Class B shares (150 million votes), so whoever controls the Class B stock also controls the company. Since voting rights usually have value, Class B common shares will have a higher market price than the company’s regular common shares.

**Requirement 2:**
The average price per share the company received from common and Class B shares can be found by dividing the common stock book value balance by the number of shares outstanding at year end:

\[
\frac{137,707,072}{89,975} = 1.53 \text{ per share}
\]
Requirement 3:
The average price per share the company paid for treasury stock can be found by dividing the treasury stock book value balance by the number of shares held in treasury at year end:

1994:  $158,711/3,187.1 shares  = $49.80
1995:  $685,076/12,709 shares  = $53.90

Treasury shares held in 1995 increased four times over the number held in 1994. The book price per share has increased by almost $4.00 over 1995.

Requirement 4:
The company paid $500 million for 9,049,773 shares in 1995, or $55.25 per share. In 1993, the company paid $103.1 million for 2 million shares, or $51.55 per share.

Requirement 5:
The stock buyback appears to have been motivated by the cash needs of the Milton Hershey School, the company’s majority (beneficial) stockholder through the Hershey Trust Company. Other reasons companies buy back stock are: to eliminate the investment of dissident stockholders; to concentrate ownership in “friendly” hands; to distribute cash to stockholders at capital gains’ tax rates; and, perhaps, to manage reported earnings per share.

Requirement 6:
Based on the information provided, credit analysts may not react favorably to the company’s 1995 stock buyback. The $500 million spent to purchase treasury stock wipes out the company’s operating cash flow for the year, leaving nothing for reinvestment, debt reduction, or normal dividends.

15-11. Preferred stock and credit analysis

Requirement 1:
Enter to record the issuance of preferred stock on January 1, 1996:

<table>
<thead>
<tr>
<th>DR</th>
<th>Cash</th>
<th>$1,646.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR</td>
<td>Preferred stock</td>
<td>$1,646.00</td>
</tr>
</tbody>
</table>
Requirement 2:
Entry to record 8% preferred dividends for 1996 and 1995:

1996:
  DR Dividends $210.00
  CR Cash $210.00
($210.00 = $2,625.00 \times 8\%)

1995:
  DR Dividends $78.32
  CR Cash $78.32
($78.32 = $979.00 \times 8\%)

Requirement 3:
The company would make entries identical to those in Requirement 2, except that Interest expense would be debited rather than dividends. The company would also receive a tax deduction for interest.

Requirement 4:
The interest coverage ratio calculations are shown in the following schedule:

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest expense on existing debt</td>
<td>$1,174.00</td>
<td>$877.00</td>
</tr>
<tr>
<td>Interest expense on debt from preferred</td>
<td>210.00</td>
<td>78.32</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,384.00</strong></td>
<td><strong>$955.32</strong></td>
</tr>
<tr>
<td>Net income before interest and taxes</td>
<td>$1,178</td>
<td>$879</td>
</tr>
<tr>
<td>Interest coverage ratio as reported</td>
<td>1.00</td>
<td>1.01</td>
</tr>
<tr>
<td><strong>Interest coverage ratio with debt from preferred</strong></td>
<td><strong>0.85</strong></td>
<td><strong>0.92</strong></td>
</tr>
</tbody>
</table>

The long-term debt-to-equity ratio would be:

<table>
<thead>
<tr>
<th>Long-Term Debt</th>
<th>Equity</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>$15,826</td>
<td>$9,498</td>
</tr>
<tr>
<td>1995</td>
<td>10,886</td>
<td>3,637</td>
</tr>
</tbody>
</table>
**Requirement 5:**
Lenders might restrict a company’s ability to issue additional preferred stock when the stock carries a high dividend payment or mandatory redemption feature. In both cases, the cash flows dedicated to preferred stock payments would not be available for debt repayment, and this might increase the company’s credit risk.

**P15-12. Comprehensive EPS calculations**

**Requirement 1:**
The preferred stock pays a 10% dividend ($500,000), so there must be $5 million of preferred stock outstanding. Since each share has a $100 par value, there must have been 50,000 shares issued (50,000 shares × $100 per share = $5 million). The preferred stock converts into 200,000 shares of common stock, so each $100 par value preferred share must convert into 4 shares of common.

**Requirement 2:**
The after-tax interest on the Series B debt was $300,000. Since this equals gross interest divided by one minus the 40% tax rate, gross interest must equal $500,000 (or $300,000/.60). Series B debt carries a 10% interest rate, so there must be $5 million outstanding ($5 million × 10% = $500,000 gross interest) or 5,000 certificates ($5 million/$1,000 per certificate). The debt converts into 200,000 shares of common stock, so each certificate must convert into 40 common shares (200,000 shares/5,000 certificates).

**Requirement 3:**
The after-tax interest on the $5 million of Series A debt was $240,000. Following the steps outlined in 2), gross interest must have been $400,000 (or $240,000/.60), so the interest rate must have been 8%. Series A debt converts into 250,000 shares of common stock at 50 shares per certificate.

**Requirement 4:**
Under the treasury stock method, the proceeds received from exercising stock options are used to buy back shares on the open market. In this case, $1 million of cash is generated when the options are exercised (50,000 options × $20 per share). Since the options add 33,334 shares to the EPS calculation, only 16,666 shares are repurchased, and the market price must be $60 per share ($1 million/16,666 shares).

**Requirement 5:**
One reason Series A debt carries a lower interest rate (8%) than Series B debt (10%) is that each $1,000 certificate converts into 50 shares of common stock instead of only 40 shares for the Series B certificates.
P15-13. Stockholders’ equity  
(AICPA adapted)

Requirement 1:
The company’s statement of retained earnings appears below:

Trask Corp.  
Statement of Retained Earnings  
For the Year Ended December 31, 2001

Balance, December 31, 2000, as originally reported $16,445,000  
Less prior period adjustment from error understating depreciation $350,000  
Less income tax effect 105,000  
As restated 16,200,000  
Net Income 2,400,000  
Deduct dividends  
Cash dividend on preferred stock 300,000 [1]  
Dividend in kind on common stock 900,000 [2]  
Balance, December 31, 2001 $17,400,000

Requirement 2:
The stockholders’ equity section of Trask’s balance sheet appears below:

Trask Corp.  
Stockholders’ Equity Section of Balance Sheet  
December 31, 2001

Preferred stock, $100 par value, 6% cumulative;  
150,000 shares authorized; 50,000 shares issued and outstanding $5,000,000  
Common stock, $2.50 par value; 4,000,000 shares authorized; 3,400,000 shares issued 8,500,000 [3]  
Additional paid-in capital 16,675,000 [4]  
Retained earnings 17,400,000  
Less common stock in treasury, 100,000 shares at cost 500,000  
Total stockholders’ equity $47,075,000
**Requirement 3:**
The computation of book value per share appears below:

**Trask Corp.**
**Computation of Book Value per Share of Common Stock**
**December 31, 2001**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total stockholders’ equity</td>
<td>$47,075,000</td>
</tr>
<tr>
<td>Deduct allocation to preferred stock</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Allocation to common stock</td>
<td>$42,075,000</td>
</tr>
<tr>
<td>Divided by number of common shares outstanding (3,400,000 - 100,000)</td>
<td>÷ 3,300,000</td>
</tr>
<tr>
<td>Book value per share of common stock</td>
<td>$12.75</td>
</tr>
</tbody>
</table>

**Explanation of amounts:**

1. **Preferred stock dividend**
   - Par value of outstanding preferred shares: $500,000
   - Multiplied by dividend rate: \( \times 0.60 \)
   - Dividends paid on preferred stock: $300,000

2. **Dividend in kind on common stock**
   - Fair market value of Harbor stock distributed (15,000 shares @ $60): $900,000

3. **Number of common shares issued and outstanding**
   - Number of common shares issued, 12/31/00: 1,575,000
   - Less: Common shares retired: (25,000)
   - Number of common shares issued, 6/1/01: 1,700,000
   - Two-for-one stock split, 10/27/01: \( \times 2 \)
   - Number of common shares issued after stock split: $3,400,000
   - Less: Common shares held in treasury: 100,000
   - Total number of common shares outstanding: $3,300,000

Amount of common shares issued:
- Amount of common shares issued, 12/31/00: $7,875,000
- Less: Common shares retired at par value: (125,000)
- Amount of common shares issued, 6/1/01: 750,000
- Total amount of common shares issued: $8,500,000
P15-14. Valuing stock option grants

**Requirement 1:**
The risk-free rate chosen should match the duration of the options. The employees' plan has an expected life of only 1.5 years, but the long-term incentive plan has an expected life of 6 years. Accordingly, the company should use a short-term risk-free rate for the employees' plan and a moderate-term risk-free rate for the long-term incentive plan. From the annual report, we can see that the short-term interest rate (6.15%) was higher than the moderate-term rate (5.42%) when the options were valued by the company.

**Requirement 2:**
The following table gives the spreadsheet inputs and option values.

<table>
<thead>
<tr>
<th>Option Plan</th>
<th>Long-Term Incentive</th>
<th>Employees’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock price at grant date</td>
<td>$45.84</td>
<td>$56.25</td>
</tr>
<tr>
<td>Weighted-average exercise price</td>
<td>$45.84</td>
<td>$56.25</td>
</tr>
<tr>
<td>Expected life of option</td>
<td>6 years</td>
<td>1.5 years</td>
</tr>
<tr>
<td>Risk-free interest rate</td>
<td>5.42%</td>
<td>6.15%</td>
</tr>
<tr>
<td>Expected volatility of stock</td>
<td>39.00%</td>
<td>39.00%</td>
</tr>
<tr>
<td>Expected dividend yield</td>
<td>1.48%</td>
<td>1.21%</td>
</tr>
</tbody>
</table>

Option value from spreadsheet: $18.58 $12.15
Option value as reported: $18.47 $12.10

An expected life of 5.915 years for the long-term incentive plan, and 1.49 years for the employees' plan, produces option values equal to those reported by the company. Some rounding errors are to be expected.

**Requirement 3:**
The following table gives the spreadsheet option values for each combination of inputs.
Option Values

<table>
<thead>
<tr>
<th></th>
<th>Long-Term Incentive</th>
<th>Employees’</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Expected dividend yield–high</td>
<td>$12.74</td>
<td>$10.22</td>
</tr>
<tr>
<td>3. Expected volatility–low</td>
<td>$15.38</td>
<td>$9.64</td>
</tr>
<tr>
<td>5. Risk-free interest rate–low</td>
<td>$18.17</td>
<td>$11.97</td>
</tr>
<tr>
<td>6. Risk-free interest rate–high</td>
<td>$18.99</td>
<td>$12.33</td>
</tr>
<tr>
<td>7. Expected life–low</td>
<td>$15.54</td>
<td>$6.76</td>
</tr>
<tr>
<td>8. Expected life–high</td>
<td>$20.79</td>
<td>$15.86</td>
</tr>
</tbody>
</table>

Option value computed in (2) $18.58 $12.15
Option value reported by company $18.47 $12.10

Requirement 4:
From the results in Requirement 3, the risk-free interest rate seems to have the smallest impact on option values. Dividend yield and expected volatility have the largest impact on the value of long-term incentive options. Expected life has the largest impact on the value of employees’ plan options.

Requirement 5:
The maximum and minimum compensation expense for options granted in 1996 are:

<table>
<thead>
<tr>
<th></th>
<th>Options Granted</th>
<th>Option Value</th>
<th>Compensation Expense</th>
<th>After-Tax Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term incentive plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum option value from (3)</td>
<td>2,663,375</td>
<td>$21.65</td>
<td>$57,662,069</td>
<td>$34,597,241</td>
</tr>
<tr>
<td>Minimum option value from (3)</td>
<td>2,663,375</td>
<td>12.74</td>
<td>33,931,398</td>
<td>20,358,839</td>
</tr>
<tr>
<td>Option value as reported</td>
<td>2,663,375</td>
<td>18.47</td>
<td>49,192,536</td>
<td>29,515,522</td>
</tr>
<tr>
<td>Employees’ plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum option value from (3)</td>
<td>848,546</td>
<td>15.86</td>
<td>13,457,940</td>
<td>8,074,764</td>
</tr>
<tr>
<td>Minimum option value from (3)</td>
<td>848,546</td>
<td>6.76</td>
<td>5,736,171</td>
<td>3,441,703</td>
</tr>
<tr>
<td>Option value as reported</td>
<td>848,546</td>
<td>12.10</td>
<td>10,267,407</td>
<td>6,160,444</td>
</tr>
</tbody>
</table>
The after-tax expense (not required in the problem statement) is based on a 40% corporate income tax rate. The company reported net income of $63 million in 1996, and the annual report indicates that net income would have been only $40 million that year if compensation expense had been recorded following the guidelines of SFAS No. 123. The value of options granted during the year is only one component of the SFAS No. 123 expense.


Part A:

Requirement 1:
There are no shares of preferred stock outstanding (none have been issued), and the par value of preferred is $0.01 per share.

Requirement 2:
The journal entry to record the sale of 10,000 shares of preferred stock at $25 per share is:

\[
\begin{array}{lcr}
\text{DR} & \text{CR} & \\
\text{Cash} & \text{Preferred stock} & \text{Additional paid-in capital} \\
$250,000 & $100 & 249,900
\end{array}
\]

Requirement 3:
The journal entry to record the $1.00 annual dividend on the 10,000 shares issued above is:

\[
\begin{array}{lcr}
\text{DR} & \text{CR} & \\
\text{Dividends} & \text{Cash} & \\
$10,000 & $10,000
\end{array}
\]

Requirement 4:
There were 32 million shares of common stock outstanding.

Requirement 5:
From the cash flow statement, we can see that no shares were issued during the year ended February 27, 1993. Shares were issued one year earlier as part of a $240,830 stock dividend.

The number of shares issued exceeds the number of shares outstanding when the company has repurchased its stock and holds the repurchased shares in the treasury account. Since ShopKo has 32 million shares of common stock issued and outstanding, we know it has no treasury shares.
Part B:

The schedule below shows the calculation using information from both the cash flow statement and the earnings statement.

<table>
<thead>
<tr>
<th></th>
<th>Common Shares Issued</th>
<th>Common Stock $0.01 Par Value</th>
<th>Paid-In Capital</th>
<th>Additional Retained Earnings</th>
<th>Total Stockholders’ Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance at February 1990:</strong></td>
<td>14,750,000</td>
<td>$147,500</td>
<td>$2,282,000</td>
<td>$226,069,000</td>
<td>$228,498,500</td>
</tr>
<tr>
<td>Net income for the year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividends paid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common shares issued</td>
<td>-</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Balance at February 23, 1991</td>
<td>14,750,000</td>
<td>$147,500</td>
<td>$2,282,000</td>
<td>$271,149,000</td>
<td>$273,578,500</td>
</tr>
<tr>
<td>Net income for the year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock dividends paid</td>
<td>17,250,000</td>
<td>172,500^1</td>
<td>240,657,500</td>
<td></td>
<td>(240,830,000)</td>
</tr>
<tr>
<td>Common shares issued</td>
<td>-</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Balance at February 29, 1992</td>
<td>32,000,000</td>
<td>$320,000</td>
<td>$242,939,500</td>
<td>$79,908,000</td>
<td>$323,167,500</td>
</tr>
<tr>
<td>Net income for the year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividends paid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common shares issued</td>
<td>-</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Balance at February 27, 1993</td>
<td>32,000,000</td>
<td>$320,000</td>
<td>$242,939,500</td>
<td>$115,887,000</td>
<td>$359,146,500</td>
</tr>
</tbody>
</table>

^1 Consistent with ARB 43 when a stock dividend is large (more than 20–25% of the shares previously outstanding), the profession recommends that since the par value of the shares is not altered that the transfer from retained earnings is only the amount required by statute. In this case that amount would be $0.01 per share or $172,500.
Requirement 1:
Although the $63.60 exercise price for employee stock options exceeds the stock’s current market value of $30, the stock options still have value to employees as long as there is some chance the stock price will rebound to an amount above $63.60 before the options expire (usually 10 years after the grant date, or 2008 in this case).

Remember, stock options are most often granted with an exercise price that equals the market price of the stock at the grant date. So, one thing we learn from this footnote is that the market price of Amazon shares has fallen from about $63.60 when the 1999 options were granted, to $30 at the balance sheet date. The value of these options has certainly declined along with the value of the stock itself—employees (via their options) and shareholders (via their share ownership) have both suffered a loss. But that’s one reason options are used to compensate employees—so they suffer along with stockholders when the share price falls. Of course, there’s an upside too! Options allow employees to share in the rewards when the stock price increases.

Requirement 2:
There are two views on this issue. One perspective says that it is not appropriate to “reprice” options when the stock price takes a tumble. The reason is that repricing insulates employees (and management) from downside risk. Stockholders cannot escape this risk, and would prefer employees and managers to have strong incentives to avoid stock price declines, and to quickly turn the situation around if a price decline occurs. Repriced options allow employees to share in the rewards of stock ownership but without any downside risk.

An alternative perspective argues that when labor markets are especially competitive, the company risks losing its most talented people unless the options are repriced. Suppose a competitor firm has also seen its stock price fall from $60 to about $30. This competitor can hire away your "best" employees by offering them a new options package where the exercise price is $30. By changing jobs, the employee no longer has to wait for the stock to rise above $60 per share so that the options can be exercise.
Both factors—risk sharing and labor market competition—must be considered carefully when determining whether or not to reprice employee stock options.

**Requirement 3:**
Amazon probably chose to use the intrinsic method because the reported net loss would have been substantially larger in each of the three years if the “fair value” method had instead been used.

**C15-2. A case study in political processes—Financial reporting for executive stock options**

This is an interesting case that can be taught from several very different perspectives depending on the instructor’s preference. First, there is the financial reporting theory issue of whether granting stock options to employees represents compensation expense. Second, there is the measurement accuracy issue. If options granted are an expense, is the technology for measuring the amount of the expense sufficiently accurate to warrant inclusion in the income statement? Third, there is the pervasive political dimension. What was really driving the opposition to the FASB? Were the motivations similar for members of Congress and corporate executives? Within the corporate executive group, were the motivations similar for high-tech Silicon Valley firms and established Fortune 100 companies? What prompted the Big Six firms to side with the FASB’s opponents? Fourth, the case can be addressed from an ethical perspective. Did all parties play fair? Finally, there is a pragmatic dimension. In light of what happened in this scenario, do students believe that the standard-setting environment will generate “good” GAAP?

**Requirement 1:**
Several different issues were apparently afoot in the preparer community. High-tech and start-up companies who opposed the FASB were undoubtedly concerned with the bottom-line effect of treating options granted as an expense. Would their stock prices suffer, thereby making it more expensive to raise equity capital in the future? Some instructors may want to introduce stock market efficiency here. Would institutional and other sophisticated investors be misled by the higher income arising from not charging options granted to expense?

What motivated executives of established companies who vociferously opposed the FASB is less clear. These companies had sufficient cash flow to pay competitive salaries. Furthermore, the prospective income statement “hit” was often trivial. To illustrate this, we list the income statement impact of treating options granted as compensation expense for a group of companies. These companies were cited in the New York Times articles (8/25/92 and 3/26/93) as opposing the board’s stock option initiative.
<table>
<thead>
<tr>
<th>Company</th>
<th>Adoption Method</th>
<th>Income Decrease from Expensing Options</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For SFAS 123</td>
<td>1996</td>
</tr>
<tr>
<td>Anheuser Busch</td>
<td>Disclosure</td>
<td>0.6%</td>
</tr>
<tr>
<td>Citicorp</td>
<td>Measurement</td>
<td>N/A</td>
</tr>
<tr>
<td>Corning</td>
<td>Disclosure</td>
<td>N/A</td>
</tr>
<tr>
<td>General Electric</td>
<td>Measurement</td>
<td>N/A</td>
</tr>
<tr>
<td>General Mills</td>
<td>Disclosure</td>
<td>N/A</td>
</tr>
<tr>
<td>B.F. Goodrich</td>
<td>Disclosure</td>
<td>+0.1%</td>
</tr>
<tr>
<td>IBM</td>
<td>Disclosure</td>
<td>2.6%</td>
</tr>
<tr>
<td>Pfizer</td>
<td>Disclosure</td>
<td>3.6%</td>
</tr>
<tr>
<td>Philip Morris</td>
<td>Disclosure</td>
<td>N/A</td>
</tr>
<tr>
<td>Phillips Petroleum</td>
<td>Disclosure</td>
<td>N/A</td>
</tr>
<tr>
<td>PPG</td>
<td>Disclosure</td>
<td>N/A</td>
</tr>
<tr>
<td>Pacific Telesis</td>
<td>Measurement</td>
<td>N/A</td>
</tr>
<tr>
<td>Texas Instruments</td>
<td>Disclosure</td>
<td>36.5%</td>
</tr>
</tbody>
</table>

N/A = either no effect or an immaterial effect
* = no disclosure

Except for Texas Instruments in 1996, notice that the income statement impact was either negligible or very small for all other firms. In light of this, what motivated the intense opposition?

One can conjecture that Senator Levin’s “Stealth Compensation” initiative (partially) explains these large firms’ opposition. Since the effect on their income was small, and since an altruistic defense of Silicon Valley’s interests is probably not their highest priority, one might surmise that these executives believed that expensing the value of options granted would heighten compensation visibility. In turn, this would increase their vulnerability to shareholder (and general public) opposition to the level of executive compensation.

Instructors who wish to explore ethical issues in this setting could discuss how certain activist firms treated their compensation consultants. The New York Times story indicates that some firms threatened their compensation consultants who cooperated with the FASB’s early 1992 study of the range of compensation estimates generated by then-existing technology. Obviously, firms can hire whom they please as consultants. But some people may object to the intimidation.

**Requirement 2:**
The Big Six accounting firms’ position on the stock options issue is understandable since virtually all of their clients opposed the FASB’s proposed treatment. Rather than antagonize their clients, the firms joined in
the opposition. The February 17, 1993, letter quoted in the case indicates this clearly. The position taken on the stock compensation issue was what prompted Walter Schuetze, then SEC Chief Accountant, to suggest that CPA firms may be behaving as “cheerleaders for their clients.” (See Walter P. Schuetze, “A Mountain or a Molehill?” Accounting Horizons (March 1994), p. 74.)

Senator Levin’s support for the FASB’s approach is presumably the result of his opposition to what he believed to be excessive executive compensation. This attitude may be shaped by the fact that his state has many mature industries and experienced significant unemployment in the 1980s. Paying top managers high salaries and bonuses while thousands were being laid off created controversy in Michigan and elsewhere. Similarly, the two California senators were also representing the strong preferences of their constituency, dominated by high-tech, growth companies who were heavy users of options. What caused the large number of others to vote against the FASB in the sense of the Senate resolution can only be surmised. Obviously, those running for elective office are understandably responsive to potential supporters and contributors.

**Requirement 3:**
The FASB implicitly and explicitly used representational faithfulness as the cornerstone of its initiative. The Board contended that options had value on the grant date, could be measured reasonably accurately, and represented compensation expense. Consequently, representational faithfulness required that they be recognized in the financial statements, according to the Board.

Opponents disputed this, but their objections are open to different interpretations. For example, as quoted in the case, Senator Lieberman asserted that options cannot be valued when granted; he seems to be saying that their *ultimate* value can be known only at exercise. While true, this does *not* mean that they are valueless prior to exercise, as daily quoted prices for options in The Wall Street Journal testify.

Other opponents concede that options have value at the grant date but suggest that they cannot be measured accurately using available models. The reasons relate to the restrictions that exist in compensation option grants. Mr. Leisenring alluded to these complications in the quote at the beginning of the case. Indeed, these restrictions do lead to difficulties in applying options-pricing models in these settings.
**C15-3. Tuesday Morning Corporation (CW): Shareholders’ equity**

**Requirement 1:**
The following schedule shows the computation of year-end balances:

<table>
<thead>
<tr>
<th>Common Shares Issued</th>
<th>Common Stock $0.01 Par Value</th>
<th>Additional Paid-In Capital</th>
<th>Retained Earnings</th>
<th>Treasury Stock Shares Held</th>
<th>Carrying Value</th>
<th>Total Stockholders' Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at the beginning of 1992</td>
<td>8,515,000</td>
<td>$85,150</td>
<td>$22,185,000</td>
<td>$32,775,000</td>
<td>-</td>
<td>$0</td>
</tr>
<tr>
<td>Net income for the year</td>
<td>8,171,000</td>
<td>8,171,000</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividends paid</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common stock issued for options</td>
<td>91,000</td>
<td>910</td>
<td>318,090</td>
<td></td>
<td></td>
<td>319,000</td>
</tr>
<tr>
<td>Common stock issued</td>
<td>195,000</td>
<td>1,950</td>
<td>2,417,050</td>
<td></td>
<td></td>
<td>2,419,000</td>
</tr>
<tr>
<td>Common shares retired</td>
<td>(160,000)</td>
<td>(1,600)</td>
<td>(1,388,400)</td>
<td></td>
<td></td>
<td>(1,390,000)</td>
</tr>
<tr>
<td>Balance at end of 1992</td>
<td>8,641,000</td>
<td>$86,410</td>
<td>$23,531,740</td>
<td>$40,946,000</td>
<td></td>
<td>$64,564,150</td>
</tr>
</tbody>
</table>

**Requirement 2:**
There were no shares of preferred stock issued and outstanding at the end of 1994, as shown on the balance sheet.

**Requirement 3:**
The par value of preferred stock is $1 per share, as shown on the balance sheet.

**Requirement 4:**
The journal entry to record the issuance of the preferred shares on March 1, 1995, is:

```
DR Cash $2,500,000
CR Preferred stock $100,000
CR Additional paid-in capital 2,400,000
```

The journal entry to record the dividend declaration and payment on March 1, 1996, is:

```
DR Dividends $250,000
CR Dividends payable $250,000
```

```
DR Dividends payable $250,000
CR Cash $250,000
```

Or to record the *simultaneous* declaration and payment:

```
DR Dividends $250,000
CR Cash $250,000
```
This case describes a “partial spin-off” in which RJR Holdings is offering to sell 25% of its ownership interest in a subsidiary—the Nabisco Group—to the public. The plan is to create a market for Nabisco Group shares that is separate and distinct from the market for R.J. Reynolds Tobacco shares. The holding company would retain a 75% ownership position in Nabisco Group and have substantial influence over its financing, operating, and investment activities.

The board at Holdings has announced a 45% (of earnings) dividend payout rate for Nabisco Group shares. The board also says it reserves the right to change the dividend payout rate at any time, and that Nabisco Group is not required to pay dividends on its common shares. As a practical matter, this is the case for all public companies: there is no requirement to pay common dividends, and the dividend rate is generally set on a quarterly basis by the board of directors. These two language elements of the offering prospectus do not present any new agency problems for potential investors.

The second paragraph of the prospectus extract says that Nabisco Group dividends will be paid out of the lesser of (1) the Available Nabisco Dividend Amount (ANDA) and (2) funds of Holdings legally available therefor. The ANDA is similar to the amount that would be available for dividends if Nabisco were a separate Delaware company. Since most U.S. companies are incorporated in Delaware, no unusual problems surface from this portion of the passage. However, the second portion places an additional restriction on Nabisco dividend payments—funds must be available in Holdings.

We also learn in this paragraph that ANDA will be “increased or decreased” as appropriate income and expenses of Holdings are allocated to the Nabisco Group “on a substantially consistent basis.” Now we have a potential agency problem!

To illustrate the nature of this agency problem, suppose Nabisco Group reports net income of $100 million. With the dividend payout set at 45%, this means that Nabisco investors should receive $45 million in dividends. But who are those investors? Under the proposed offering, Nabisco Group would be 25% owned by outside investors and 75% owned by Holdings. But the original buyout group, which includes management and board members, owns 49% of Holdings. According to the last paragraph of the prospectus extract, Holdings will let the Nabisco dividend “pass through” to owners of Reynolds stock. So, here is what will happen to the $45 million in dividends:
Nabisco Stock | Reynolds Stock
---|---
Outsiders | Holdings | Outsiders | Buyout Group

Nabisco Group pays $45 million dividend:
25% to outsiders with the remainder to Holdings | $11,250 | $33,750
Holdings “pass through” of its share:
51% to outsiders with remainder to buyout group | $17,213 | $16,538

The buyout group receives $16,538,000 as its share of the Nabisco Group dividend.

Now, suppose, instead, that Holdings decides to charge Nabisco Group a $45 million management fee and to dispense with the dividend payment. Earnings at Nabisco Group fall to $55 million (ignoring tax considerations), but $45 million cash is transferred to Holdings. And, let us suppose that Holdings now decides to declare a $45 million dividend on Reynolds stock. Here is what would happen:

Nabisco Stock | Reynolds Stock
---|---
Outsiders | Holdings | Outsiders | Buyout Group

Nabisco Group pays $45 million management fee: | $0,000 | $45,000
Holdings pays $45 million dividend:
51% to outsiders with remainder to buyout group | $22,950 | $22,050

Now the buyout group receives $22,050,000 instead of just $16,538,000, and Nabisco outsiders get nothing. The buyout group, consisting of RJR Nabisco management and directors, can transfer wealth from outside Nabisco stockholders to Reynolds stockholders, including the buyout group itself.

Of course, the story is incomplete because actions of this sort would undoubtedly cause the price of Nabisco stock to fall. This would lower the value of Reynolds stock held by outsiders and the buyout group since Holdings owns 75% of Nabisco. This possibility should lessen the agency problem, but it may not eliminate the problem.

RJR Nabisco withdrew its Nabisco Group stock offering in late June 1993, after it became clear that there was little investor interest in the deal at the price ($17-$19 per share) RJR hoped to receive. Nabisco shares were finally sold to the public in 1995.
C15-5. Time Warner Inc.: Is it equity or debt?

Requirement 1:
All three preferred stock instruments have characteristics that resemble traditional debt financing: required payment of annual cash flow (called dividends here but interest when it is debt), and a scheduled redemption (or principal payment). In addition, two of the securities were issued solely for the purpose of transforming debt into preferred stock. Here are the details.

“PERCS”: These securities were issued in August 1995 and replaced $385 million of the company’s 4% subordinated notes. The subordinated notes have not been retired, but instead were placed in a “shell” subsidiary of the company, called PERCS. The cash flows from the company to PERCS for the 4% notes will be used to make the required cash distributions of 4% on the preferred stock. The preferred stock must be retired on December 31, 1997, for cash, or at the company’s option, shares of stock in Hasbro. The company also has a call option that would permit early retirement of the preferred stock for cash or Hasbro stock. December 31, 1997, is also the day the 4% note is to be retired.

Preferred Trust Securities: These securities were issued in December 1995 and replace $592 million of the company’s 8 7/8% subordinated debentures. The debt has not been retired, but instead was placed in a “shell” subsidiary of the company, called Preferred Trust Securities. The cash flows from the company to Preferred Trust Securities for the 8 7/8% debt will be used to make the required cash distributions of 8 7/8% on the preferred stock. The preferred stock must be redeemed for cash on December 31, 2025 (the retirement date for the debt), and the company has a call option that permits early redemption.

Series M Exchangeable Preferred: These securities were issued in April 1996 for cash in a private placement. Each preferred share carries a cumulative dividend requirement of 10 1/4% per year, payable in cash but pro-rated based on the cash distributions to the company from Time Warner Entertainment (TWE). The company is required to redeem the preferred stock for cash by July 1, 2016, with partial redemption beginning in 2012. If there is a reorganization of TWE, the company must either (1) exchange the Series M preferred for a Series L preferred, or (2) redeem the Series M preferred for cash. The Series L preferred has terms similar to the Series M except that (1) the company is required to pay dividends in kind (issuing more preferred shares) until June 30, 2006; (2) the Series L shares must be redeemed by 2011; and (3) the company has the option of exchanging the Series L shares for 10 1/4% senior debt.

All three instruments obligate the company to a series of predictable future cash outflows that closely resemble interest and principal repayments.
Because the cash outflows cannot be avoided, most credit analysts will include them when assessing the credit risk of the company. Even though the cash flows are earmarked for dividends and preferred stock redemption, they will be treated similarly to interest and debt repayment for credit analysis purposes.

**Requirement 2:**
The following schedule treats all three preferred stock instruments as debt for purposes of calculating revised covenant levels:

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term debt as reported at year end</td>
<td>$13,201</td>
<td>$9,907</td>
</tr>
<tr>
<td>Preferred stock reclassified as debt:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERCS</td>
<td>374</td>
<td>374</td>
</tr>
<tr>
<td>Preferred Trust Securities</td>
<td>575</td>
<td>575</td>
</tr>
<tr>
<td>Series M Exchangeable Preferred</td>
<td>1,700</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$15,850</strong></td>
<td><strong>$10,856</strong></td>
</tr>
<tr>
<td>Common stockholders’ equity at year end</td>
<td>$9,498</td>
<td>$3,637</td>
</tr>
<tr>
<td><strong>Debt-to-equity/ratio</strong></td>
<td>1.67</td>
<td>2.98</td>
</tr>
<tr>
<td>Net income before interest and taxes as reported</td>
<td>$1,178</td>
<td>$879</td>
</tr>
<tr>
<td>Interest expense as reported</td>
<td>$1,174</td>
<td>$877</td>
</tr>
<tr>
<td>Preferred dividends reclassified as interest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERCS at 4% issued August 1995</td>
<td>$15</td>
<td>$5</td>
</tr>
<tr>
<td>Preferred Trust at 8 7/8% issued December 1995</td>
<td>$51</td>
<td>$4</td>
</tr>
<tr>
<td>Series M at 10 1/4% issued April 1996</td>
<td>$131</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,371</strong></td>
<td><strong>$886</strong></td>
</tr>
<tr>
<td><strong>Times-interest-earned ratio</strong></td>
<td>0.86</td>
<td>0.99</td>
</tr>
</tbody>
</table>

Both covenants are violated at the end of 1996 (and 1995) if the preferred stock is treated like debt for loan purposes. Notice that the debt-to-equity covenant was violated in 1995 even without reclassification of the preferred stock.

**Requirement 3:**
The simple fix is to specify that debt, for purposes of the loan agreement, will include interest-bearing debt and preferred stock with mandatory redemption features. Similarly, interest, for purposes of the loan agreement, will include interest payments on debt plus dividend payments (accrued or paid) on preferred stock with mandatory redemption features.