

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 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 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 a 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 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 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 |
| 4 | d |
| 5 | b |

Solution E2-2 [AICPA adapted]

- 1 d
- 2 b
- 3 d
- 4 b

Pop's investment is reported at its \$600,000 cost because the equity method is not appropriate and because Pop's share of Son's income exceeds dividends received since acquisition $[(\$520,000 \times 15\%) > \$40,000]$.

- 5 c

Dividends received from Sun for the two years were \$10,500 $(\$70,000 \times 15\% - \text{all in 2017})$, but only \$9,000 (15% of Sun's income of \$60,000 for the two years) can be shown on Pam's income statement as dividend income from the Sun 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 Sun $(\$100,000 \times 30\%)$	<u>30,000</u>
Investment in Sun December 31	<u>\$280,000</u>

Solution E2-3

- 1 *Pop's percentage ownership in Son*

Pop'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 Sun for 2016

Share of Sun's income $(\$100,000 \times 1/2 \text{ year} \times 30\%)$	<u>\$ 15,000</u>
---	------------------

Solution E2-5**1** *Income from Son*

Share of Son's reported income ($\$200,000 \times 30\%$)	\$ 60,000
Less: Excess allocated to inventory	(25,000)
Less: Depreciation of excess allocated to building ($\$50,000/4$ years)	<u>(12,500)</u>
Income from Son	<u>\$ 22,500</u>

2 *Investment account balance at December 31*

Cost of investment in Son	\$ 500,000
Add: Income from Son	22,500
Less: Dividends ($\$50,000 \times 30\%$)	<u>(15,000)</u>
Investment in Son December 31	<u>\$ 507,500</u>

Alternative solution

Underlying equity in Son at January 1 ($\$375,000/.3$)	\$1,250,000
Income less dividends	<u>150,000</u>
Underlying equity December 31	1,400,000
Interest owned	<u>30%</u>
Book value of interest owned December 31	420,000
Add: Unamortized excess	<u>87,500</u>
Investment in Son December 31	<u>\$ 507,500</u>

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

Investment in Sun ($\$1,200,000 \times 40\%$)	480,000	
Loss from discontinued operations	80,000	
Income from Sun		560,000

To recognize income from 40% investment in Sun.

Solution E2-7

1	a	Dividends received from Son ($\$120,000 \times 15\%$)	\$ 18,000
		Share of income since acquisition of interest	
		2016 ($\$20,000 \times 15\%$)	(3,000)
		2017 ($\$80,000 \times 15\%$)	<u>(12,000)</u>
		Excess dividends received over share of income	<u>\$ 3,000</u>
		Investment in Son January 3, 2016	\$ 50,000
		Less: Excess dividends received over share of income	<u>(3,000)</u>
		Investment in Son December 31, 2017	<u>\$ 47,000</u>
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, 2016 +	
		$\$1,400,000$ from additional stock issuance) $\times 25\%$	<u>1,350,000</u>
		Excess fair value over book value (goodwill)	<u>\$ 50,000</u>
3	d	The investment in Son balance remains at the original cost.	
4	c	Income from continuing operations	\$ 200,000
		Percent owned	<u>40%</u>
		Income from Son Products	<u>\$ 80,000</u>

Solution E2-8*Preliminary computations*

Cost of 40% interest January 1, 2016	\$2,400,000
Book value acquired (\$4,000,000 × 40%)	(1,600,000)
Excess fair value over book value	<u>\$ 800,000</u>

Excess allocated to

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

Pam's underlying equity in Sun (\$5,500,000 × 40%)	\$2,200,000
Add: Goodwill	680,000
Investment balance December 31, 2019	<u>\$2,880,000</u>

Alternative computation

Pam's share of the change in Sun's stockholders' equity (\$1,500,000 × 40%)	\$ 600,000
Less: Excess allocated to inventories (\$40,000 × 100%)	(40,000)
Less: Excess allocated to equipment (\$80,000/4 years × 4 years)	(80,000)
Increase in investment account	480,000
Original investment	2,400,000
Investment balance December 31, 2019	<u>\$2,880,000</u>

Solution E2-9**1** *Income from Son*

Share of income to common (\$400,000 - \$30,000 preferred dividends) × 30%	\$ 111,000
--	------------

2 *Investment in Son December 31, 2017*

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 Son	111,000
Less: Dividends from Son (\$200,000 dividends - \$30,000 dividends to preferred) × 30%	(51,000)
Investment in Son December 31, 2017	<u>\$1,260,000</u>

Solution E2-10

1	Income from Sun (\$200,000 - \$150,000) × 25%	
	Investment income October 1 to December 31	\$ 12,500
2	Investment balance December 31	
	Investment cost October 1	\$ 300,000
	Add: Income from Sun	12,500
	Less: Dividends	---
	Investment in Sun at December 31	<u>\$ 312,500</u>

	December 31	October 1
Sales	\$ 600,000	\$450,000
Expenses	400,000	300,000
Net Income	<u>\$200,000</u>	<u>\$150,000</u>

Solution E2-11*Preliminary computations*

Goodwill from first 10% interest:

Cost of investment	\$ 25,000
Book value acquired (\$210,000 × 10%)	(21,000)
Excess fair value over book value	<u>\$ 4,000</u>

Goodwill from second 10% interest:

Cost of investment	\$ 50,000
Book value acquired (\$250,000 × 10%)	(25,000)
Excess fair value over book value	<u>\$ 25,000</u>

1.	Correcting entry as of January 2, 2017 to convert investment to the equity method		
	Accumulated gain/loss on stock available for Sale	25,000	
	Valuation allowance to record Son at fair value		25,000
	To remove the valuation allowance entered on December 31, 2016 under the fair value method for an available for sale security.		
	Investment in Son	4,000	
	Retained earnings		4,000
	To adjust investment account to an equity basis computed as follows:		
	Share of Son's income for 2016	\$ 10,000	
	Less: Share of dividends for 2016	(6,000)	
		<u>\$ 4,000</u>	
2	Income from Son for 2017		
	Income from Son on original 10% investment	\$ 5,000	
	Income from Son on second 10% investment	5,000	
	2017 Income from Son	<u>\$ 10,000</u>	

Solution E2-12*Preliminary computations*

Stockholders' equity of Sun on December 31, 2016	\$380,000
Sale of 12,000 previously unissued shares on January 1, 2017	<u>250,000</u>
Stockholders' equity after issuance on January 1, 2017	<u>\$630,000</u>

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

Excess is allocated as follows

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

*Journal entries on Pam's books during 2017**January 1*

Investment in Sun	250,000	
Cash		250,000
To record acquisition of a 1/3 interest in Sun.		

During 2017

Cash	30,000	
Investment in Sun		30,000
To record dividends received from Sun ($\$90,000 \times 1/3$).		

December 31

Investment in Sun	38,000	
Income from Sun		38,000
To record investment income from Sun computed as follows:		
Share of Sun's income ($\$120,000 \times 1/3$)		\$ 40,000
Depreciation on building ($\$20,000/10$ years)		<u>(2,000)</u>
Income from Sun		<u>\$ 38,000</u>

Solution E2-13**1** *Journal entries on Pop's books for 2017*

Cash	120,000	
Investment in Son (30%)		120,000
To record dividends received from Son (\$400,000 × 30%).		
Investment in Son (30%)	240,000	
Discontinued operations loss (from Son)	24,000	
Income from Son		264,000
To record investment income from Son computed as follows:		
Share of income from continuing operations \$680,000 × 30%		\$ 204,000
Add: Excess fair value over cost realized in 2017 \$200,000 × 30%		<u>60,000</u>
Income from Son before discontinued operations		<u>\$ 264,000</u>

2 *Investment in Son balance December 31, 2017*

Investment cost	\$ 780,000
Add: Income from Son after discontinued operations	240,000
Less: Dividends received from Son	<u>(120,000)</u>
Investment in Son December 31	<u>\$900,000</u>

Check: Investment balance is equal to underlying book value
 (\$2,800,000 + \$600,000 - \$400,000) × 30% = \$900,000

3**Pop Corporation****Income Statement**

for the year ended December 31, 2017

Sales	\$4,000,000
Expenses	<u>2,800,000</u>
Operating income	1,200,000
Income from Son (before discontinued operations)	<u>264,000</u>
Income from continuing operations	1,464,000
Discontinued operations loss (net of tax effect)	<u>24,000</u>
Net income	<u>\$1,440,000</u>

Solution E2-14**1** *Income from Sun for 2017*

Equity in income (\$108,000 - \$8,000 preferred) × 40%	\$ 40,000
--	--------------

2 *Investment in Sun December 31, 2017*

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

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

Solution E2-15

Since the total fair value of Son has declined by \$60,000 while the fair value of the net identifiable assets is unchanged, the \$60,000 decline is the impairment in goodwill for the period. The \$60,000 impairment loss is deducted in calculating Pop'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. Pam must report an impairment loss of \$5,000 in calculating 2017 income from continuing operations.

SOLUTIONS TO PROBLEMS**Solution P2-1****1** *Goodwill*

Cost of investment in Son on April 1	\$686,000
--------------------------------------	-----------

Book value acquired:	
----------------------	--

Net assets at December 31	\$2,000,000
---------------------------	-------------

Add: Income for 1/4 year ($\$320,000 \times 25\%$)	80,000
--	--------

Less: Dividends paid March 15	<u>(40,000)</u>
-------------------------------	-----------------

Book value at April 1	2,040,000
-----------------------	-----------

Interest acquired	<u>30%</u>
-------------------	------------

	<u>612,000</u>
--	----------------

Goodwill from investment in Son	<u>\$ 74,000</u>
---------------------------------	------------------

2 *Income from Son for 2016*

Equity in income from continuing operations	
($\$240,000 \times 3/4 \text{ year} \times 30\%$)	\$ 54,000

3 *Investment in Son at December 31, 2016*

Investment cost April 1	\$ 686,000
-------------------------	------------

Add: Income from Son plus discontinued operations gain	78,000
--	--------

Less: Dividends ($\$40,000 \times 3 \text{ quarters}$) $\times 30\%$	<u>(36,000)</u>
--	-----------------

Investment in Son December 31	<u>\$ 728,000</u>
-------------------------------	-------------------

4 *Equity in Son's net assets at December 31, 2016*

Son's stockholders' equity January 1	\$2,000,000
--------------------------------------	-------------

Add: Net income	320,000
-----------------	---------

Less: Dividends	<u>(160,000)</u>
-----------------	------------------

Son's stockholders' equity December 31	2,160,000
--	-----------

Investment interest	30%
---------------------	-----

Equity in Son's net assets	<u>\$ 648,000</u>
----------------------------	-------------------

5 *Discontinued operations gain for 2016 to be reported by Pop*

Son's discontinued operations gain $\times 30\%$	<u>\$ 24,000</u>
--	------------------

Solution P2-2**1** *Cost method*

Investment in Sun July 1, 2016 (at cost)	\$440,000
Dividends charged to investment	<u>(17,600)</u>
Investment in Sun balance at December 31, 2016	<u>\$422,400</u>

July 1, 2016

Investment in Sun	440,000	
Cash		440,000
To record initial investment for 80% interest.		

November 1, 2016

Dividends receivable	25,600	
Dividend income		25,600
To record receipt of dividends (\$32,000 × 80%).		

December 31, 2016

Dividend income	17,600	
Investment in Sun		17,600
To reduce investment for dividends in excess of earnings (\$32,000 dividends - \$10,000 earnings) × 80%.		

2 *Equity method*

Investment in Sun July 1, 2016	\$440,000
Add: Share of reported income	8,000
Deduct: Dividends charged to investment	(25,600)
Deduct: Excess Depreciation	<u>(13,200)</u>
Investment in Sun balance at December 31, 2016	<u>\$409,200</u>

July 1, 2016

Investment in Sun	440,000	
Cash		440,000
To record initial investment for 80% interest of Sun.		

November 1, 2016

Dividends receivable	25,600	
Investment in Sun		25,600
To record receipt of dividends (\$32,000 × 80%).		

December 31, 2016

Income from Sun	5,200	
Investment in Sun		5,200
To record income from Sun computed as follows:		
Share of Sun's income (\$20,000 × 1/2 year × 80%)		
less excess depreciation (\$264,000/10 years × 1/2 year).		

Solution P2-3*Preliminary computations*

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

1 *Income from Son*

Share of Son's reported income ($\$100,000 \times 30\%$)	\$ 30,000
Less: Excess allocated to inventories sold in 2016	(9,000)
Add: Depreciation of excess allocated to overvalued building $\$18,000/10$ years	<u>1,800</u>
Income from Son—2016	<u>\$ 22,800</u>

2 *Investment balance December 31, 2016*

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

3 *Pop's share of Son'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	\$190,000
Book value acquired [$\$250,000 + (\$50,000 \times 1/2 \text{ year})$] \times 40%	<u>110,000</u>
Excess fair value over book value	<u>\$ 80,000</u>

Excess allocated

Land $\$15,000 \times 40\%$	\$ 6,000
Equipment $\$25,000 \times 40\%$	10,000
Remainder to goodwill	<u>64,000</u>
Excess fair value over book value	<u>\$ 80,000</u>

July 1, 2016

Investment in Sun	190,000	
Cash		190,000
To record initial investment for 40% interest in Sun.		

November 2016

Cash (other receivables)	10,000	
Investment in Sun		10,000
To record receipt of dividends ($\$25,000 \times 40\%$).		

December 31, 2016

Investment in Sun	10,000	
Income from Sun		10,000
To record share of Sun's income ($\$50,000 \times 1/2 \text{ year} \times 40\%$).		

December 31, 2016

Income from Sun	1,000	
Investment in Sun		1,000
To record depreciation on excess allocated to Undervalued equipment ($\$10,000/5 \text{ years} \times 1/2 \text{ year}$).		

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 × 30%)	<u>1,170,000</u>
Excess fair value 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			<u>300,000</u>
Excess fair value over book value			<u>\$ 510,000</u>

2 *Income from Son for 2016*

Equity in income (\$1,200,000 × 30%)	\$ 360,000
Less: Amortization of differentials	
Inventories (sold in 2016)	(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 Son	<u>\$ 321,000</u>

3 *Investment in Son balance December 31, 2016*

Investment cost	\$1,680,000
Add: Income from Son	321,000
Less: Dividends (\$600,000 × 30%)	<u>(180,000)</u>
Investment in Son 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 Son account	<u>\$1,821,000</u>

Solution P2-6

1	<i>Income from Sun</i>	
	Investment in Sun July 1, 2016 at cost	\$96,000
	Book value acquired ($\$130,000 \times 60\%$)	<u>78,000</u>
	Excess fair value over book value	<u>\$18,000</u>
	 <i>Pam's share of Sun's income for 2016</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 Sun for 2016	<u>\$ 5,100</u>
 2	 <i>Investment balance December 31, 2016</i>	
	Investment cost July 1	\$96,000
	Add: Income from Sun	5,100
	Less: Dividends ($\$12,000 \times 60\%$)	<u>(7,200)</u>
	Investment in Sun December 31	<u>\$93,900</u>

Solution P2-7

Pop Corporation
 Partial Income Statement
 for the year ended December 31, 2018

<i>Investment income</i>	
Income from Son (equity basis)	<u>\$90,000</u>
Income from continuing operations	90,000
 <i>Discontinued operations gain</i>	
Share of Son's discontinued operations gain	<u>60,000</u>
Net income	<u>\$150,000</u>

Solution P2-8*Preliminary computations*

Investment cost of 90% interest in Sun	<u>\$1,980,000</u>
Implied total fair value of Sun ($\$1,980,000 / 90\%$)	\$2,200,000
Book value ($\$2,525,000 + \$125,000$)	<u>(2,650,000)</u>
Excess book value over fair value	<u>\$ (450,000)</u>

Excess allocated

Overvalued plant assets	\$ (500,000)
Undervalued inventories	<u>50,000</u>
Excess book value over fair value	<u>\$ (450,000)</u>

1 *Investment income for 2016*

Share of reported income ($\$250,000 \times 1/2 \text{ year} \times 90\%$)	\$ 112,500
Add: Depreciation on overvalued plant assets ($(\$500,000 \times 90\%) / 9 \text{ years}) \times 1/2 \text{ year}$	25,000
Less: 90% of Undervaluation allocated to inventories	<u>(45,000)</u>
Income from Sun—2016	<u>\$ 92,500</u>

2 *Investment balance at December 31, 2017*

Underlying book value of 90% interest in Sun (Sun's December 31, 2017 equity of $\$2,700,000 \times 90\%$)	\$2,430,000
Less: Unamortized overvaluation of plant assets ($\$50,000 \text{ per year} \times 7 \frac{1}{2} \text{ years}$)	<u>(375,000)</u>
Investment balance December 31, 2017	<u>\$2,055,000</u>

3 *Journal entries to account for investment in 2018*

Cash (or Dividends receivable)	135,000	
Investment in Sun		135,000
To record receipt of dividends ($\$150,000 \times 90\%$).		
Investment in Sun	230,000	
Income from Sun		230,000
To record income from Sun computed as follows: Pam's share of Sun's reported net income ($\$200,000 \times 90\%$) plus \$50,000 amortization of overvalued plant assets.		

Check: Investment balance December 31, 2017 of \$2,055,000 + \$230,000
income from Sun - \$135,000 dividends = \$2,150,000 balance December 31,
2018

Alternatively, Sun's underlying equity ($\$2,000,000$ paid-in capital +
 $\$750,000$ retained earnings) $\times 90\%$ interest - $\$325,000$ unamortized excess
allocated to plant assets = \$2,150,000 balance December 31, 2018.

Solution P2-9**1** *Market price of \$24 for Pop's shares*

Cost of investment in Son

(40,000 shares × \$24) The \$80,000 direct costs must be expensed. \$ 960,000Book value acquired (\$2,000,000 net assets × 40%) 800,000Excess fair value over book value \$ 160,000*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 Pop's shares*

Cost of investment in Son

(40,000 shares × \$16) Other direct costs are \$0 \$ 640,000Book value acquired (\$2,000,000 net assets × 40%) 800,000Excess book value over fair value \$ (160,000)*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			(320,000)
			<u>\$ (160,000)</u>

Solution P2-10

1	<i>Income from Sun—2016</i> Pam's share of Sun's income for 2016 $\$40,000 \times 1/2 \text{ year} \times 15\%$	\$ 3,000
2	<i>Investment in Sun balance December 31, 2016</i> Investment in Sun at cost Add: Income from Sun Less: Dividends from Sun November 1 ($\$15,000 \times 15\%$) Investment in Sun balance December 31	\$ 48,750 3,000 <u>(2,250)</u> \$ 49,500
3	<i>Income from Sun—2017</i> Pam's share of Sun's income for 2017: $\$60,000 \text{ income} \times 15\% \text{ interest} \times 1 \text{ year}$ $\$60,000 \text{ income} \times 30\% \text{ interest} \times 1 \text{ year}$ $\$60,000 \text{ income} \times 45\% \text{ interest} \times 1/4 \text{ year}$ Pam's share of Sun's income for 2017	\$ 9,000 18,000 <u>6,750</u> \$ 33,750
4	<i>Investment in Sun December 31, 2017</i> Investment balance December 31, 2016 (from 2) Add: Additional investments ($\$99,000 + \$162,000$) Add: Income for 2017 (from 3) Less: Dividends for 2017 ($\$15,000 \times 45\%$) + ($\$15,000 \times 90\%$) Investment in Sun balance at December 31	\$ 49,500 261,000 33,750 <u>(20,250)</u> \$324,000
<i>Alternative solution</i>		
Investment cost ($\$48,750 + \$99,000 + \$162,000$)		\$309,750
Add: Share of reported income		
2016— $\$40,000 \times 1/2 \text{ year} \times 15\%$		\$ 3,000
2017— $\$60,000 \times 1 \text{ year} \times 45\%$		27,000
2017— $\$60,000 \times 1/4 \text{ year} \times 45\%$		<u>6,750</u>
		36,750
Less: Dividends		
2016— $\$15,000 \times 15\%$		\$ 2,250
2017— $\$15,000 \times 45\%$		6,750
2017— $\$15,000 \times 90\%$		<u>13,500</u>
Investment in Sun		<u>(22,500)</u>
		\$324,000

Note: Since Pam's investment in Sun consisted of 9,000 shares (a 45% interest) on January 1, 2017, Pam correctly used the equity method of accounting for the 15% investment interest held during 2016. The alternative of reporting income for 2016 on a fair value/cost basis and applying the equity method retroactively for 2017 is not appropriate in view of the overwhelming evidence of an ability to exercise significant influence by the time 2016 income is recorded.

Solution P2-11*Income from Sun*

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>Total</u>
As reported	\$ 80,000	\$64,000	\$104,000	\$96,000	\$344,000
Correct amounts	<u>40,000^a</u>	<u>64,000^b</u>	<u>104,000^c</u>	<u>96,000^d</u>	<u>304,000</u>
Overstatement	<u>\$120,000</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$ 40,000</u>

^a(\$200,000 × 1/2 year × 40%)

^b(\$160,000 × 40%)

^c(\$260,000 × 40%)

^d(\$240,000 × 40%)

1 *Investment in Sun balance December 31, 2019*

Investment in Sun per books December 31	\$800,000
Less: Overstatement	<u>40,000</u>
Correct investment in Sun balance December 31	<u>\$760,000</u>

Check

Underlying equity in Sun (\$1,800,000 × 40%)	\$720,000
Add: Goodwill (\$600,000 - (\$1,400,000 × 40%))	<u>40,000</u>
Investment balance	<u>\$760,000</u>

2 *Correcting entry (before closing for 2019)*

Retained earnings	40,000	
Investment in Sun		40,000
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 × \$13) \$10,000 direct costs	\$182,000
must be expensed.	
Book value acquired \$190,000 × 70%	<u>133,000</u>
Excess fair value over book value	<u>\$ 49,000</u>

Excess allocated

	Fair Value —	Book Value	× Interest Acquired =	Allocation
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 fair value over book value				<u>\$ 49,000</u>

2 *Investment income from Son*

Share of Son'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 Son	<u>\$ 43,750</u>

3 *Investment in Son account at December 31, 2016*

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

Check

Underlying equity at December 31, 2016 (\$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

Solution PR 2-1

Yes, since this is a noncontrolling interest, the equity method can be used.
 (ASC 323-10).

Solution PR 2-2

(ASC 320-30-4) The initial basis under the new accounting method should be the amount carried over from the equity method amount at the date of the change.

Chapter 2

STOCK INVESTMENTS - INVESTOR ACCOUNTING AND REPORTING

Learning Objectives

- 2.1 Recognize investors' varying levels of influence or control, based on the level of stock ownership.
- 2.2 Understand how accounting adjusts to reflect the economics underlying varying levels of investor influence.
- 2.3 Identify factors beyond stock ownership that affect an investor's ability to exert influence or control over an investee.
- 2.4 Apply the fair value/cost and equity methods of accounting for stock investments.
- 2.5 Apply the equity method to stock investments.
- 2.6 Learn how to test goodwill for impairment.

Chapter Outline

ACCOUNTING FOR STOCK INVESTMENTS – ALL STOCK INVESTMENTS MUST BE RECORDED AT THE INVESTOR'S COST (FAIR VALUE AT ACQUISITION).

(Learning Objectives 2.1 and 2.2)

- A** There are two basic methods of accounting for common stock investments: the **fair value (cost) method** and the **equity method**.

GAAP PRESCRIBED METHODS

- 1** Fair value (cost) method for up to 20% ownership
- 2** Equity method for 20% to 50% ownership
- 3** GAAP presumes 20% or more of ownership demonstrates the company has an ability to exercise significant influence over an investee.
- 4** In both methods, there are exceptions to the ownership percentage test, depending on whether or not the company has significant influence over the investee.

- B** In the absence of evidence to the contrary, an investment of 20% or more is presumed to give the investor an ability to exercise significant influence. The equity method requires that the investment be recorded at cost and the investment account adjusted for earnings, losses, and dividends each subsequent period.

- 1** The equity method should not be used if the ability to exercise significant influence is temporary or if the investee is a foreign company operating under severe exchange restrictions or controls.

- 2** GAAP provides indicators of the inability to exercise significant influence:
(*Learning Objective 2.3*)
- a** Opposition by the investee that challenges the investor's influence
 - b** Surrender of significant stockholder rights by agreement between investor and investee
 - c** Concentration of majority ownership
 - d** Inadequate or untimely information to apply the equity method
 - e** Failure to obtain representation on the investee's board of directors

ACCOUNTING FOR NONCURRENT COMMON STOCK INVESTMENTS UNDER THE FAIR VALUE/COST METHOD:

- A** The fair value/cost method is used for common stock investments of less than 20% unless it can be demonstrated that the investor company has the ability to exercise significant influence over the investee company.
- B** GAAP classifies equity securities that have a readily determinable market value as either trading securities or available-for-sale securities.
- 1** Investment is initially recorded at cost.
 - 2** The investment is adjusted to fair value at the end of the fiscal period.
 - 3** Unrealized gains or losses are reported either in income or as an equity adjustment to the balance sheet (other comprehensive income), depending on the company's intention for holding the stock.
 - 4** Unrealized gains and losses associated with 'trading' securities are recorded as part of income. Trading securities are very short-term holdings; continued relationships are not expected.
 - 5** Unrealized gains and losses associated with available-for-sale securities are considered "other comprehensive income" and are reported either on the income statement, a separate statement of comprehensive income, or a statement of changes in equity. Only dividend income and realized gains and losses impact income and EPS for available-for-sale securities.

C Procedures for the fair value/cost method
(*Learning Objective 2.4*)

- 1** Investment is initially recorded at cost.
- 2** Dividends received are recorded as dividend income.
 - a** An exception: Liquidating dividends are deducted from the investment account. Liquidating dividends are those dividends received in excess of the investor's share of earnings after the stock is acquired and are considered a return of capital.

ACCOUNTING FOR NONCURRENT COMMON STOCK INVESTMENTS UNDER THE EQUITY METHOD:

(*Learning Objective 2.5*)

A Application of the equity method

- 1** The investment is initially recorded at cost.
- 2** Subsequently, the investor records its share of the investee's income as an increase to the investment account (losses will decrease the investment account).
- 3** Dividends received from the investee are recorded as a decrease to the investment account.
 - a** The investment account moves in the same direction as the investee's net assets (for example, income increases assets for both).
- 4** Additional adjustments are required.
 - a** Intercompany profits and losses are eliminated until realized.
 - b** Cost-book value differentials are accounted for as if the investee were a consolidated subsidiary.
 - (1) The difference between the investment cost and the underlying equity is assigned to identifiable assets and liabilities based on their fair values with any remaining difference allocated to goodwill.
 - (2) The difference between investment cost and book value acquired will disappear over the remaining lives of identifiable assets and liabilities, except for amounts assigned

to land, goodwill, and intangible assets having an indeterminate life, which are not amortized.

- (3) If the book value acquired is greater than the investment cost, the difference should be allocated against non-current assets other than marketable securities with any remaining amount treated as an extraordinary gain (negative goodwill).

- c** The investment is reported on one line of the investor's balance sheet and income on one line of the investor's income statement, a one-line consolidation.

- (1) Except extraordinary and other below-the-line items

C Accounting for an interim investment

- 1** Absent evidence to the contrary, income of the investee is assumed to be earned proportionately throughout the year.
- 2** The investee's book value at an interim date is determined by adding income earned from the last statement date to beginning stockholders' equity and deducting dividends declared to the date of purchase.

D Investment in a step-by-step acquisition

- 1** An investor may acquire significant influence through a series of purchases.
- 2** Prior to obtaining significant influence, the fair value/cost method is used. When an investment qualifies for the equity method, the investment account is adjusted to the equity method, and the investor's retained earnings are adjusted retroactively.
 - a** This is a change in reporting entity, and it requires retroactive restatement if the effect is material.

E Sale of an equity interest

- 1** When an investor reduces its equity interest in an investee to below 20%, the retained investment is accounted for under the fair value/cost method.
 - a** Gain or loss from the equity interest sold is the difference between the selling price and the book value of the equity interest immediately before the sale.

- b** Immediately after the sale, the balance of the investment account becomes the new cost basis.
- F** If the stock is purchased directly from the investee (rather than its shareholders), the investor's interest is determined by dividing shares acquired by shares outstanding immediately after the issuance of the additional shares.
- G** Investee corporation with preferred stock
 - 1** Special adjustments are necessary when investees have both common and preferred stock outstanding.
 - 2** The investee's stockholders' equity must be allocated into its common and preferred stock components to determine the book value of the common stock investment.
 - 3** The investee's net income must also be allocated into common and preferred stock components.
 - 4** Call or liquidating premiums and dividends in arrears must also be considered in determining the investor's share of earnings.
- H** The one-line consolidation does not apply when the investee's income includes discontinued operations. Investment income must be separated into ordinary and discontinued operations components.

DISCLOSURES FOR EQUITY INVESTEEES

- A** Material investments accounted for by the equity method require disclosure of the following:
 - 1** The investee's name and percent of ownership in common stock, the investor's accounting policies with respect to investments in common stock, the cost/book value differentials and accounting treatment
 - 2** The aggregate value of each identified investment for which quoted market prices are available
 - 3** Summarized information about the investee's assets, liabilities, and results of operations

B Related-party transactions

- 1** Related-party transactions arise when one of the transacting parties has the ability to significantly influence the operations of the other.
- 2** There is no presumption of arms-length bargaining between the related parties.
- 3** Required disclosures include the nature of the relationship, a description of the transaction, the dollar amount of the transaction (and any change in the method used to establish the terms of the transaction), and amounts due to or due from related parties at the balance sheet date for each balance sheet presented.

TESTING GOODWILL FOR IMPAIRMENT

(Learning Objective 2.6)

A GAAP eliminates former requirements to amortize goodwill, but goodwill must be periodically tested for impairment.

- 1** Firms may find this valuable for two reasons.
 - a** Firms may recognize significant impairment losses on initial adoption which are treated as a “cumulative effect of an accounting change” (appears after “income from operations”).
 - b** Firms will no longer report annual goodwill expense charges.

B Recognizing and measuring impairment losses is a two-step process.

- 1** First, carrying values and fair values of net assets are compared at the business-reporting-unit level.
 - a** If fair value is greater than carrying value, goodwill is deemed unimpaired, and no further action is necessary.
 - b** If carrying value is greater than fair value, the firm proceeds to step 2.
- 2** Step 2, when necessary, requires a comparison of the carrying value of goodwill with its implied fair value.
- 3** The implied fair value of goodwill is determined in the same manner used to originally record the goodwill at the business combination date.

- a Allocate the fair value of the reporting unit to all identifiable assets and liabilities as if they had made the purchase on the measurement date. Any excess is the implied fair value of goodwill.
- 4** The fair value of the reporting unit is the amount for which it could be purchased or sold in a current, arm's-length transaction.
 - a Current market prices (in an active market) are considered the most reliable indicator of fair value.
- C** Goodwill impairment testing must be conducted at least annually.
 - 1** More frequent testing may be required if certain events occur such as adverse changes in the legal or business climate, new and unanticipated competition, loss of key personnel, and other similar events.
- D** Reporting and disclosures
 - 1** Material aggregate amounts of goodwill must be reported as a separate line item on the balance sheet.
 - 2** Goodwill impairment losses are shown separately in the income statement.
- E** Equity method investments
 - 1** Many of the rules regarding goodwill impairment apply only to goodwill arising from business combinations (parent acquiring a controlling interest in a sub). Impairment testing also applies to goodwill arising from use of the equity method.
 - 2** One notable exception is the rule regarding goodwill impairments; impairment tests are performed based on fair value versus book value of the investment taken as a whole.

Description of assignment material**Minutes**

Questions (14)

Exercises (16)

E2-1	5 MC general	10
E2-2	AICPA 8 MC general and problem-type	35
E2-3	[Son/Pop] Calculate percentage ownership and goodwill on investment acquired directly from investee	12
E2-4	[Pam/Sun] Calculate income for midyear investment	15
E2-5	[Pop/Son] Calculate income and investment balance allocation of excess to undervalued assets	15
E2-6	[Pam/Sun] Journal entry to record income from investee with loss from discontinued operations	10
E2-7	4 MC problem-type	20
E2-8	[Pam/Sun] Calculate investment balance four years after acquisition	15
E2-9	[Son/Pop] Calculate income and investment balance when investee capital structure includes preferred stock	20
E2-10	[Pam/Sun] Calculate income and investment balance for midyear investment	15
E2-11	[Pop/Sun] Adjust investment account and determine income when additional investment qualifies for equity method of accounting	25
E2-12	[Sun/Pam] Journal entries (investment in previously unissued stock)	15
E2-13	[Pop/Sun] Prepare journal entries and income statement, and determine investment account balance	20
E2-14	[Pam/Sun] Calculate income and investment account balance (investee has preferred stock)	20
E2-15	[Pop/Sun] Goodwill impairment	10
E2-16	[Pam/Alpha/Beta] Goodwill impairment	10

Problems (12)

P2-1	[Pop/Sun] Computations for a midyear purchase (investee has a discontinued operations gain)	25
P2-2	[Pam/Sun] Journal entries for midyear investment (cost and equity methods)	20
P2-3	[Pop/Sun] Computations for investee when excess allocated to inventories, building, and goodwill	20
P2-4	[Pam/Sun] Journal entries for midyear investment (excess allocated to land, equipment, and goodwill)	20
P2-5	[Pop/Sun] Prepare an allocation schedule; compute income and the investment balance	15
P2-6	[Pam/Son] Computations for a midyear acquisition	20
P2-7	[Pop/Son] Partial income statement with a discontinued operations	10
P2-8	[Sun/Pam] Computations and journal entries with excess of book value over fair value	25

Description of assignment material
(cont'd)

Minutes

P2-9	[Pop/Sun] Prepare allocation schedules under different stock price assumptions (bargain purchase)	20
P2-10	[Pam/Sun] Computations for a piecemeal acquisition	25
P2-11	[Pam/Sun] Computations and a correcting entry (errors)	25
P2-12	[Pop/Sun] Allocation schedule and computations (excess cost over fair value)	25

PROFESSIONAL RESEARCH ASSIGNMENTS

Answer the following questions by reference to the FASB Codification of Accounting Standards. Include the appropriate reference in your response.

PR 2-1 The equity method of accounting is often referred to as a one-line consolidation. Since the net impact on the balance sheet and income statement is the same under both consolidation and the equity method, is it acceptable to report a noncontrolling investment using the simpler equity method?

PR 2-2 A firm sells a part of its investment interest, reducing its holding from 30% to 10%. The firm decides, correctly, that the equity method is no longer appropriate. What is the basis for the investment in applying the new accounting method?