## 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 gain/loss or 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.

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, 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. 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 and 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 the 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. The first step requires a comparison of the carrying value and fair value of all the net assets at the business reporting level. If the fair value exceeds the carrying value, goodwill is not impaired and no further tests are needed. If the carrying value exceeds the fair value, then we proceed to step two. In step two, we calculate the implied value of goodwill. Any excess measured fair value over the net identifiable assets is the implied fair value of goodwill. The company then compares the goodwill's implied fair value estimate to the carrying value of goodwill to determine if there has been an impairment during the period.

14 Yes. 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 impairments for equity method investments as a whole, but perform no separate goodwill impairment tests.

## SOLUTIONS TO EXERCISES

## Solution E2-1

| 1 | d |
| :--- | :--- |
| 2 | c |
| 3 | c |
| $\mathbf{4}$ | d |
| $\mathbf{5}$ | b |

Chapter 2
Solution E2-2 [AICPA adapted]

```
d d
2 b
| 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 < 15%) >
    $40,000] .
5 c
    Dividends received from Zef for the two years were $10,500 ($70,000 x
    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.
C
    [$100,000 + $300,000 + ($600,000 < 10%)]
7 a
d d
    Investment balance January 2 $250,000
    Add: Income from Pod ($100,000 x 30%) 30,000
    Investment in Pod December 31 $280,000
```


## Solution E2-3

1 Bow's percentage ownership in Tre
Bow's 10,000 shares $/(30,000+10,000)$ shares $=\underline{\underline{25 \%}}$
2 Goodwill
Investment cost $\$ 250,000$
Book value $(\$ 500,000+\$ 250,000) \times 25 \%$ (187,500)
Goodwill
$\$ 62,500$

## 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 (\$400,000×30\%) \$ 120,000
Less: Excess allocated to inventory
$(50,000)$
Less: Depreciation of excess allocated to building (\$100,000/4 years)
Income from Oak
2 Investment account balance at December 31
Cost of investment in Oak
Add: Income from Oak
Less: Dividends (\$100,000 x 30\%)
Investment in Oak December 31
\$1,000,000
45,000
$(30,000)$
\$1,015,000
Alternative solution
Underlying equity in Oak at January 1 (\$750,000/.3)
$\$ 2,500,000$
Income less dividends
Underlying equity December 31
Interest owned
Book value of interest owned December 31
Add: Unamortized excess
Investment in Oak December 31
$(25,000)$
$\$ \quad 45,000$
$\frac{300,000}{2,800,000}$
30\% 840,000 175,000
$\$ \overline{\$ 1,015,000}$

## Solution E2-6

Journal entry on Man's books
Investment in Nib (\$1,200,000 x 40\%) 480,000
Loss from discontinued operations 80,000 Income from Nib

560,000
To recognize income from $40 \%$ investment in Nib.

## Solution E2-7

1 a

| Dividends received from Ben (\$120,000×15\%) <br> 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 incomeInvestment in Ben December 31, 2012 |  | $(3,000)$ |
|  | \$ | 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) $\times 25 \%$ | $\underline{1,350,000}$ |
| Excess fair value over book value(goodwill) | $\underline{\$ 10,000}$ |

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
\$ $80,00 \%$

## Solution E2-8

```
Preliminary computations
Cost of 40% interest January 1, 2011 $4,800,000
Book value acquired ($8,000,000 < 40%)
    (3,200,000)
    Excess fair value over book value
    $1,600,000
Excess allocated to
Inventories $200,000 < 40% $ 80,000
Equipment $400,000 < 40%
Goodwill for the remainder
    Excess fair value over book value
Ray's underlying equity in Ton ($11,000,000 < 40%)
Add: Goodwill
    Investment balance December 31, }201
    000
        160,000
    1,360,000
    $1,600,000
    1,360,000
Alternative computation
Ray's share of the change in Ton's stockholders'
    equity ($3,000,000 < 40%)
    $1,200,000
Less: Excess allocated to inventories ($80,000 < 100%)
        (80,000)
Less: Excess allocated to equipment ($160,000/4 years }\times4\mathrm{ years)
Increase in investment account
        (160,000)
        960,000
Original investment
Investment balance December 31, 2014
4,800,000
    $5,760,000
```


## 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 must be expensed when incurred. They are not a part of the cost of the investment.
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

$$
\frac{(51,000)}{\$ 1,260,000}
$$

## 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

|  | December 31 | October 1 |
| :--- | :---: | :---: |
| Sales | $\$ 1,200,000$ | $\$ 900,000$ |
| Expenses | $\underline{800,000}$ | 600,000 |
| Net Income | $\underline{\underline{\$ 400,000}}$ | $\underline{\underline{\$ 300,000}}$ |

## Solution E2-11

```
Preliminary computations
Goodwill from first 10% interest:
Cost of investment
Book value acquired ($210,000 x 10%)
    Excess fair value over book value
Goodwill from second 10% interest:
Cost of investment
Book value acquired ($250,000 < 10%)
Excess fair value over book value
1. Correcting entry as of January 2, 2012 to
        convert investment to the equity basis
        Accumulated gain/loss on stock available for
        Sale
            Valuation allowance to record Fed at fair
            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
        25,000
                            $ 10,000
    (6,000)
    $ 4,000
2 Income from Fed for }201
    Income from Fed on original 10% investment
    Income from Fed on second 10% investment
    Income from Fed
```

\$ 5,000

5,000
\$ 10,000

## Chapter 2

## 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 $630,000
Cost of 12,000 shares to Riv
Book value of 12,000 shares acquired
    $630,000 x 12,000/36,000 shares
Excess fair value over book value
Excess is allocated as follows
    Buildings $60,000 * 12,000/36,000 shares $ 20,000
    Goodwill
Excess fair value over book value
Journal entries on Riv's books during 2012
January 1
Investment in Tal 250,000
    Cash
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)
                Depreciation on building ($20,000/10 years)
                Income from Tal
```

(2,000)

## Solution E2-13

1 Journal entries on BIP's books for 2012

```
    Cash 120,000
            Investment in Cow (30%)
To record dividends received from Cow
    ($400,000 < 30%).
    Investment in Cow (30%) 240,000
    Extraordinary loss (from Cow) 24,000
            Income from Cow 264,000
    To record investment income from Cow computed
    as follows:
    Share of income before extraordinary item
        $680,000 < 30%
    Add: Excess fair value over cost realized
        in 2012
        $200,000 < 30%
        Income from Cow before extraordinary
            loss
                            $ 204,000
        $ 60,000
```

2 Investment in Cow balance December 31, 2012
Investment cost
\$ 780,000
Add: Income from Cow after extraordinary loss
Less: Dividends received from Cow
Investment in Cow December 31
240,000
(120,000)
Check: Investment balance is equal to underlying book value
$(\$ 2,800,000+\$ 600,000-\$ 400,000) \times 30 \%=\$ 900,000$
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
```

$\$ 4,000,000$
$\frac{2,800,000}{1,200,000}$
264,000
1,464,000
24,000
\$1,440,000

## Chapter 2

## Solution E2-14

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

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

Solution E2-15

Since the total fair value of Sel has declined by $\$ 30,000$ while the fair value of the net identifiable assets is unchanged, the $\$ 30,000$ decline is the impairment in goodwill for the period. 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.

## SOLUTIONS TO PROBLEMS

## Solution P2-1

1 Goodwill
Cost of investment in Tel on April $1 \quad \$ 686,000$
Book value acquired:
Net assets at December $31 \quad \$ 2,000,000$
Add: Income for $1 / 4$ year ( $\$ 320,000 \times 25 \%$ ) 80,000
Less: Dividends paid March 15 (40,000)
Book value at April 1
$2,040,000$
Interest acquired
$30 \%$
Goodwill from investment in Tel
$\begin{array}{r}612,000 \\ \$ 74,000 \\ \hline\end{array}$
2 Income from Tel for 2011
Equity in income before extraordinary item $(\$ 240,000 \times 3 / 4$ year $\times 30 \%)$
\$ 54,000
3 Investment in Tel at December 31, 2011
Investment cost April 1 686,000
Add: Income from Tel plus extraordinary gain
Less: Dividends (\$40,000×3 quarters) $\times 30 \%$
Investment in Tel December 31
4 Equity in Tel's net assets at December 31, 2011
Tel's stockholders' equity January 1
\$2,000,000
Add: Net income
Less: Dividends
Tel's stockholders' equity December 31
Investment interest
Equity in Tel's net assets
320,000
$\frac{(160,000)}{2,160,000}$
2,160,000
\$ 648,000
5 Extraordinary gain for 2011 to be reported by Rit Tel's extraordinary gain $\times 30 \%$
$\$ \quad 24,000$

## Solution P2-2

1 Cost method

| Investment in Sel July 1, 2011 (at cost) | $\$ 220,000$ |
| :--- | :--- |
| Dividends charged to investment | $(8,800)$ |
| Investment in Sel balance at December 31, | $\frac{\$ 211,200}{}$ | 2011

July 1, 2011
Investment in Sel 220,000
Cash 220,000
To record initial investment for $80 \%$ interest.

November 1, 2011
Cash 12,800
Dividend income
12,800
To record receipt of dividends (\$16,000 $\times 80 \%$ ).
December 31, 2011
Dividend income 8,800
Investment in Sel 8,800
To reduce investment for dividends in excess of
earnings (\$16,000 dividends - \$5,000 earnings) $\times$
$80 \%$.

2 Equity method

Investment in Sel July 1, $2011 \quad \$ 220,000$
Add: Share of reported income
4,000
Deduct: Dividends charged to investment
$(12,800)$
Deduct: Excess Depreciation
Investment in Sel balance at December 31, 2011
$\begin{array}{r}(6,600) \\ \$ 204,600 \\ \hline\end{array}$

July 1, 2011
$\begin{gathered}\text { Investment in Sel } 220,000 \\ \text { Cash }\end{gathered} 220,000$
To record initial investment for $80 \%$ interest
of Sel.
November 1, 2011
Cash 12,800
Investment in Sel 12,800
To record receipt of dividends (\$16,000×80\%).

December 31, 2011
Income from Sel 2,600
Investment in Sel 2,600
To record income from Sel computed as follows:
Share of Sel's income ( $\$ 10,000 \times 1 / 2$ year $\times 80 \%$ )
less excess depreciation ( $\$ 132,000 / 10$ years $\times 1 / 2$ year).

Chapter 2

## Solution P2-3

```
Preliminary computations
Cost of investment in Zel $662,000
Book value acquired ($2,000,000 x 30%) 600,000
    Excess fair value over book value $ 62,000
Excess allocated
Undervalued inventories ($60,000 < 30%) $ 18,000
Overvalued building (-$120,000 x 30%)
Goodwill for the remainder
    Excess fair value over book value
1 Income from Zel
    Share of Zel's reported income ($200,000 < 30%) $ 60,000
    Less: Excess allocated to inventories sold in 2011
    Add: Amortization of excess allocated to overvalued
            building $36,000/10 years
    Income from Zel-2011
2 Investment balance December 31, 2011
    Cost of investment
    Add: Income from Zel
    Less: Share of Zel's dividends ($100,000 x 30%)
    Investment in Zel balance December 31
3 Vat's share of Zel's net assets
    Share of stockholders' equity
    ($2,000,000 + $200,000 income - $100,000 dividends) }\times30% $ $630,000
```


## Solution P2-4

```
Preliminary computations
Investment cost of 40% interest $380,000
Book value acquired [$500,000 + ($100,000 < 1/2 year)] × 40% 220,000
    Excess fair value over book value
    $160,000
Excess allocated
Land $30,000 x 40% $ 12,000
Equipment $50,000 < 40%
        20,000
Remainder to goodwill
    Excess fair value over book value 
July 1, 2011
Investment in Jill 380,000
        Cash
        380,000
To record initial investment for 40% interest in Jill.
November 2011
Cash (other receivables) 20,000
        Investment in Jill
        20,000
To record receipt of dividends ($50,000 x 40%).
December 31, 2011
Investment in Jill 20,000
    Income from Jill 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)
```


## 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 fair value over book value

1,170,000
\$ 510,000

Allocation of excess

## Land

Inventories
Buildings - net
Equipment-net
Fair Value - Percent

Bonds payable

| Book Value | Acquired | Allocation |  |
| :---: | :---: | :---: | :---: |
| \$200,000 | 30\% | \$ | 60,000 |
| 800,000 | 30\% |  | 240,000 |
| 500,000 | 30\% |  | 150,000 |
| ( 700,000 ) | 30\% |  | $(210,000)$ |
| (100,000) | 30\% |  | $(30,000)$ |
|  |  |  | 210,000 |
|  |  |  | 300,000 |
|  |  | \$ | 510,000 |

2 Income from Tremor for 2011
Equity in income ( $\$ 1,200,000 \times 30 \%$ )
Less: Amortization of differentials
Inventories (sold in 2011)
(60,000)
Buildings - net ( $\$ 150,000 / 10$ years)
$(15,000)$
Equipment-net ( $\$ 210,000 / 7$ years)
30,000
Bonds payable ( $\$ 30,000 / 5$ years)
Income from Tremor
3 Investment in Tremor balance December 31, 2011
Investment cost
\$1,680,000
Add: Income from Tremor
Less: Dividends (\$600,000 $\times 30 \%$ )
Investment in Tremor December 31
Check:

```
Underlying equity ($4,500,000 x 30%)
Unamortized excess:
            Land
    Buildings - net ($150,000 - $15,000)
        240,000
        135,000
            Equipment - net ($210,000 - $30,000)
        (180,000)
            Bonds payable ($30,000 - $6,000)
            Goodwill
        Investment in Tremor account
```

321,000
$(180,000)$
$\underline{\underline{\$ 1,821,000}}$
$\$ 1,350,000$
240,000
$(180,000)$
(24,000)
300,000
\$1,821,000

## 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 fair value over book value \$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) 900
Income from Sap for 2011
\$ 5,100
2 Investment balance December 31, 2011
Investment cost July $1 \quad \$ 96,000$
Add: Income from Sap
Less: Dividends (\$12,000×60\%)
Investment in Sap December 31
5,100
$(7,200)$
$\$ 93,900$

## Solution P2-7

## Dil Corporation

Partial Income Statement for the year ended December 31, 2013

Investment income
Income from Lar (equity basis)
Income before extraordinary item
$\frac{\$ 45,000}{45,000}$

Extraordinary gain
Share of Lar's operating loss carryforward Net income

30,000

## Solution P2-8

```
Preliminary computations
Investment cost of 90% interest in Jen $1,980,000
Implied total fair value of Jen ($1,980,000 / 90%) $2,200,000
Book value($2,525,000 + $125,000)
    Excess book value over fair value ($ (450,000)
Excess allocated
Overvalued plant assets $ (500,000)
Undervalued inventories
    Excess book value over fair value
1 Investment income for 2011
    Share of reported income ($250,000 < 1/2 year }\times90%) $ 112,50
    Add: Depreciation on overvalued plant assets
                (($500,000 x 90%) / 9 years) x 1/2 year
        25,000
    Less: 90% of Undervaluation allocated to inventories
    Income from Jen - 2011
2 \text { Investment balance at December 31, } 2 0 1 2
    Underlying book value of 90% interest in Jen
    (Jen's December 31, 2012 equity of $2,700,000 }\times90%\mathrm{ ) $2,430,000
    Less: Unamortized overvaluation of plant assets
        ($50,000 per year < 7 1/2 years)
    Investment balance December 31, }201
        (375,000)
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 < 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,
    2 0 1 3
    Alternatively, Jen's underlying equity ($2,000,000 paid-in capital +
    $750,000 retained earnings) x 90% interest - $325,000 unamortized excess
    allocated to plant assets = $2,150,000 balance December 31, 2013.
```


## 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
expensed.
Book value acquired $(\$ 2,000,000$ net assets $\times 40 \%)$
Excess fair value over book value

Allocation of excess

Inventories
Land


2 Market price of $\$ 16$ for Tricia's shares
Cost of investment in Lisa
$(40,000$ shares $\times \$ 16)$ Other direct costs are $\$ 0 \quad \$ 640,000$
Book value acquired ( $\$ 2,000,000$ net assets $\times 40 \%$ ) Excess book value over fair value

800,000
\$(160,000)

Excess allocated to
Fair Value - Percent

Inventories
Land

| Book Value | Acquired | Allocation |
| :---: | :---: | :---: |
| \$200,000 | 40\% | \$ 80,000 |
| 400,000 | 40\% | 160,000 |
| ( 400,000 ) | 40\% | (160,000) |
| 200,000 | 40\% | 80,000 |

Equipment-net 200,000
$40 \%$
80,000
Bargain purchase
gain
$(320,000)$
$\$(160,000)$

## Solution P2-10

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

2 Investment in Prima balance December 31, 2011
Investment in Prima at cost
$\$ 48,750$
Add: Income from Prima
Less: Dividends from Prima November 1 ( $\$ 15,000 \times 15 \%$ )
Investment in Prima balance December 31
3,000
$(2,250)$
$\$ 49,500$

3 Income from Prima-2012
Fred's share of Prima's income for 2012: $\$ 60,000$ 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

4 Investment in Prima December 31, 2012
Investment balance December 31, 2011 (from 2) $\$ 49,500$
Add: Additional investments (\$99,000 + \$162,000)
Add: Income for 2012 (from 3)
261,000

Less: Dividends for $2012(\$ 15,000 \times 45 \%)+(\$ 15,000 \times 90 \%)$
Investment in Prima balance at December 31
33,750
$\frac{(20,250)}{\$ 324,000}$

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-\$15,000×15\% \$ 2,250
$2012-\$ 15,000 \times 45 \% \quad 6,750$
$2012-\$ 15,000 \times 90 \% \quad \frac{13,500}{\$ 324,000}$
Investment in Prima
\$324,000
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.

## Solution P2-11

Income from Sue

|  | 2011 | 2012 | 2013 | 2014 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| As reported | \$40,000 | \$32,000 | \$52,000 | \$48,000 | \$172,000 |
| Correct amounts | 20,000 ${ }^{\text {a }}$ | $32,000^{\text {b }}$ | 52,000 ${ }^{\text {c }}$ | 48,000 ${ }^{\text {d }}$ | 152,000 |
| Overstatement | \$20,000 | \$ -0- | \$ -0- | \$ -0- | \$ 20,000 |
| ${ }^{\text {a }}$ (\$100,000 $\times 1 / 2$ year $\times 40 \%$ ) |  |  |  |  |  |
| ${ }^{\mathrm{b}}(\$ 80,000 \times 40 \%)$ |  |  |  |  |  |
| ${ }^{\text {c }}(\$ 130,000 \times 40 \%)$ |  |  |  |  |  |
| ${ }^{\mathrm{d}}(\$ 120,000 \times 40 \%)$ |  |  |  |  |  |

1 Investment in Sue balance December 31, 2014
Investment in Sue per books December $31 \quad \$ 400,000$
Less: Overstatement
Correct investment in Sue balance December 31
20,000
$\$$
Check
Underlying equity in Sue $(\$ 900,000 \times 40 \%) \quad \$ 360,000$
Add: Goodwill (\$300,000-(700,000×40\%)) 20,000
Investment balance \$380,000
2 Correcting entry (before closing for 2014)
Retained earnings 20,000
Investment in Sue 20,000
To record investment and retained earnings accounts for prior error.

## 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 fair value over book value \$ 49,000
Excess allocated


2 Investment income from Jojo
Share of Jojo's reported income $\$ 60,000 \times 70 \%$ 42,000
Add: Overvalued inventory items 7,000
Less: Depreciation on undervalued equipment
(\$28,000/4 years) $\times 3 / 4$ year
Investment income from Jojo
$(5,250)$

Investment in Jojo account at December 31, 2011
Investment cost
\$182,000
Add: Income from Jojo
43,750
Less: Dividends received (14,000 shares $\times$ \$2)
Investment in Jojo balance December 31
$(28,000)$

Check
Underlying equity at December 31, 2011 ( $\$ 210,000 * \times 70 \%$ ) $\$ 147,000$
Add: Unamortized excess of cost over book value Land

14,000
Equipment
22,750
Goodwill
14,000
Investment balance
$\overline{\$ 197,750}$

```
* $100,000 (C/S) + $70,000 (R/E) + $80,000 (current earnings)
    -$40,000 (Dividends) = $210,000
```

