## Chapter 2

## STOCK INVESTMENTS - INVESTOR ACCOUNTING AND REPORTING

## Answers to Questions

1 Only the investor's accounts are affected when outstanding stock is acquired from existing stockholders. The investor records the investment at its cost. Since the investee company is not a party to the transaction, its accounts are not affected.

Both investor and investee accounts are affected when unissued stock is acquired directly from the investee. The investor records the investment at its cost and the investee adjusts its asset and owners' equity accounts to reflect the issuance of previously unissued stock.

2 Goodwill arising from an equity investment of 20 percent or more is not recorded separately from the investment account. Under the equity method, the investment is presented on one line of the balance sheet in accordance with the one-line consolidation concept.

3 Dividends received from earnings accumulated before an investment is acquired are treated as decreases in the investment account balance under the fair value/cost method. Such dividends are considered a return of a part of the original investment.

4 The equity method of accounting for investments increases the investment account for the investor's share of the investee's income and decreases it for the investor's share of the investee's losses and for dividends received from the investee. In addition, the investment and investment income accounts are adjusted for amortization of any investment cost-book value differentials related to the interest acquired. Adjustments to the investment and investment income accounts are also needed for unrealized profits and losses from transactions between the investor and investee companies. A fair value adjustment is optional under SFAS No. 159.

5 The equity method is referred to as a one-line consolidation because the investment account is reported on one line of the investor's balance sheet and investment income is reported on one line of the investor's income statement (except when the investee has extraordinary gains/losses or gains/losses from discontinued operations). In addition, the investment income is computed such that the parent company's income and stockholders' equity are equal to the consolidated net income and consolidated stockholders' equity that would result if the statements of the investor and investee were consolidated.

6 If the equity method of accounting is applied correctly, the income of the parent company will generally equal the controlling interest share of consolidated net income. If the subsidiary is $100 \%$ owned by the parent, the parent's net income under the equity method will equal the consolidated net income of the parent and it's subsidiary.

7 The difference in the equity method and consolidation lies in the detail reported, but not in the amount of income reported. The equity method reports investment income on one line of the income statement whereas the details of revenues and expenses are reported in the consolidated income statement.

8 The investment account balance of the investor will equal underlying book value of the investee if (a) the equity method is correctly applied, (b) the investment was acquired at book value which was equal to fair value, the pooling method was used, or the cost-book value differentials have all been amortized or written off as impairment losses, and (c) there have been no intercompany transactions between the affiliated companies that have created investment account-book value differences.

9 The investment account balance must be converted from the cost to the equity method when acquisitions increase the interest held to 20 percent or more. The amount of the adjustment is the difference between the investment income reported under the cost method in prior years and the income that would have been reported if the equity method of accounting had been used. The offsetting account in the journal entry is

Retained Earnings. Changes from the cost to the equity method of accounting for equity investments are changes in the reporting entity that require restatement of prior years' financial statements when the effect is material.

10 The one-line consolidation is adjusted when the investee's income includes extraordinary items or gains or losses from discontinued operations. In this case, the investor's share of the investee's ordinary income is reported as investment income under a one-line consolidation, but the investor's share of extraordinary items, and gains and losses from discontinued operations is combined with similar items of the investor.

11 The remaining 15 percent interest in the investee is accounted for under the fair value/cost method, and the investment account balance immediately after the sale becomes the new cost basis.

12 Yes. When an investee has preferred stock in its capital structure, the investor has to allocate the investee's income to preferred and common stockholders. Then, the investor takes up its share of the investee's income allocated to common stockholders in applying the equity method. The allocation is not necessary when the investee has only common stock outstanding.

13 Goodwill impairment losses are calculated by business reporting units. For each reporting unit, the company must first determine the fair values of net assets. The fair value of the reporting unit is the amount at which it could be purchased in a current market transaction. This may be based on market prices, discounted cash flow analyses, or similar current transactions. This is done in the same manner as is done to originally record a combination. Any excess measured fair value over identifiable assets and liabilities is the implied fair value of goodwill. The company then compares the implied goodwill fair value to the carrying value of goodwill to determine if there has been an impairment loss during the period. If the carrying value exceeds the implied fair value, an impairment loss equal to the difference is recognized.

14 Yes. Goodwill impairment losses for subsidiaries are computed as outlined in the solution to question 13. Companies compare fair values to book values for equity method investments as a whole. Firms may recognize impairment losses for equity method investments as a whole, but perform no separate impairment tests for goodwill associated with an equity method investment.

## SOLUTIONS TO EXERCISES

## Solution E2-1

| 1 | d |
| :--- | :--- |
| 2 | c |
| 3 | c |
| 4 | d |
| 5 | b |

```
Solution E2-2 [AICPA adapted]
```

| 1 | d |
| :--- | :--- |
| 2 | b |
| 3 | d |
| 4 | b |

    Gar's investment is reported at its \(\$ 600,000\) cost because the equity
    method is not appropriate and because Gar's share of Med's income
    exceeds dividends received since acquisition \([(\$ 520,000 \times 15 \%)>\)
    \(\$ 40,000\).
    5 C
Dividends received from Zef for the two years were $\$ 10,500(\$ 70,000 \times$
15\% - all in 2012), but only $\$ 9,000$ ( $15 \%$ of Zef's income of $\$ 60,000$ for
the two years) can be shown on Two's income statement as dividend income
from the Zef investment. The remaining $\$ 1,500$ reduces the investment
account balance.
6 C
$[\$ 100,000+\$ 300,000+(\$ 600,000 \times 10 \%)]$
7 a
8 d
Investment balance January 2 \$250,000
Add: Income from $\operatorname{Pod}(\$ 100,000 \times 30 \%)$
Investment in Pod December 31
30,000
\$280,000

## Solution E2-3

1 Bow's percentage ownership in Tre
Bow's 20,000 shares $/(60,000+20,000)$ shares $=\underline{\underline{25 \%}}$
2 Goodwill

```
Investment cost $500,000
Book value ($1,000,000 + $500,000) > 25% (375,000)
Goodwill $125,000
```


## Solution E2-4

Income from Med for 2011
Share of Med's income $(\$ 200,000 \times 1 / 2$ year $\times 30 \%)$
$\$ 30,000$

## Solution E2-5

1 Income from Oak

Share of Oak's reported income (\$800,000 $\times 30 \%$ )
Less: Excess allocated to inventory
Less: Depreciation of excess allocated to building (\$200,000/4 years)
Income from Oak
2 Investment account balance at December 31
Cost of investment in Oak
Add: Income from Oak
Less: Dividends (\$200,000 x 30\%)
Investment in Oak December 31
Alternative solution
Underlying equity in Oak at January 1 (\$1,500,000/.3)
Income less dividends
Underlying equity December 31
Interest owned
Book value of interest owned December 31
Add: Unamortized excess
Investment in Oak December 31
\$ 240,000 $(100,000)$ (50,000)
$\$ \quad 90,000$
$\$ 2,000,000$
90,000
$(60,000)$
$\$ 2,030,000$
$\$ 5,000,000$
600,000
5,600,000
$30 \%$
1,680,000
350,000
$\$ \overline{\$ 2,030,000}$

## Solution E2-6

```
Journal entry on Man's books
    Investment in Nib ($600,000 x 40%)) 240,000
    Loss from discontinued operations 40,000
        Income from Nib
        280,000
To recognize income from 40% investment in Nib.
```


## Solution E2-7

1 a

| Dividends received from Ben (\$120,000 $\times 15 \%$ ) \$ 18,000 |  |  |
| :---: | :---: | :---: |
| Share of income since acquisition of interest |  |  |
| 2011 (\$20,000 $\times 15 \%$ ) |  | $(3,000)$ |
| 2012 (\$80,000 $\times 15 \%$ ) |  | $(12,000)$ |
| Excess dividends received over share of income | \$ | 3,000 |
| Investment in Ben January 3, 2011 | \$ | 50,000 |
| Less: Excess dividends received over share of income |  | $(3,000)$ |
| Investment in Ben December 31, 2012 | \$ | 47,000 |

2 b
Cost of 10,000 of 40,000 shares outstanding $\$ 1,400,000$
Book value of $25 \%$ interest acquired (\$4,000,000
stockholders' equity at December 31, 2011 +
$\$ 1,400,000$ from additional stock issuance) $\times 25 \%$
Excess cost over book value(goodwill)
$\begin{array}{r}1,350,000 \\ \$ \quad 50,000 \\ \hline\end{array}$
$3 d$
The investment in Moe balance remains at the original cost.
4 C

```
Income before extraordinary item $ 200,000
Percent owned
    Income from Kaz Products
\begin{tabular}{l}
\(\frac{40 \%}{\circ}\) \\
\hline\(\underline{80,000}\)
\end{tabular}
```


## Solution E2-8

```
Mreliminary computations 
Mreliminary computations 
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## Solution E2-9

1 Income from Run
Share of income to common (\$400,000 - \$30,000 preferred dividends) $\times 30 \%$ \$ 111,000

2 Investment in Run December 31, 2012
NOTE: The $\$ 50,000$ direct costs of acquiring the investment
are a part of the cost of the investment. They are charged against additional piad-in capital.
Investment cost
\$1,200,000
Add: Income from Run 111,000
Less: Dividends from Run $(\$ 200,000$ dividends - $\$ 30,000$ dividends to preferred) $\times 30 \%$
Investment in Run December 31, 2012
(51,000)
$\$ \underline{\underline{\$ 1,260,000}}$

## Solution E2-10

1 Income from Tee $(\$ 400,000-\$ 300,000) \times 25 \%$
Investment income October 1 to December 31 25,000
2 Investment balance December 31
Investment cost October 1 \$ 600,000
Add: Income from Tee
Less: Dividends
Investment in Tee at December 31
25,000
$\$ 625,000$

Chapter 2

## Solution E2-11

```
Preliminary computations
Goodwill from first 10% interest:
Cost of investment 
Book value acquired ($210,000 < 10%)
    Excess cost over book value
Goodwill from second 10% interest:
Cost of investment
Book value acquired ($250,000 x 10%)
    Excess cost over book value
1 Correcting entry as of January 2, 2012 to
    convert investment to the equity basis
    Unrealized gain/loss on available-for-sale
        securities 25,000
    Allowance to adjust available-for-sale
    Securities to market value
    To remove the valuation allowance entered on
    December 31, }2011\mathrm{ under the fair value method
    for an available for sale security.
    Investment in Fed 4,000
    Retained earnings
        4,000
    To adjust investment account to an equity basis
    computed as follows:
            Share of Fed's income for 2011
            Less: Share of dividends for 2011
```

\$ 25,000 $(21,000)$
\$ 4,000
$\$ \quad 50,000$
$(25,000)$
25,000
1 Correcting entry as of January 2, 2012 to convert investment to the equity basis Unrealized gain/loss on available-for-sale securities 25,000
Allowance to
ust investment account to an equity basis computed as follows:

Share of Fed's income for 2011
Less: Share of dividends for 2011

2 Income from Fed for 2012
Income from Fed on original 10\% investment
Income from Fed on second 10\% investment
Income from Fed
\$ 5,000
5,000
$\$ \quad 10,000$

## Solution E2-12

```
Preliminary computations
Stockholders' equity of Tal on December 31, 2011 $380,000
Sale of 12,000 previously unissued shares on January 1, 2012 250,000
Stockholders' equity after issuance on January 1, 2012 目630,000
Cost of 12,000 shares to Riv $250,000
Book value of 12,000 shares acquired
    $630,000 x 12,000/36,000 shares 210,000
Excess cost over book value $ 40,000
Excess is allocated as follows
    Buildings $60,000 * 12,000/36,000 shares $ 20,000
    Goodwill
    20,000
Excess cost over book value
$ 40,000
Journal entries on Riv's books during 2012
January 1
Investment in Tal 250,000
    Cash
    250,000
To record acquisition of a 1/3 interest in Tal.
During 2012
Cash 30,000
    Investment in Tal
    30,000
To record dividends received from Tal ($90,000 x 1/3).
December 31
Investment in Tal 38,000
    Income from Tal 38,000
            To record investment income from Tal computed as
                follows:
                Share of Tal's income ($120,000 x 1/3) $ 40,000
                Depreciation on building ($20,000/10 years)
                Income from Tal
                    (2,000)
$ 38,000
```


## Solution E2-13

1 Journal entries on BIP's books for 2012

```
    Cash 60,000
Investment in Cow (30\%) 60,000
```

To record dividends received from Cow (\$200,000×30\%).

Investment in Cow (30\%) 120,000
Extraordinary loss (from Cow) 12,000
Income from Cow
To record investment income from Cow computed as follows:

Share of income before extraordinary item

$$
\$ 340,000 \times 30 \% \quad \$ 102,000
$$

Add: Excess fair value over cost realized in 2012 \$100,000 × 30\%

30,000
Income from Cow before extraordinary
\$ 132,000 loss

2 Investment in Cow balance December 31, 2012
Investment cost
Add: Income from Cow after extraordinary loss
\$ 390,000
Less: Dividends received from Cow
120,000
$(60,000)$
Investment in Cow December 31
$\$ 450,000$
Check: Investment balance is equal to underlying book value $(\$ 1,400,000+\$ 300,000-\$ 200,000) \times 30 \%=\$ 450,000$

3

## BIP Corporation

Income Statement
for the year ended December 31, 2012

```
Sales
Expenses
    Operating income
Income from Cow (before extraordinary item)
    Income before extraordinary item
Extraordinary loss (net of tax effect)
    Net income
```

\$2,000,000
$\frac{1,400,000}{600,000}$
132,000
732,000
12,000
\$ 720,000

## Solution E2-14

1 Income from Wat for 2012
Equity in income ( $\$ 108,000-\$ 8,000$ preferred) $\times 40 \% \quad \$ 40,000$
2 Investment in Wat December 31, 2012
Cost of investment in Wat common \$ 290,000
Add: Income from Wat
Less: Dividends * (\$40,000 x 40\%)
Investment in Wat December 31
40,000
$(16,000)$
\$ 314,000

* $\$ 48,000$ total dividends less $\$ 8,000$ preferred dividend


## Solution E2-15

December 31, 2012:
Total fair value of Sel \$320,000
Fair value of identifiable assets(net) \$250,000
Implied fair value of goodwill \$70,000

| Goodwill carrying value | $\$ 100,000$ |
| :--- | ---: |
| Goodwill implied fair value | $\$ 70,000$ |
| Impairment loss | $\$ 30,000$ |

The $\$ 30,000$ impairment loss is deducted in calculating Par's income from continuing operations.

## Solution E2-16

Goodwill impairments are calculated at the business reporting unit level. Increases and decreases in fair values across business units are not offsetting. Flash must report an impairment loss of $\$ 5,000$ in calculating 2012 income from continuing operations. The calculation follows:
Carrying value of goodwill $\$ 35,000$
Estimated value of goodwill 30,000
Impairment loss

$$
\$ 5,000
$$

## SOLUTIONS TO PROBLEMS

## Solution P2-1

1 Goodwill
Cost of investment in Tel on April 1 \$1,372,000
Book value acquired:

| Net assets at December 31 | $\$ 4,000,000$ |
| :--- | ---: |
| Add: Income for $1 / 4$ year $(\$ 480,000 \times 25 \%)$ | 120,000 |
| Less: Dividends paid March 15 | $(80,000)$ |
| Book value at April 1 | $\frac{4,040,000}{}$ |
| Interest acquired | $-30 \%$ |
| $1 l$ from investment in Tel |  |
| $1,212,000$ |  |
| 160,000 |  |

2 Income from Tel for 2011
Equity in income before extraordinary item $(\$ 480,000 \times 3 / 4$ year $\times 30 \%) \quad \$ 108,000$
Extraordinary gain from Tel (\$160,000×30\%) 48,000
3 Investment in Tel at December 31, 2011
Investment cost April 1
\$1,372,000
Add: Income from Tel plus extraordinary gain Less: Dividends $(\$ 80,000 \times 3$ quarters) $\times 30 \%$ Investment in Tel December 31 $(72,000)$
$\$ 1,456,000$
4 Equity in Tel's net assets at December 31, 2011 Tel's stockholders' equity January 1
$\$ 4,000,000$
Add: Net income
Less: Dividends Tel's stockholders' equity December 31 Investment interest Equity in Tel's net assets

640,000
$\frac{(320,000)}{4,320,000}$
$30 \%$
\$1,296,000
5 Extraordinary gain for 2011 to be reported by Rit Tel's extraordinary gain $\times 30 \%$
$\$ \quad 48,000$
Solution P2-2

1 Cost method

```
    Investment in Sel July 1, 2011 (at cost) $220,000
Dividends charged to investment
Investment in Sel balance at December 31,
\((2,400)\)
\(\$ 217,600\)
``` 2011

July 1, 2011
Investment in Sel 220,000
Cash
220,000
To record initial investment for \(80 \%\) interest.
November 1, 2011
Cash 6,400
Dividend income 6,400
To record receipt of dividends (\$8,000 \(\times 80 \%\) ).
December 31, 2011
Dividend income 2,400
Investment in Sel 2,400
To reduce investment for dividends in excess of earnings (\$6,400 dividends - \$4,000 earnings).

2 Equity method
```

Investment in Sel July 1, 2011
\$220,000
Add: Share of reported income
4,000
Deduct: Dividends charged to investment
Deduct: Excess Depreciation
Investment in Sel balance at December 31, 2011
July 1, 2011
Investment in Sel 220,000
Cash
To record initial investment for 80% interest
of Sel.
November 1, 2011
Cash 6,400
Investment in Sel
To record receipt of dividends (\$8,000 < 80%).
December 31, 2011
Loss from Sel(Income from Sel) 2,600
To record loss from Sel computed as follows:
Share of Sel's income (\$10,000 < 1/2 year }\times80%
less excess depreciation (\$132,000/10 years }\times1/2 year)

```
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\section*{Solution P2-3}

Preliminary computations
Cost of investment in Zel \$331,000
Book value acquired (\$1,000,000×30\%)
300,000 Excess cost over book value
\(\$ 31,000\)
Excess allocated
Undervalued inventories (\$30,000 \(\times 30 \%\) )
\$ 9,000
\((18,000)\)
Overvalued building ( \(-\$ 60,000 \times 30 \%\) )
Goodwill for the remainder Excess cost over book value
\(\begin{array}{r}40,000 \\ \$ 31,000 \\ \hline\end{array}\)

1 Income from Zel
Share of Zel's reported income (\$100,000×30\%)
\(\$ 30,000\)
Less: Excess allocated to inventories sold in 2011
\((9,000)\)
Add: Amortization of excess allocated to overvalued building \$18,000/10 years
Income from Zel-2011
1,800
\(\$ 22,800\)

2 Investment balance December 31, 2011
Cost of investment
Add: Income from Zel
Less: Share of Zel's dividends (\$50,000 \(\times 30 \%\) )
\$331,000
22,800
Investment in Zel balance December \(31 \quad \underline{\underline{\$ 338,800}}\)
3 Vat's share of Zel's net assets Share of stockholders' equity \((\$ 1,000,000+\$ 100,000\) income - \$50,000 dividends) \(\times 30 \% \quad \$ 315,000\)

Chapter 2

\section*{Solution P2-4}
```

Preliminary computations
Investment cost of 40% interest \$380,000
Book value acquired [\$500,000 + (\$100,000 < 1/2 year)] \times 40% 220,000
Excess cost over book value
\$160,000
Excess allocated
Land \$30,000 x 40% \$ 12,000
Equipment \$50,000 × 40% 20,000
Remainder to goodwill
Excess cost over book value
July 1, 2011
Investment in Jill 380,000
Cash
To record initial investment for 40% interest in Jill.
November 2011
Cash (other receivables) 20,000 20,000
To record receipt of dividends (\$50,000 < 40%).
December 31, 2011
Investment in Jill Income from Jill 20,000 20,000
To record share of Jill's income (\$100,000 < 1/2 year }\times40%)
December 31, 2011
Income from Jill 2,000
Investment in Jill 2,000
To record depreciation on excess allocated to
Undervalued equipment (\$20,000/5 years }\times1/2 year)

```

\section*{Solution P2-5}

1 Schedule to allocate fair value-book value differentials
Investment cost January 1 \$1,680,000

Book value acquired \((\$ 3,900,000\) net assets \(\times 30 \%)\)
Excess cost over book value \(\frac{1,170,000}{\$ 1510,000}\)
Allocation of excess
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{Fair Value Book Value} & \multirow[t]{2}{*}{\begin{tabular}{l}
Percent \\
Acquired
\end{tabular}} & & \\
\hline & & \multicolumn{2}{|l|}{Allocation} \\
\hline \$200,000 & 30\% & \$ & 60,000 \\
\hline 800,000 & 30\% & & 240,000 \\
\hline 500,000 & 30\% & & 150,000 \\
\hline (700, 000 ) & 30\% & & \((210,000)\) \\
\hline \multirow[t]{4}{*}{\((100,000)\)} & 30\% & & \((30,000)\) \\
\hline & & & 210,000 \\
\hline & & & 300,000 \\
\hline & & \$ & 510,000 \\
\hline
\end{tabular}

2 Income from Tremor for 2011
Equity in income ( \(\$ 1,200,000 \times 30 \%\) )
Less: Amortization of differentials Inventories (sold in 2011)
\$ 360,000
Inventories \$200,000
Land 800,000
Buildings - net
\((700,000)\)
Equipment-net
(100, 000)
Assigned to identifiable net assets
Remainder to goodwill
Excess cost over book value
\$ 510,000

Income from Tremor
\[
30,000
\]

Investment in Tremor balance December 31, 2011
Investment cost
\$1,680,000
Add: Income from Tremor
Less: Dividends (\$600,000×30\%)
Investment in Tremor December 31
321,000
\((180,000)\)
\$1,821,000
Check:
Underlying equity \((\$ 4,500,000 \times 30 \%)\)
\(\$ 1,350,000\)
Unamortized excess:
Land
Buildings — net (\$150,000 - \$15,000)
240,000

Equipment - net (\$210,000 - \$30,000)
135,000
\((180,000)\)
Bonds payable ( \(\$ 30,000-\$ 6,000\) ) Goodwill
Investment in Tremor account
(24,000)
300,000
\(\$ 1,821,000\)

\section*{Solution P2-6}

1 Income from Sap
Investment in Sap July 1, 2011 at cost \$96,000
Book value acquired ( \(\$ 130,000 \times 60 \%\) )
78,000
Excess cost over book value \(\quad \underline{\underline{\$ 18,000}}\)
Pal's share of Sap's income for 2011
\((\$ 20,000 \times 1 / 2\) year \(\times 60 \%) \quad \$ 6,000\)
Less: Excess Depreciation ( \(\$ 18,000 / 10\) years \(\times 1 / 2\) year) \(\quad 900\)
Income from Sap for 2011
\(\$ \quad 5,100\)
2 Investment balance December 31, 2011
Investment cost July \(1 \quad \$ 96,000\)
Add: Income from Sap
Less: Dividends (\$12,000 \(\times 60 \%\) )
Investment in Sap December 31
5,100
\((7,200)\)
\(\$ 93,900\)

\section*{Solution P2-7}

\section*{Dil Corporation}

Partial Income Statement for the year ended December 31, 2013

Investment income
Income from Lar (equity basis)
Income before extraordinary item \(\quad 90,000\)
Extraordinary gain
Share of Lar's operating loss carryforward
Net income
60,000
\$150,000

\section*{Solution P2-8}

Preliminary computations
Investment cost of \(90 \%\) interest in Jen \(\$ 1,980,000\)

Book value acquired (\$2,525,000 + \$125,000) x 90\%
\((2,385,000)\)
Excess book value over cost \(\quad \underline{\underline{\$(405,000)}}\)
Excess allocated
Overvalued plant assets \((\$ 500,000 \times 90 \%) \quad \$(450,000)\)
Undervalued inventories (\$50,000 x 90\%) Excess book value over cost

45,000

Investment income for 2011
Share of reported income ( \(\$ 250,000 \times 1 / 2\) year \(\times 90 \%\) )
\(\$ 112,500\)
Add: Depreciation on overvalued plant assets ( (\$500,000 x 90\%) / 9 years) \(\times 1 / 2\) year Less: 90\% of Undervaluation allocated to inventories Income from Jen-2011

2 Investment balance at December 31, 2012 Underlying book value of \(90 \%\) interest in Jen (Jen's December 31, 2012 equity of \(\$ 2,700,000 \times 90 \%\) ) \(\$ 2,430,000\) Less: Unamortized overvaluation of plant assets ( \(\$ 50,000\) per year \(\times 71 / 2\) years) Investment balance December 31, 2012
\(\frac{(375,000)}{\$ 2,055,000}\)

3 Journal entries to account for investment in 2013 Cash (or Dividends receivable) 135,000 Investment in Jen 135,000 To record receipt of dividends (\$150,000×90\%). Investment in Jen 230,000 Income from Jen 230,000 To record income from Jen computed as follows: Laura's share of Jen's reported net income ( \(\$ 200,000 \times 90 \%\) ) plus \(\$ 50,000\) amortization of overvalued plant assets.

Check: Investment balance December 31, 2012 of \(\$ 2,055,000+\$ 230,000\) income from Jen - \$135,000 dividends = \$2,150,000 balance December 31, 2013

Alternatively, Jen's underlying equity (\$2,000,000 paid-in capital + \(\$ 750,000\) retained earnings) \(\times 90 \%\) interest \(-\$ 325,000\) unamortized excess allocated to plant assets \(=\underline{\underline{\$ 2,150,000}}\) balance December 31, 2013.

\section*{Solution P2-9}

1 Market price of \(\$ 24\) for Tricia's shares
Cost of investment in Lisa
(40,000 shares \(\times \$ 24\) ) The \(\$ 80,000\) direct costs must be \(\$ 960,000\) expensed. The direct costs of issuing shares of stock should reduce Additional paid-in capital.
Book value acquired \((\$ 2,000,000\) net assets \(\times 40 \%) \quad 800,000\)
Excess cost over book value \$160,000
Allocation of excess
\begin{tabular}{|c|c|c|}
\hline Fair Value- & Percent & \\
\hline Book Value & Acquired & Allocation \\
\hline \$ 200,000 & 40\% & \$ 80,000 \\
\hline 400,000 & 40\% & 160,000 \\
\hline \((400,000)\) & 40\% & \((160,000)\) \\
\hline 200,000 & 40\% & 80,000 \\
\hline assets & & 160,000 \\
\hline & & 0 \\
\hline & & \$ 160,000 \\
\hline
\end{tabular}

2 Market price of \(\$ 16\) for Tricia's shares
Cost of investment in Lisa
(40,000 shares \(\times \$ 16\) ) Other direct costs are \(\$ 0\)
\$ 640,000
Direct costs of issuing shares of stock should reduce
Additional Paid-in Capital.
Book value acquired ( \(\$ 2,000,000\) net assets \(\times 40 \%\) ) Excess book value over cost

800,000
\$(160,000)

Excess allocated to
Fair Value - Percent
Inventories
Land
\begin{tabular}{|c|c|c|}
\hline Book Value & Acquired & Allocation \\
\hline \$200,000 & 40\% & \$ 80,000 \\
\hline 400,000 & 40\% & 160,000 \\
\hline \((400,000)\) & 40\% & (160,000) \\
\hline 200,000 & 40\% & 80,000 \\
\hline & & \((320,000)\) \\
\hline
\end{tabular}
\begin{tabular}{lccc} 
Equipment-net & 200,000 & \(40 \%\) & 80,000 \\
Bargain purchase
\end{tabular}\(\quad\)\begin{tabular}{l}
\((320,000)\)
\end{tabular}
gain
\(\$(160,000)\)

\section*{Solution P2-10}

1 Income from Prima-2011
Fred's share of Prima's income for 2011
\(\$ 40,000 \times 1 / 2\) year \(\times 15 \% \quad \$ 3,000\)

2 Investment in Prima balance December 31, 2011
Investment in Prima at cost \$48,750
Add: Income from Prima
3,000
Less: Dividends from Prima November 1 ( \(\$ 15,000 \times 15 \%\) )
Investment in Prima balance December 31
\((2,250)\)
\(\$ 49,500\)
3 Income from Prima-2012
Fred's share of Prima's income for 2012:
\begin{tabular}{llr}
\(\$ 60,000\) income \(\times 15 \%\) interest \(\times 1\) year & \(\$ 9,000\) \\
\(\$ 60,000\) income \(\times 30 \%\) interest \(\times 1\) year & 18,000 \\
\(\$ 60,000\) income \(\times 45 \%\) interest \(\times 1 / 4\) year & 6,750 \\
Fred's share of Prima's income for 2012 & \(\$ 33,750\)
\end{tabular}

4 Investment in Prima December 31, 2012
Investment balance December 31, 2011 (from 2) \$49,500
Add: Additional investments (\$99,000 + \$162,000) 261,000
Add: Income for 2012 (from 3) 33,750
Less: Dividends for \(2012(\$ 15,000 \times 45 \%)+(\$ 15,000 \times 90 \%)\)
Investment in Prima balance at December 31
\((20,250)\)

Alternative solution
Investment cost (\$48,750 + \$99,000 + \$162,000) \$309,750
Add: Share of reported income
\(2011-\$ 40,000 \times 1 / 2\) year \(\times 15 \%\) \$ 3,000
\(2012-\$ 60,000 \times 1\) year \(\times 45 \% \quad 27,000\)
\(2012-\$ 60,000 \times 1 / 4\) year \(\times 45 \% \quad 6,750 \quad 36,750\)
Less: Dividends
\(2011-\$ 15,000 \times 15 \%\) \$ 2,250
\(2012-\$ 15,000 \times 45 \% \quad 6,750\)
\(2012-\$ 15,000 \times 90 \%\)
\(\frac{13,500}{(22,500)}\)
tment in Prima
Investment in Prima
\[
\begin{aligned}
& \text { 27,000 } \\
& \text { 6,750 36,750 } \\
& \text { \$ 2,250 } \\
& 13,500 \quad \frac{(22,500)}{\underline{\$ 324,000}}
\end{aligned}
\]

Note: Since Fred's investment in Prima consisted of 9,000 shares (a \(45 \%\) interest) on January 1, 2012, Fred correctly used the equity method of accounting for the 15\% investment interest held during 2011. The alternative of reporting income for 2011 on a fair value/cost basis and recording a prior period adjustment for 2012 is not appropriate in view of the overwhelming evidence of an ability to exercise significant influence by the time 2011 income is recorded.

\section*{Solution P2-11}

Income from Sue
\begin{tabular}{|c|c|c|c|c|c|}
\hline & 2011 & 2012 & 2013 & 2014 & Total \\
\hline As reported & \$40,000 & \$32,000 & \$52,000 & \$48,000 & \$172,000 \\
\hline Correct amounts & 19,000 \({ }^{\text {a }}\) & \(30,000^{\text {b }}\) & 50,000 \({ }^{\text {c }}\) & 46,000 \({ }^{\text {d }}\) & 145,000 \\
\hline Overstatement & \$21,000 & \$ 2,000 & \$ 2,000 & \$2,000 & \$ 27,000 \\
\hline \multicolumn{6}{|l|}{\({ }^{\text {a }}(\$ 100,000 \times 1 / 2\) year \(\times 40 \%)-(\$ 20,000 / 10 \times 1 / 2\) year \()=19,000\)} \\
\hline \multicolumn{6}{|l|}{\({ }^{\text {b }}(\$ 80,000 \times 40 \%)-(\$ 20,000 / 10)=30,000\)} \\
\hline \multicolumn{6}{|l|}{\({ }^{c}(\$ 130,000 \times 40 \%)-(\$ 20,000 / 10)=50,000\)} \\
\hline \multicolumn{6}{|l|}{\({ }^{d}(\$ 120,000 \times 40 \%)-(\$ 20,000 / 10)=46,000\)} \\
\hline
\end{tabular}

1 Investment in Sue balance December 31, 2014
Investment in Sue per books December 31 \$400,000
Less: Overstatement
Correct investment in Sue balance December \(31 \quad \$ 3 \overline{73,000}\)
Check
Underlying equity in Sue \((\$ 900,000 \times 40 \%) \quad \$ 360,000\)
Add: Building (\$20,000 - \$7,000) 13,000
Investment balance
\(\$\)
2 Correcting entry (before closing for 2014)
\begin{tabular}{lr} 
Retained earnings & 25,000 \\
Investment income \\
Investment in Sue & 2,000
\end{tabular}

\section*{Solution P2-12}

1 Schedule to allocate excess cost over book value
Investment cost (14,000 shares \(\times \$ 13\) ) \$10,000 direct costs \$182,000
must be expensed.
Book value acquired \(\$ 190,000 \times 70 \% \quad 133,000\)
Excess cost over book value \(\$ 49,000\)
Excess allocated

Inventories
Land
\begin{tabular}{|c|c|c|c|}
\hline Fair Value - & Book Value \(\times\) & Acquired \(=\) & Allocation \\
\hline \$ 50,000 & \$60,000 & 70\% & \$ (7,000) \\
\hline 50,000 & 30,000 & 70\% & 14,000 \\
\hline 135,000 & 95,000 & 70\% & 28,000 \\
\hline & & & 14,000 \\
\hline er book value & & & \$ 49,000 \\
\hline
\end{tabular}

2 Investment income from Jojo
Share of Jojo's reported income \(\$ 60,000 \times 70 \%\) \$2,000
Add: Overvalued inventory items 7,000
Less: Depreciation on undervalued equipment (\$28,000/4 years) \(\times 3 / 4\) year
Investment income from Jojo
\begin{tabular}{r}
\((5,250)\) \\
\(\$ 43,750\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline Investment cost & \$182,000 \\
\hline Add: Income from Jojo & 43,750 \\
\hline Less: Dividends received (14,000 shares \(\times\) \$2) & \((28,000)\) \\
\hline Investment in Jojo balance December 31 & \$197,750 \\
\hline \multicolumn{2}{|l|}{Check} \\
\hline Underlying equity at December 31, 2011 (\$210,000 \(\times 70 \%\) * & \$147,000 \\
\hline \multicolumn{2}{|l|}{Add: Unamortized excess of cost over book value} \\
\hline Land & 14,000 \\
\hline Equipment & 22,750 \\
\hline Goodwill & 14,000 \\
\hline Investment balance & \$197,750 \\
\hline
\end{tabular}
* \(\$ 100,000(\mathrm{C} / \mathrm{S})+\$ 70,000(\mathrm{R} / \mathrm{E})+\$ 80,000\) (current earnings) \(-\$ 40,000\) (Dividends) \(=\$ 210,000\)```

