*Chapter 2*

STOCK INVESTMENTS — INVESTOR ACCOUNTING AND REPORTING

**Answers to Questions**

**1** Investor should use the equity method when it has the ability to exercise significant influence over the investee. Twenty percent ownership test is used to determine the significant influence. Investment of more than 20 percent of the investee’s voting stock shall lead to a presumption that the investor has the ability to exercise significant influence over the investee otherwise there is predominant evidence in the contrary. On the other hand, Investment of less than 20 percent investee’s voting stock shall lead to a presumption that the investor doesn’t have the ability to exercise significant influence over the investee unless such ability can be demonstrated. If the latter condition is met, investor should use the fair value method.

**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** Under the fair value method, investments are recorded at cost and adjust it to the fair value at the end of the reporting period. Dividends received are treated as dividend income, except dividends received in excess of investor share of earnings are considered as return on of capital (liquidating dividend). Liquidating dividend is treated as a deduction of investments account.

Under the equity method, investments are recorded at cost, but at the end of the reporting period it is not adjusted to the fair value. Investments are adjusted with the profit or loss and the dividends of the investee. Investor increases the investments account based on the share of the investee’s profit or decrease the investments account based on the share of the investee’s loss. Dividends are always treated as a disinvestments and always decrease the investments account.

**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** If overvalued assets are identified during the acquisition, it will increase the income from investment recorded by the investor because the expenses associated with the overvalued assets are overvalued. The overvaluation will be eliminated periodically and charged to the income from investment. However, if the overvalued assets had indefinite life feature, the overvaluation will not be eliminated periodically such as land and intangible assets having an indefinite life. Thus the overvaluation of these assets will not affect the income from investment, unless the assets are disposed or impaired.

**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 itemsand 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.

1. 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.
2. 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.
3. Yes. Impairment losses for subsidiaries are computed as outlined in the solution to question 13. Companies compare fair values to book valuesfor 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

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 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 10%)]

**7** a

**8** d

|  |  |  |
| --- | --- | --- |
|  | Investment balance January 2 | $250,000 |
|  | Add: Income from Pod ($100,000 30%) | 30,000 |
|  | Investment in Pod December 31 | $280,000 |

**Solution E2-3**

1. Klaus AG recorded investment in Max AG using fair value/cost method because no significant influence was obtained.

**Journal entries on Klaus AG's book**

*March 2*

|  |  |  |
| --- | --- | --- |
| Investment in Max AG (+A) | 10,000 |  |
| Cash (-A) |  | 10,000 |
| To record purchase of Max AG’s outstanding shares |  |  |
|  |  |  |
| *April 1* |  |  |
| Cash (+A) | 25,000 |  |
| Dividend income [R, +SE] |  | 25,000 |
| To record dividends received from Max AG  [$500,000 x 500 / 10,000] |  |  |

Note: under the fair value/cost method, there is no need to recognize a portion of Max AG earnings.

**Solution E2-4**

*Income from Med for 2011*

|  |  |  |
| --- | --- | --- |
|  | Share of Med’s income ($200,000 1/2 year 30%) | $ 30,000 |

**Solution E2-5**

Interest acquired (5,000 shares / 20,000 shares) 25%

|  |  |  |
| --- | --- | --- |
| Cost of 25% interest in Atah PLC | $29,000,000 |  |
| Book value acquired ($100,000,000 x 25%) |  | $25,000,000 |
| Excess fair value over book value |  | $4,000,000 |
|  |  |  |
| Excess allocated to: |  |  |
| Overvalued Inventories ($4,000,000 x 25%) |  | [$1,000,000] |
| Undervalued equipment ($24,000,000 x 25%) | $6,000,000 |  |
| Undervalued notes payable ($8,000,000 x 25%) | [$2,000,000] |  |
| Goodwill for remainder |  | $1,000,000 |
| Excess fair value over book value |  | $4,000,000 |

Goodwill from Henry PLC investment in Atah PLC was $1,000,000

**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%) | | $ 18,000 |
|  | Share of income since acquisition of interest | |  |
|  | 2011 ($20,000 15%) | | (3,000) |
|  | 2012 ($80,000 15%) | | (12,000) |
|  | Excess dividends received over share of income | | $ 3,000 |
|  |  | |  |
|  | Investment in Ben January 3, 2011 | | $ 50,000 |
|  | Less: Excess dividends received over share of income | | (3,000) |
|  | Investment in Ben December 31, 2012 | | $ 47,000 |
|  |  |  |  |
| **2** | b |  |  |
|  | Cost of 10,000 of 40,000 shares outstanding | | $1,400,000 |
|  | Book value of 25% interest acquired ($4,000,000 stockholders’ equity at December 31, 2011 + | |  |
|  | $1,400,000 from additional stock issuance) 25% | | 1,350,000 |
|  | Excess fair value over book value(goodwill) | | $ 50,000 |
|  |  |  |  |
| **3** | d |  |  |
|  | The investment in Moe balance remains at the original cost. | |  |
|  |  |  |  |
| **4** | c |  |  |
|  | Income before extraordinary item | | $ 200,000 |
|  | Percent owned | | 40% |
|  | Income from Kaz Products | | $ 80,000 |

**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% | 160,000 |
| Goodwill for the remainder | 1,360,000 |
| Excess fair value over book value | $1,600,000 |
|  |  |
| Ray’s underlying equity in Ton ($11,000,000 40%) | $4,400,000 |
| Add: Goodwill | 1,360,000 |
| Investment balance December 31, 2014 | $5,760,000 |
|  |  |
| *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 4 years) | (160,000) |
| Increase in investment account | 960,000 |
| Original investment | 4,800,000 |
| Investment balance December 31, 2014 | $5,760,000 |

**Solution E2-9**

**1** Cost of 30% common interest in William Ltd $3,500,000

Book value (and fair value) acquired:

|  |  |  |
| --- | --- | --- |
| Common stock, $10 par | $3,000,000 |  |
| Additional paid-in capital | $5,000,000 |  |
| Retained earnings |  | $3,000,000 |
| Common stockholders’ equity | $9,000,000 |  |
| Percent acquired 30% |  | $2,700,000 |
| Goodwill |  | $ 800,000 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| **2** |  |  |
|  |  |  |
|  | William Ltd’s Income | $1,000,000 |
|  | Less: preferred income ($1,000,000 x 10%) | $ 100,000 |
|  | Income to common | $ 900,000 |
|  | Income from William Ltd ($900,000 x 30%) | $ 270,000 |

**Solution E2-10**

|  |  |  |
| --- | --- | --- |
| **1** | *Income from Tee* ($400,000 – $300,000) 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 | 25,000 |
|  | Less: Dividends | --- |
|  | Investment in Tee at December 31 | $ 625,000 |

|  |  |  |
| --- | --- | --- |
|  | December 31 | October 1 |
| Sales | $1,200,000 | $900,000 |
| Expenses | 800,000 | 600,000 |
| Net Income | $400,000 | $300,000 |

**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 | $ 4,000 |
| Goodwill from second 10% interest: |  |
| Cost of investment | $ 50,000 |
| Book value acquired ($250,000 10%) | (25,000) |
| Excess fair value over book value | $ 25,000 |

|  |  |  |  |
| --- | --- | --- | --- |
| 1. | Correcting entry as of January 2, 2012to convert investment to the equity basis |  |  |
|  | Accumulated gain/loss on stock available for  Sale | 25,000 |  |
|  | Valuation allowance to record Fed at fair  Value |  | 25,000 |
|  | To remove the valuation allowance entered on December 31, 2011 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 |  | $ 10,000 |
|  | Less: Share of dividends for 2011 |  | (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 | 250,000 |
| Stockholders’ equity after issuance on January 1, 2012 | $630,000 |
|  |  |
| Cost of 12,000 shares to Riv | $250,000 |
| Book value of 12,000 shares acquired |  |
| $630,000 12,000/36,000 shares | 210,000 |
| Excess fair value over book value | $ 40,000 |
|  |  |
| *Excess is allocated as follows* |  |
| Buildings $60,000 12,000/36,000 shares | $ 20,000 |
| Goodwill | 20,000 |
| Excess fair value over book value | $ 40,000 |

*Journal entries on Riv’s books during 2012*

|  |  |  |
| --- | --- | --- |
| *January 1* |  |  |
| Investment in Tal | 250,000 |  |
| Cash |  | 250,000 |

To record acquisition of a 1/3 interest in Tal.

|  |  |  |
| --- | --- | --- |
| *During 2012* |  |  |
| Cash | 30,000 |  |
| Investment in Tal |  | 30,000 |

To record dividends received from Tal ($90,000 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) | | (2,000) |
|  | Income from Tal | | $ 38,000 |

**Solution E2-13**

|  |  |  |  |
| --- | --- | --- | --- |
| **1** | *Journal entries on BIP’s books for 2012* |  |  |
|  |  |  |  |
|  | Cash | 120,000 |  |
|  | Investment in Cow (30%) |  | 120,000 |
|  | 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% |  | $ 204,000 |
|  | Add: Excess fair value over cost realized in 2012 |  |  |
|  | $200,000 30% |  | 60,000 |
|  | Income from Cow before extraordinary loss |  | $ 264,000 |

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

|  |  |  |
| --- | --- | --- |
| **3** | **BIP Corporation** |  |
|  | Income Statement |  |
|  | for the year ended December 31, 2012 |  |
|  | Sales | $4,000,000 |
|  | Expenses | 2,800,000 |
|  | Operating income | 1,200,000 |
|  | Income from Cow (before extraordinary item) | 264,000 |
|  | Income before extraordinary item | 1,464,000 |
|  | Extraordinary loss (net of tax effect) | 24,000 |
|  | Net income | $1,440,000 |

**Solution E2-14**

|  |  |  |
| --- | --- | --- |
| **1** | *Income from Wat for 2012* |  |
|  |  |  |
|  | Equity in income ($108,000 - $8,000 preferred) 40% | $ 40,000 |
|  |  |  |
| **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\* x 40%) | (16,000) |
|  | Investment in Wat December 31 | $ 314,000 |
| \* | $48,000 total dividends less $8,000 preferred dividend |  |

**Solution E2-15**

Since the total fairvalue 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 |  | $686,000 |
|  | Book value acquired: |  |  |
|  | Net assets at December 31 | $2,000,000 |  |
|  | Add: Income for 1/4 year ($320,000 25%) | 80,000 |  |
|  | Less: Dividends paid March 15 | (40,000) |  |
|  | Book value at April 1 | 2,040,000 |  |
|  | Interest acquired | 30% | 612,000 |
|  | Goodwill from investment in Tel |  | $74,000 |
|  |  |  |  |
| **2** | *Income from Tel for 2011* |  |  |
|  | Equity in income before extraordinary item |  |  |
|  | ($240,000 3/4 year 30%) |  | $ 54,000 |
|  |  |  |  |
| **3** | *Investment in Tel at December 31, 2011* |  |  |
|  | Investment cost April 1 |  | $ 686,000 |
|  | Add: Income from Tel plus extraordinary gain |  | 78,000 |
|  | Less: Dividends ($40,000 3 quarters) 30% |  | (36,000) |
|  | Investment in Tel December 31 |  | $ 728,000 |
|  |  |  |  |
| **4** | *Equity in Tel’s net assets at December 31, 2011* | |  |
|  | Tel’s stockholders’ equity January 1 |  | $2,000,000 |
|  | Add: Net income |  | 320,000 |
|  | Less: Dividends |  | (160,000) |
|  | Tel’s stockholders’ equity December 31 |  | 2,160,000 |
|  | Investment interest |  | 30% |
|  | Equity in Tel’s net assets |  | $ 648,000 |
|  |  |  |  |
| **5** | *Extraordinary gain for 2011 to be reported by Rit* | |  |
|  | Tel’s extraordinary gain 30% |  | $ 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,  2011 |  | $211,200 |
|  |  |  |  |
|  | *July 1, 2011* |  |  |
|  | Investment in Sel | 220,000 |  |
|  | Cash |  | 220,000 |
|  | To record initial investment for80% interest. |  |  |
|  |  |  |  |
|  | *November 1, 2011* |  |  |
|  | Cash | 12,800 |  |
|  | Dividend income |  | 12,800 |
|  | To record receipt of dividends ($16,000 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) 80%. |  |  |
|  |  |  |  |
| **2** | *Equity method* |  |  |
|  |  |  |  |
|  | Investment in Sel July 1, 2011 |  | $220,000 |
|  | Add: Share of reported income |  | 4,000 |
|  | Deduct: Dividends charged to investment |  | (12,800) |
|  | Deduct: Excess Depreciation |  | (6,600) |
|  | Investment in Sel balance at December 31, 2011 |  | $204,600 |
|  |  |  |  |
|  | *July 1, 2011* |  |  |
|  | Investment in Sel | 220,000 |  |
|  | Cash |  | 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 1/2 year 80%)  less excess depreciation ($132,000/10 years 1/2 year). | | |

**Solution P2-3**

1. Schedule for allocating the investment cost over the book values/fair values interest acquired:

**RAJ LTD AND ITS 40 PERCENT-OWNED EQUITY INVESTEE**

**AKASH LTD (IN THOUSANDS)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **RAJ LTD AND ITS 40%-OWNED EQUITY INVESTEE,** | | | | | |  |  |
| **AKASH LTD (IN THOUSANDS)** | | |  |  |  |  |  |
| Investment in Akash Ltd | |  |  |  |  |  | $ 800 |
| Book value of the interest acquired (40% x $2,250,000) | | | | | |  | $ 900 |
| Excess of cost over book value acquired | | | |  |  |  | -$ 100 |
|  |  |  |  |  |  |  |  |
|  | Fair Value | - | Book Value | x | % Interest Acquired | = | Amount Assigned |
| Inventory | $ 150 |  | $ 130 |  | 40% |  | $ 8 |
| Equipment-net | $ 460 |  | $ 500 |  | 40% |  | -$ 16 |
| Notes payable | $ 220 |  | $ 300 |  | 40% |  | $ 32 |
|  | Total assigned to identifiable net assets | | | | |  | $ 24 |
| Remainder assigned to gain on bargain purchase | | | | | |  | -$ 124 |
| Total excess of cost over book value acquired | | | | |  |  | -$ 100 |

2. Journal entries in Raj Ltd’s book:

*January 1*

Investment in Akash Ltd (+A) 924,000

Common stock (+SE) 700,000

Additional paid-in capital (+SE) 100,000

Gain on bargain purchase (Ga, +SE) 124,000

To record acquisitions of 1 40% equity investment in Akash Ltd.

*December 1*

Cash (+A) 64,000

Investment in Akash Ltd 64,000

To record dividends received ($160,000 x 40%)

*December 31*

Investment in Akash Ltd (+A) 92,000

Income from Akash Ltd (R, +SE) 92,000

To recognize investment income from Akash Ltd computed as follows:

40% of AkashLtd’s $400,000 net income $100,000

Excess allocated to inventories ($ 8,000)

Excess allocated to equipment

($16,000 / 4 years) $ 4,000

Excess allocated to notes payable ($ 4,000)

($32,000 / 8 years) $952,000

3. Investment in Akash Ltd Balance at December 31, 2014:

Initial cost $800,000

Gains on bargain purchase $124,000

Dividends received ($64,000)

Income from Akash Ltd $ 92,000

Ending balance $952,000

**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 40% | $ 12,000 |
| Equipment $50,000 40% | 20,000 |
| Remainder to goodwill | 128,000 |
| Excess fair value over book value | $160,000 |

|  |  |  |
| --- | --- | --- |
| *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 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 40%). | | |
|  |  |  |
| *December 31, 2011* |  |  |
| Income from Jill | 2,000 |  |
| Investment in Jill |  | 2,000 |
| To record depreciation on excess allocated to  Undervaluedequipment ($20,000/5 years 1/2 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 30%) | 1,170,000 |
|  | Excess fair value over book value | $ 510,000 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *Allocation of excess* |  |  |  |
|  |  | Fair Value — | Percent |  |
|  |  | Book Value | 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% | (30,000) |
|  | Assigned to identifiable netassets |  |  | 210,000 |
|  | Remainder to goodwill |  |  | 300,000 |
|  | Excess fair value over book value |  |  | $ 510,000 |

|  |  |  |
| --- | --- | --- |
| **2** | *Income from Tremor for 2011* |  |
|  | 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) | 6,000 |
|  | Income from Tremor | $ 321,000 |
|  |  |  |
| **3** | *Investment in Tremor balance December 31, 2011* |  |
|  | Investment cost | $1,680,000 |
|  | Add: Income from Tremor | 321,000 |
|  | Less: Dividends ($600,000 30%) | (180,000) |
|  | Investment in Tremor December 31 | $1,821,000 |
|  |  |  |
|  | *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 | 300,000 |
|  | Investment in Tremor account | $1,821,000 |

**Solution P2-6**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | Preliminary computations: | | | | | | | |  |
|  | Javier CA’s net assets at January 1 | | | | | | | | $1,200,000 |
|  | Income for the first quarter ($100,000 x 3 / 12) | | | | | | | | 78,000 |
|  | Javier CA’s net assets at March 31 | | | | | | | | $1,225,000 |
| **WERO CA AND ITS 40%-OWNED EQUITY INVESTEE,** | | | | | | | |  |  | | |
| **JAVIER CA (IN THOUSANDS)** | | | | |  |  |  |  |  | | |
| Investment in Javier CA | | | |  |  |  |  |  | $ 450 | | |
| Book value of the interest acquired (30% x $1,225,000) | | | | | | | |  | $ 367.5 | | |
| Excess of cost over book value acquired | | | | | |  |  |  | $ 82.5 | | |
|  | | |  |  |  |  |  |  |  | | |
|  | | |  |  | Undervalued (Overvalued) | x | % Interest Acquired | = | Amount Assigned | | |
| Inventory | | |  |  | -$ 100 |  | 30% |  | -$ 30 | | |
| Equipment-net | | |  |  | $ 300 |  | 30% |  | $ 90 | | |
|  | | | Total assigned to identifiable net assets | | | | |  | $ 60 | | |
| Remainder assigned to goodwill | | | | | |  |  |  | $ 22.5 | | |
| Total excess of cost over book value acquired | | | | | | |  |  | $ 82.5 | | |

**2**. Journal entries in Wero CA book:

*March 31*

Investment in Javier CA (+A) 450,000

Cash (-A) 450,000

*July 1*

Cash (+A) 15,000

Investment in Javier CA (-A) 15,000

To record dividends received ($50,000 x 30%)

*December 31*

Investment in Javier CA (+A) 45,000

Income from Javier CA (R, +SE) 45,000

To recognize investment income from Javier CA computed as follows:

30% of Javier CA’s $100,000 net income $30,000

Excess allocated to inventories $30,000

Excess allocated to equipment ($90,000 / 6 years) ($15,000)

$45,000

**3**. Investment in Javier CA Balance at December 31, 2014:

Initial cost $450,000

Dividends received ($15,000)

Income from Javier CA $45,000

Ending balance $480,000

**Solution P2-7**

|  |  |
| --- | --- |
| **Dil Corporation** |  |
| Partial Income Statement |  |
| for the year ended December 31, 2013 |  |
|  |  |
| *Investment income* |  |
| Income from Lar (equity basis) | $45,000 |
| Income before extraordinary item | 45,000 |
|  |  |
| *Extraordinary gain* |  |
| Share of Lar’s operating loss carryforward | 30,000 |
| Net income | $ 75,000 |

**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) | (2,650,000) |
| Excess book value over fair value | $ (450,000) |
|  |  |
| *Excess allocated* |  |
| Overvalued plant assets | $ (500,000) |
| Undervalued inventories | 50,000 |
| Excess book value over fair value | $ (450,000) |

|  |  |  |  |
| --- | --- | --- | --- |
| **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 x 90%) /9 years) 1/2 year | | 25,000 |
|  | Less: 90% of Undervaluation allocated to inventories | | (45,000) |
|  | Income from Jen — 2011 | | $ 92,500 |
|  |  | |  |
| **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 | | $2,055,000 |
|  |  |  |  |
| **3** | *Journal entries to account for investment in 2013* | |  |
|  | Cash (or Dividends receivable) | 135,000 |  |
|  | Investment in Jen |  | 135,000 |
|  | To record receipt of dividends ($150,000 90%). | | |
|  |  |  |  |
|  | Investment in Jen | 230,000 |  |
|  | Income from Jen |  | 230,000 |

To record income from Jen computed as follows: Laura’sshare 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. | $ 960,000 |
|  | Book value acquired ($2,000,000 net assets 40%) | 800,000 |
|  | Excess fair value over book value | $ 160,000 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *Allocation of excess* |  |  |  |
|  |  | Fair Value — | Percent |  |
|  |  | Book Value | 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 |  |  | $160,000 |

|  |  |  |
| --- | --- | --- |
| **2** | *Market price of $16 for Tricia’s shares* |  |
|  | Cost of investment in Lisa |  |
|  | (40,000 shares $16)Other direct costs are $0 | $ 640,000 |
|  | Book value acquired ($2,000,000 net assets 40%) | 800,000 |
|  | Excess book value over fair value | $(160,000) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *Excess allocated to* | |  |  |
|  |  | Fair Value — | Percent |  |
|  |  | Book Value | 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) |
|  |  |  |  | $(160,000) |

**Solution P2-10**

|  |  |  |
| --- | --- | --- |
| **1** | *Income from Prima — 2011* |  |
|  | Fred’s share of Prima’s income for 2011 |  |
|  | $40,000 1/2 year 15% | $ 3,000 |
|  |  |  |
| **2** | *Investment in Prima balance December 31, 2011* |  |
|  | Investment in Prima at cost | $ 48,750 |
|  | Add: Income from Prima | 3,000 |
|  | Less: Dividends from Prima November 1($15,000 15%) | (2,250) |
|  | Investment in Prima balance December 31 | $ 49,500 |
|  |  |  |
| **3** | *Income from Prima — 2012* |  |
|  | Fred’s share of Prima’s income for 2012: |  |
|  | $60,000 income 15% interest 1 year | $ 9,000 |
|  | $60,000 income 30% interest 1 year | 18,000 |
|  | $60,000 income 45% interest 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) | | 261,000 |
|  | Add: Income for 2012 (from 3) | | 33,750 |
|  | Less: Dividends for 2012 ($15,000 45%) + ($15,000 90%) | | (20,250) |
|  | Investment in Prima balance at December 31 | | $324,000 |
|  |  |  |  |
|  | *Alternative solution* |  |  |
|  | Investment cost ($48,750 + $99,000 + $162,000) |  | $309,750 |
|  | Add: Share of reported income |  |  |
|  | 2011 — $40,000 1/2 year 15% | $ 3,000 |  |
|  | 2012 — $60,000 1 year 45% | 27,000 |  |
|  | 2012 — $60,000 1/4 year 45% | 6,750 | 36,750 |
|  | Less: Dividends |  |  |
|  | 2011 — $15,000 15% | $ 2,250 |  |
|  | 2012 — $15,000 45% | 6,750 |  |
|  | 2012 — $15,000 90% | 13,500 | (22,500) |
|  | 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 | 20,000a | 32,000b | 52,000c | 48,000d | 152,000 |
| Overstatement | $20,000 | $ -0- | $ -0- | $ -0- | $ 20,000 |

a($100,000 1/2 year 40%)

b($80,000 40%)

c($130,000 40%)

d($120,000 40%)

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

|  |  |  |
| --- | --- | --- |
|  | Investment in Sue per books December 31 | $400,000 |
|  | Less: Overstatement | 20,000 |
|  | Correct investment in Sue balance December 31 | $380,000 |
|  |  |  |
|  | *Check* |  |
|  | Underlying equity in Sue ($900,000 40%) | $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 $13) $10,000 direct costs must be expensed. | $182,000 |
|  | Book value acquired $190,000 70% | 133,000 |
|  | Excess fair value over book value | $ 49,000 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | *Excess allocated* |  |  |  |  |
|  |  |  |  | Interest |  |
|  |  | Fair Value — | Book Value | 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 | | |  | 14,000 |
|  | Excess fair value over book value | | |  | $ 49,000 |

**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 | (5,250) |
|  | Investment income from Jojo | $ 43,750 |

**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) | (28,000) |
|  | Investment in Jojo balance December 31 | $197,750 |
|  |  |  |
|  | *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 | 14,000 |
|  | Investment balance | $197,750 |
|  |  |  |
| \* | $100,000 (C/S) + $70,000 (R/E) + $80,000 (current earnings) -$40,000 (Dividends) = $210,000 |  |