

*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 its 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 Pod ( $\$100,000 \times 30\%$ ) | <u>30,000</u>    |
| Investment in Pod December 31                    | <u>\$280,000</u> |

**Solution E2-3**

- 1 *Bow's percentage ownership in Tre*
- Bow's 20,000 shares / (60,000 + 20,000) shares = 25%
- 2 *Goodwill*
- |   |                  |
|---|------------------|
| Investment cost                                       | \$500,000        |
| Book value ( $\$1,000,000 + \$500,000$ ) $\times$ 25% | <u>(375,000)</u> |
| Goodwill  | <u>\$125,000</u> |

**Solution E2-4**

*Income from Med for 2011*

Share of Med's income ( $\$200,000 \times 1/2 \text{ year} \times 30\%$ )	<u>\$ 30,000</u>
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**Solution E2-5****1**      *Income from Oak*

Share of Oak's reported income ( $\$800,000 \times 30\%$ )	\$ 240,000
Less: Excess allocated to inventory	(100,000)
Less: Depreciation of excess allocated to building ( $\$200,000/4$ years)	<u>(50,000)</u>
Income from Oak	<u>\$ 90,000</u>

**2**      *Investment account balance at December 31*

Cost of investment in Oak	\$2,000,000
Add: Income from Oak	90,000
Less: Dividends ( $\$200,000 \times 30\%$ )	<u>(60,000)</u>
Investment in Oak December 31	<u>\$2,030,000</u>

*Alternative solution*

Underlying equity in Oak at January 1 ( $\$1,500,000/.3$ )	\$5,000,000
Income less dividends	<u>600,000</u>
Underlying equity December 31	5,600,000
Interest owned	<u>30%</u>
Book value of interest owned December 31	1,680,000
Add: Unamortized excess	<u>350,000</u>
Investment in Oak December 31	<u>\$2,030,000</u>

**Solution E2-6***Journal entry on Man's books*

Investment in Nib ( $\$600,000 \times 40\%$ )	240,000	
Loss from discontinued operations	40,000	
Income from Nib		280,000

To recognize income from 40% investment in Nib.

**Solution E2-7**

<b>1</b>	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	\$	<u>3,000</u>
	Investment in Ben January 3, 2011	\$	50,000
	Less: Excess dividends received over share of income		(3,000)
	Investment in Ben December 31, 2012	\$	<u>47,000</u>
<b>2</b>	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) $\times 25\%$		<u>1,350,000</u>
	Excess cost over book value (goodwill)	\$	<u>50,000</u>
<b>3</b>	d		
	The investment in Moe balance remains at the original cost.		
<b>4</b>	c		
	Income before extraordinary item	\$	200,000
	Percent owned		40%
	Income from Kaz Products	\$	<u>80,000</u>

**Solution E2-8***Preliminary computations*

Cost of 40% interest January 1, 2011	\$2,400,000
Book value acquired ( $\$4,000,000 \times 40\%$ )	<u>(1,600,000)</u>
Excess cost over book value	<u>\$ 800,000</u>

*Excess allocated to*

Inventories $\$100,000 \times 40\%$	\$ 40,000
Equipment $\$200,000 \times 40\%$	80,000
Goodwill for the remainder	680,000
Excess cost over book value	<u>\$ 800,000</u>

Ray's underlying equity in Ton ( $\$5,500,000 \times 40\%$ )	\$2,200,000
Add: Goodwill	680,000
Investment balance December 31, 2016	<u>\$2,880,000</u>

*Alternative computation*

Ray's share of the change in Ton's stockholders' equity ( $\$1,500,000 \times 40\%$ )	\$ 600,000
Less: Excess allocated to inventories ( $\$40,000 \times 100\%$ )	(40,000)
Less: Excess allocated to equipment ( $\$80,000/4$ years $\times 4$ years)	<u>(80,000)</u>
Increase in investment account	480,000
Original investment	2,400,000
Investment balance December 31, 2016	<u>\$2,880,000</u>

**Solution E2-9**

<b>1</b>	<i>Income from Run</i>	
	Share of income to common (\$400,000 - \$30,000 preferred dividends) × 30%	\$ 111,000
<b>2</b>	<i>Investment in Run December 31, 2012</i>	
	NOTE: The \$50,000 direct costs of acquiring the investment are a part of the cost of the investment. They are charged against additional paid-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) × 30%	(51,000)
	Investment in Run December 31, 2012	<u>\$1,260,000</u>

**Solution E2-10**

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

**Solution E2-11***Preliminary computations*

Goodwill from first 10% interest:

Cost of investment

\$ 25,000

Book value acquired ( $\$210,000 \times 10\%$ )(21,000)

Excess cost over book value

\$ 4,000

Goodwill from second 10% interest:

Cost of investment

\$ 50,000

Book value acquired ( $\$250,000 \times 10\%$ )(25,000)

Excess cost over book value

\$ 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
- Allowance to adjust available-for-sale Securities to market value
- To remove the valuation allowance entered on December 31, 2011 under the fair value method for an available for sale security.
- Investment in Fed
- Retained earnings
- 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

4,000

4,000

\$ 10,000

(6,000)\$ 4,000**2** *Income from Fed for 2012*

Income from Fed on original 10% investment

\$ 5,000

Income from Fed on second 10% investment

5,000

Income from Fed

\$ 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	<u>250,000</u>
Stockholders' equity after issuance on January 1, 2012	<u>\$630,000</u>

Cost of 12,000 shares to Riv	\$250,000
Book value of 12,000 shares acquired	
\$630,000 × 12,000/36,000 shares	<u>210,000</u>
Excess cost over book value	<u>\$ 40,000</u>

*Excess is allocated as follows*

Buildings \$60,000 × 12,000/36,000 shares	\$ 20,000
Goodwill	<u>20,000</u>
Excess cost over book value	<u>\$ 40,000</u>

*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 × 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 × 1/3)		\$ 40,000
Depreciation on building (\$20,000/10 years)		<u>(2,000)</u>
Income from Tal		<u>\$ 38,000</u>



**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		132,000
To record investment income from Cow computed as follows:		
Share of income before extraordinary item		
\$340,000 × 30%		\$ 102,000
Add: Excess fair value over cost realized in 2012		
\$100,000 × 30%		30,000
Income from Cow before extraordinary loss		<u>\$ 132,000</u>

**2**      *Investment in Cow balance December 31, 2012*

Investment cost	\$ 390,000
Add: Income from Cow after extraordinary loss	120,000
Less: Dividends received from Cow	(60,000)
Investment in Cow December 31	<u>\$450,000</u>

Check: Investment balance is equal to underlying book value  
 (\$1,400,000 + \$300,000 - \$200,000) × 30% = \$450,000

**3****BIP Corporation**

## Income Statement

for the year ended December 31, 2012

Sales	\$2,000,000
Expenses	<u>1,400,000</u>
Operating income	600,000
Income from Cow (before extraordinary item)	<u>132,000</u>
Income before extraordinary item	732,000
Extraordinary loss (net of tax effect)	<u>12,000</u>
Net income	<u>\$ 720,000</u>

**Solution E2-14****1**      *Income from Wat for 2012*

Equity in income (\$108,000 - \$8,000 preferred) × 40%	\$ 40,000
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**2**      *Investment in Wat December 31, 2012*

Cost of investment in Wat common	\$ 290,000
Add: Income from Wat	40,000
Less: Dividends * (\$40,000 × 40%)	(16,000)
Investment in Wat December 31	<u>\$ 314,000</u>

\* \$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)	<u>\$250,000</u>
Implied fair value of goodwill	<u>\$70,000</u>

Goodwill carrying value	\$100,000
Goodwill implied fair value	<u>\$70,000</u>
Impairment loss	<u>\$30,000</u>

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	<u>30,000</u>
Impairment loss	<u>\$5,000</u>

**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	<u>(80,000)</u>	
Book value at April 1	4,040,000	
Interest acquired	<u>30%</u>	<u>1,212,000</u>
Goodwill from investment in Tel		<u>\$ 160,000</u>

**2 Income from Tel for 2011**

Equity in income before extraordinary item		
( $\$480,000 \times 3/4 \text{ year} \times 30\%$ )		\$ 108,000
Extraordinary gain from Tel ( $\$160,000 \times 30\%$ )		48,000

**3 Investment in Tel at December 31, 2011**

Investment cost April 1	\$1,372,000
Add: Income from Tel plus extraordinary gain	156,000
Less: Dividends ( $\$80,000 \times 3 \text{ quarters}$ ) $\times 30\%$	<u>(72,000)</u>
Investment in Tel December 31	<u>\$1,456,000</u>

**4 Equity in Tel's net assets at December 31, 2011**

Tel's stockholders' equity January 1	\$4,000,000
Add: Net income	640,000
Less: Dividends	<u>(320,000)</u>
Tel's stockholders' equity December 31	4,320,000
Investment interest	<u>30%</u>
Equity in Tel's net assets	<u>\$1,296,000</u>

**5 Extraordinary gain for 2011 to be reported by Rit**

Tel's extraordinary gain $\times 30\%$	<u>\$ 48,000</u>
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**Solution P2-2**

**1**      *Cost method*

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

*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 × 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		(6,400)
Deduct: Excess Depreciation		(6,600)
Investment in Sel balance at December 31, 2011		<u>\$211,000</u>

*July 1, 2011*

Investment in Sel	220,000	
Cash		220,000

To record initial investment for 80% interest of Sel.

*November 1, 2011*

Cash	6,400	
Investment in Sel		6,400

To record receipt of dividends (\$8,000 × 80%).

*December 31, 2011*

Loss from Sel (Income from Sel)	2,600	
Investment in Sel		2,600

To record loss from Sel computed as follows:

    Share of Sel's income (\$10,000 × 1/2 year × 80%)  
    less excess depreciation (\$132,000/10 years × 1/2 year).

**Solution P2-3***Preliminary computations*

Cost of investment in Zel	\$331,000
Book value acquired ( $\$1,000,000 \times 30\%$ )	<u>300,000</u>
Excess cost over book value	<u>\$ 31,000</u>

*Excess allocated*

Undervalued inventories ( $\$30,000 \times 30\%$ )	\$ 9,000
Overvalued building ( $-\$60,000 \times 30\%$ )	(18,000)
Goodwill for the remainder	<u>40,000</u>
Excess cost over book value	<u>\$ 31,000</u>

**1** *Income from Zel*

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

**2** *Investment balance December 31, 2011*

Cost of investment	\$331,000
Add: Income from Zel	22,800
Less: Share of Zel's dividends ( $\$50,000 \times 30\%$ )	<u>(15,000)</u>
Investment in Zel balance December 31	<u>\$338,800</u>

**3** *Vat's share of Zel's net assets*

Share of stockholders' equity	
$(\$1,000,000 + \$100,000 \text{ income} - \$50,000 \text{ dividends}) \times 30\%$	<u>\$315,000</u>

**Solution P2-4***Preliminary computations*

Investment cost of 40% interest	\$380,000
Book value acquired $[\$500,000 + (\$100,000 \times 1/2 \text{ year})] \times 40\%$	<u>220,000</u>
Excess cost over book value	<u>\$160,000</u>

*Excess allocated*

Land $\$30,000 \times 40\%$	\$ 12,000
Equipment $\$50,000 \times 40\%$	20,000
Remainder to goodwill	<u>128,000</u>
Excess cost over book value	<u>\$160,000</u>

*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 $(\$50,000 \times 40\%)$ .		

*December 31, 2011*

Investment in Jill	20,000	
Income from Jill		20,000
To record share of Jill's income $(\$100,000 \times 1/2 \text{ year} \times 40\%)$ .		

*December 31, 2011*

Income from Jill	2,000	
Investment in Jill		2,000
To record depreciation on excess allocated to Undervalued equipment $(\$20,000/5 \text{ years} \times 1/2 \text{ year})$ .		

**Solution P2-5**

<b>1</b>	<i>Schedule to allocate fair value—book value differentials</i>	
	Investment cost January 1	\$1,680,000
	Book value acquired (\$3,900,000 net assets × 30%)	<u>1,170,000</u>
	Excess cost over book value	<u>\$ 510,000</u>

*Allocation of excess*

	Fair Value— Book Value	Percent Acquired	Allocation
Inventories	\$200,000	30%	\$ 60,000
Land	800,000	30%	240,000
Buildings—net	500,000	30%	150,000
Equipment—net	(700,000)	30%	(210,000)
Bonds payable	(100,000)	30%	<u>(30,000)</u>
Assigned to identifiable net assets			210,000
Remainder to goodwill			300,000
Excess cost over book value			<u>\$ 510,000</u>

<b>2</b>	<i>Income from Tremor for 2011</i>	
	Equity in income (\$1,200,000 × 30%)	\$ 360,000
	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)	<u>6,000</u>
	Income from Tremor	<u>\$ 321,000</u>

<b>3</b>	<i>Investment in Tremor balance December 31, 2011</i>	
	Investment cost	\$1,680,000
	Add: Income from Tremor	321,000
	Less: Dividends (\$600,000 × 30%)	<u>(180,000)</u>
	Investment in Tremor December 31	<u>\$1,821,000</u>

*Check:*

Underlying equity (\$4,500,000 × 30%)	\$1,350,000
Unamortized excess:	
Land	240,000
Buildings—net (\$150,000 - \$15,000)	135,000
Equipment—net (\$210,000 - \$30,000)	(180,000)
Bonds payable (\$30,000 - \$6,000)	(24,000)
Goodwill	<u>300,000</u>
Investment in Tremor account	<u>\$1,821,000</u>

**Solution P2-6**

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

**Solution P2-7**

**Dil Corporation**  
 Partial Income Statement  
 for the year ended December 31, 2013

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

**Solution P2-8***Preliminary computations*

Investment cost of 90% interest in Jen	<u>\$1,980,000</u>
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Book value acquired (\$2,525,000 + \$125,000) × 90%	(2,385,000)
Excess book value over cost	<u>\$ (405,000)</u>

*Excess allocated*

Overvalued plant assets (\$500,000 × 90%)	\$ (450,000)
Undervalued inventories (\$50,000 × 90%)	45,000
Excess book value over cost	<u>\$ (405,000)</u>

**1**     *Investment income for 2011*

Share of reported income (\$250,000 × 1/2 year × 90%)	\$ 112,500
Add: Depreciation on overvalued plant assets	
((\$500,000 × 90%) / 9 years) × 1/2 year	25,000
Less: 90% of Undervaluation allocated to inventories	(45,000)
Income from Jen—2011	<u>\$ 92,500</u>

**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 × 90%)	\$2,430,000
Less: Unamortized overvaluation of plant assets	
(\$50,000 per year × 7 1/2 years)	(375,000)
Investment balance December 31, 2012	<u>\$2,055,000</u>

**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, 2013

Alternatively, Jen's underlying equity (\$2,000,000 paid-in capital + \$750,000 retained earnings) × 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 × \$24) The \$80,000 direct costs must be expensed. The direct costs of issuing shares of stock should reduce Additional paid-in capital.

Book value acquired (\$2,000,000 net assets × 40%)	800,000
Excess cost over book value	<u>\$ 160,000</u>

*Allocation of excess*

	Fair Value — Book Value	Percent Acquired	Allocation
Inventories	\$ 200,000	40%	\$ 80,000
Land	400,000	40%	160,000
Buildings — net	(400,000)	40%	(160,000)
Equipment — net	200,000	40%	80,000
Assigned to identifiable net assets			160,000
Remainder assigned to goodwill			0
Total allocated			<u>\$ 160,000</u>

**2**      *Market price of \$16 for Tricia's shares*

Cost of investment in Lisa

(40,000 shares × \$16) Other direct costs are \$0  
Direct costs of issuing shares of stock should reduce Additional Paid-in Capital.

Book value acquired (\$2,000,000 net assets × 40%)	800,000
Excess book value over cost	<u>\$ (160,000)</u>

*Excess allocated to*

	Fair Value — Book Value	Percent Acquired	Allocation
Inventories	\$200,000	40%	\$ 80,000
Land	400,000	40%	160,000
Buildings — net	(400,000)	40%	(160,000)
Equipment — net	200,000	40%	80,000
Bargain purchase gain			<u>(320,000)</u>
			<u>\$ (160,000)</u>

**Solution P2-10**

<b>1</b>	<i>Income from Prima—2011</i> Fred's share of Prima's income for 2011 $\$40,000 \times 1/2 \text{ year} \times 15\%$	<u>\$ 3,000</u>
<b>2</b>	<i>Investment in Prima balance December 31, 2011</i> Investment in Prima at cost Add: Income from Prima Less: Dividends from Prima November 1 ( $\$15,000 \times 15\%$ ) Investment in Prima balance December 31	<u>\$ 48,750</u> 3,000 <u>(2,250)</u> <u>\$ 49,500</u>
<b>3</b>	<i>Income from Prima—2012</i> Fred's share of Prima's income for 2012: $\$60,000 \text{ income} \times 15\% \text{ interest} \times 1 \text{ year}$ $\$60,000 \text{ income} \times 30\% \text{ interest} \times 1 \text{ year}$ $\$60,000 \text{ income} \times 45\% \text{ interest} \times 1/4 \text{ year}$ Fred's share of Prima's income for 2012	<u>\$ 9,000</u> 18,000 6,750 <u>\$ 33,750</u>
<b>4</b>	<i>Investment in Prima December 31, 2012</i> Investment balance December 31, 2011 (from 2) Add: Additional investments ( $\$99,000 + \$162,000$ ) Add: Income for 2012 (from 3) Less: Dividends for 2012 ( $\$15,000 \times 45\%$ ) + ( $\$15,000 \times 90\%$ ) Investment in Prima balance at December 31	<u>\$ 49,500</u> 261,000 33,750 <u>(20,250)</u> <u>\$324,000</u>
<i>Alternative solution</i>		
	Investment cost ( $\$48,750 + \$99,000 + \$162,000$ )	\$309,750
	Add: Share of reported income	
	2011— $\$40,000 \times 1/2 \text{ year} \times 15\%$	\$ 3,000
	2012— $\$60,000 \times 1 \text{ year} \times 45\%$	27,000
	2012— $\$60,000 \times 1/4 \text{ year} \times 45\%$	<u>6,750</u>
		36,750
	Less: Dividends	
	2011— $\$15,000 \times 15\%$	\$ 2,250
	2012— $\$15,000 \times 45\%$	6,750
	2012— $\$15,000 \times 90\%$	<u>13,500</u>
		<u>(22,500)</u>
	Investment in Prima	<u>\$324,000</u>

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*

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>Total</u>
As reported	\$40,000	\$32,000	\$52,000	\$48,000	\$172,000
Correct amounts	<u>19,000<sup>a</sup></u>	<u>30,000<sup>b</sup></u>	<u>50,000<sup>c</sup></u>	<u>46,000<sup>d</sup></u>	<u>145,000</u>
Overstatement	<u>\$21,000</u>	<u>\$ 2,000</u>	<u>\$ 2,000</u>	<u>\$ 2,000</u>	<u>\$ 27,000</u>

<sup>a</sup>(\$100,000 × 1/2 year × 40%) - (\$20,000/10 × 1/2 year) = 19,000

<sup>b</sup>(\$80,000 × 40%) - (\$20,000/10) = 30,000

<sup>c</sup>(\$130,000 × 40%) - (\$20,000/10) = 50,000

<sup>d</sup>(\$120,000 × 40%) - (\$20,000/10) = 46,000

**1**      *Investment in Sue balance December 31, 2014*

Investment in Sue per books December 31	\$400,000
Less: Overstatement	<u>27,000</u>
Correct investment in Sue balance December 31	<u>\$373,000</u>

*Check*

Underlying equity in Sue (\$900,000 × 40%)	\$360,000
Add: Building (\$20,000 - \$7,000)	<u>13,000</u>
Investment balance	<u>\$373,000</u>

**2**      *Correcting entry (before closing for 2014)*

Retained earnings	25,000	
Investment income	2,000	
Investment in Sue		27,000
To correct errors in investment account. Current year error	\$2,000.	

**Solution P2-12****1**      *Schedule to allocate excess cost over book value*

Investment cost (14,000 shares × \$13) \$10,000 direct costs	\$182,000
must be expensed.	
Book value acquired \$190,000 × 70%	<u>133,000</u>
Excess cost over book value	<u>\$ 49,000</u>

*Excess allocated*

	<u>Fair Value</u>	<u>— Book Value</u>	<u>× Interest</u>	<u>Acquired</u>	<u>= Allocation</u>
Inventories	\$ 50,000	\$60,000	70%		\$ (7,000)
Land	50,000	30,000	70%		14,000
Equipment—net	135,000	95,000	70%		28,000
Remainder to goodwill					<u>14,000</u>
Excess cost over book value					<u>\$ 49,000</u>

**2**      *Investment income from Jojo*

Share of Jojo's reported income \$60,000 × 70%	\$ 42,000
Add: Overvalued inventory items	7,000
Less: Depreciation on undervalued equipment	
(\$28,000/4 years) × 3/4 year	<u>(5,250)</u>
Investment income from Jojo	<u>\$ 43,750</u>

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**3**      *Investment in Jojo account at December 31, 2011*

Investment cost	\$182,000
Add: Income from Jojo	43,750
Less: Dividends received (14,000 shares × \$2)	<u>(28,000)</u>
Investment in Jojo balance December 31	<u>\$197,750</u>

*Check*

Underlying equity at December 31, 2011 (\$210,000 × 70%)*	\$147,000
Add: Unamortized excess of cost over book value	
Land	14,000
Equipment	22,750
Goodwill	<u>14,000</u>
Investment balance	<u>\$197,750</u>

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