Chapter 2
Solution Manual for Advanced Accounting
12th Edition by Beams


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.
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.

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.

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.

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.

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

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.

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.

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.

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

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  Bow’s percentage ownership in Tre
Bow’s 10,000 shares/(30,000 + 10,000) shares = 25%

2 Goodwill

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Investment cost</td>
<td>$250,000</td>
</tr>
<tr>
<td>Book value ($500,000 + $250,000) × 25%</td>
<td>(187,500)</td>
</tr>
<tr>
<td>Goodwill</td>
<td>$62,500</td>
</tr>
</tbody>
</table>

Solution E2-4

Income from Med for 2011

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

Solution E2-5

1 Income from Oak

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Share of Oak’s reported income ($400,000 × 30%)</td>
<td>$120,000</td>
</tr>
<tr>
<td>Less: Excess allocated to inventory</td>
<td>(50,000)</td>
</tr>
<tr>
<td>Less: Depreciation of excess allocated to building</td>
<td>(25,000)</td>
</tr>
<tr>
<td>($100,000/4 years)</td>
<td></td>
</tr>
<tr>
<td>Income from Oak</td>
<td>$45,000</td>
</tr>
</tbody>
</table>

2 Investment account balance at December 31

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of investment in Oak</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Add: Income from Oak</td>
<td>45,000</td>
</tr>
<tr>
<td>Less: Dividends ($100,000 × 30%)</td>
<td>(30,000)</td>
</tr>
<tr>
<td>Investment in Oak December 31</td>
<td>$1,015,000</td>
</tr>
</tbody>
</table>

Alternative solution

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Underlying equity in Oak at January 1 ($750,000/.3)</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Income less dividends</td>
<td>300,000</td>
</tr>
<tr>
<td>Underlying equity December 31</td>
<td>2,800,000</td>
</tr>
</tbody>
</table>
Interest owned  
Book value of interest owned December 31  
Add: Unamortized excess  
Investment in Oak December 31  

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest owned</td>
<td>30%</td>
</tr>
<tr>
<td>Book value of interest owned December 31</td>
<td>840,000</td>
</tr>
<tr>
<td>Add: Unamortized excess</td>
<td>175,000</td>
</tr>
<tr>
<td>Investment in Oak December 31</td>
<td>$1,015,000</td>
</tr>
</tbody>
</table>

Solution E2-6

*Journal entry on Man’s books*

- Investment in Nib ($1,200,000 x 40%)  
- Loss from discontinued operations  
- Income from Nib  

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in Nib ($1,200,000 x 40%)</td>
<td>480,000</td>
</tr>
<tr>
<td>Loss from discontinued operations</td>
<td>80,000</td>
</tr>
<tr>
<td>Income from Nib</td>
<td>560,000</td>
</tr>
</tbody>
</table>

To recognize income from 40% investment in Nib.
Solution E2-7

1  a
Dividends received from Ben ($120,000 \times 15\%) $ 18,000
Share of income since acquisition of interest
   2011 ($20,000 \times 15\%) (3,000)
   2012 ($80,000 \times 15\%) (12,000)
Excess dividends received over share of income $ 3,000

Investment in Ben January 3, 2011 $ 50,000
Less: Excess dividends received over share of income (3,000)
Investment in Ben December 31, 2012 $ 47,000

2  b
Cost of 10,000 of 40,000 shares outstanding $1,400,000
Book value of 25% interest acquired ($4,000,000 stockholders’
equity at December 31, 2011 + $1,400,000 from additional stock issuance) \times 25\% 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
Book value acquired ($8,000,000 × 40%)
Excess fair value over book value

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  *Income from Run*

Share of income to common ($400,000 - $30,000 preferred dividends) \( \times 30\% \)  
\[
\text{Income from Run} = (400,000 - 30,000) \times 0.30 = 111,000
\]

2  *Investment in Run December 31, 2012*

NOTE: The $50,000 direct costs of acquiring the investment must be expensed when incurred. They are not a part of the cost of the investment.

Investment cost  
Add: Income from Run  
Less: Dividends from Run ($200,000 dividends - $30,000 dividends to preferred) \( \times 30\% \)  
\[
\text{Investment in Run December 31, 2012} = 1,200,000 + 111,000 - 51,000 = 1,260,000
\]

Solution E2-10

1  *Income from Tee* ($400,000 - $300,000) \( \times 25\% \)

Investment income October 1 to December 31  
\[
\text{Investment income October 1 to December 31} = (400,000 - 300,000) \times 0.25 = 25,000
\]

2  *Investment balance December 31*

Investment cost October 1  
Add: Income from Tee  
Less: Dividends  
Investment in Tee at December 31  
\[
\text{Investment in Tee at December 31} = 600,000 + 25,000 - --- = 625,000
\]

<table>
<thead>
<tr>
<th></th>
<th>December 31</th>
<th>October 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$1,200,000</td>
<td>$900,000</td>
</tr>
<tr>
<td>Expenses</td>
<td>800,000</td>
<td>600,000</td>
</tr>
<tr>
<td>Net Income</td>
<td>$400,000</td>
<td>$300,000</td>
</tr>
</tbody>
</table>
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, 2012 to 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 \times 12,000/36,000 \text{ shares}  
Excess fair value over book value $40,000  

**Excess is allocated as follows**  
Buildings $60,000 \times 12,000/36,000 \text{ 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 \times 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 \times 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 fair value of Sel has declined by $30,000 while the fair value of the net identifiable assets is unchanged, the $30,000 decline is the impairment in goodwill for the period. The $30,000 impairment loss is deducted in calculating Par’s income from continuing operations.

**Solution E2-16**

Goodwill impairments are calculated at the business reporting unit level. Increases and decreases in fair values across business units are not offsetting. Flash must report an impairment loss of $5,000 in calculating 2012 income from continuing operations.
SOLUTIONS TO PROBLEMS

Solution P2-1

1 **Goodwill**
   Cost of investment in Tel on April 1 $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 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 for 80% 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

Preliminary computations
Cost of investment in Zel $662,000
Book value acquired ($2,000,000 × 30%) 600,000
Excess fair value over book value $62,000

Excess allocated
Undervalued inventories ($60,000 × 30%) $18,000
Overvalued building (-$120,000 × 30%) (36,000)
Goodwill for the remainder 80,000
Excess fair value over book value $62,000

1 Income from Zel
Share of Zel’s reported income ($200,000 × 30%) $60,000
Less: Excess allocated to inventories sold in 2011 (18,000)
Add: Amortization of excess allocated to overvalued building $36,000/10 years 3,600
Income from Zel — 2011 $45,600

2 Investment balance December 31, 2011
Cost of investment $662,000
Add: Income from Zel 45,600
Less: Share of Zel’s dividends ($100,000 × 30%) (30,000)
Investment in Zel balance December 31 $677,600
3  
*Vat’s share of Zel’s net assets*

Share of stockholders’ equity

\[(2,000,000 + 200,000 \text{ income} - 100,000 \text{ dividends}) \times 30\% \]

\[= 630,000\]

**Solution P2-4**

*Preliminary computations*

Investment cost of 40% interest  
\[= 380,000\]

Book value acquired \[= 500,000 + (100,000 \times 1/2 \text{ year})] \times 40% \]

Excess fair value over book value  
\[= 220,000\]

**Excess allocated**

Land $30,000 \times 40%  
\[= 12,000\]

Equipment $50,000 \times 40%  
\[= 20,000\]

Remainder to goodwill  
\[= 128,000\]

Excess fair value over book value  
\[= 160,000\]

**July 1, 2011**

Investment in Jill  
Cash  
\[= 380,000\]

To record initial investment for 40% interest in Jill.

**November 2011**

Cash (other receivables)  
Investment in Jill  
\[= 20,000\]

To record receipt of dividends ($50,000 \times 40\%).

**December 31, 2011**

Investment in Jill  
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  
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

1  Schedule to allocate fair value — book value differentials

<table>
<thead>
<tr>
<th></th>
<th>Fair Value — Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Book Value</td>
</tr>
<tr>
<td>Inventories</td>
<td>$200,000</td>
</tr>
<tr>
<td>Land</td>
<td>800,000</td>
</tr>
<tr>
<td>Buildings — net</td>
<td>500,000</td>
</tr>
<tr>
<td>Equipment — net</td>
<td>(700,000)</td>
</tr>
<tr>
<td>Bonds payable</td>
<td>(100,000)</td>
</tr>
<tr>
<td>Assigned to identifiable net assets</td>
<td>210,000</td>
</tr>
<tr>
<td>Excess fair value over book value</td>
<td>$  510,000</td>
</tr>
</tbody>
</table>

2  Income from Tremor for 2011

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Equity in income ($1,200,000 × 30%)</td>
<td>$  360,000</td>
</tr>
<tr>
<td>Less: Amortization of differentials</td>
<td></td>
</tr>
<tr>
<td>Inventories (sold in 2011)</td>
<td>(60,000)</td>
</tr>
<tr>
<td>Buildings — net ($150,000/10 years)</td>
<td>(15,000)</td>
</tr>
<tr>
<td>Equipment — net ($210,000/7 years)</td>
<td>30,000</td>
</tr>
<tr>
<td>Bonds payable ($30,000/5 years)</td>
<td>6,000</td>
</tr>
<tr>
<td>Income from Tremor</td>
<td>$  321,000</td>
</tr>
</tbody>
</table>

3  Investment in Tremor balance December 31, 2011

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<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Investment cost</td>
<td>$1,680,000</td>
</tr>
<tr>
<td>Add: Income from Tremor</td>
<td>321,000</td>
</tr>
<tr>
<td>Less: Dividends ($600,000 × 30%)</td>
<td>(180,000)</td>
</tr>
<tr>
<td>Investment in Tremor December 31</td>
<td>$1,821,000</td>
</tr>
</tbody>
</table>

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  Income from Sap
   Investment in Sap July 1, 2011 at cost  $96,000
   Book value acquired ($130,000 × 60%) 78,000
      Excess fair value over book value $18,000

   Pal’s share of Sap’s income for 2011
      ($20,000 × 1/2 year × 60%) $ 6,000
   Less: Excess Depreciation ($18,000/10 years × 1/2 year) 900
   Income from Sap for 2011 $ 5,100

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

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’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.
Book value acquired ($2,000,000 net assets × 40%)  800,000
Excess fair value over book value  $ 160,000

Allocation of excess

<table>
<thead>
<tr>
<th></th>
<th>Fair Value</th>
<th>Percent</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventories</td>
<td>$ 200,000</td>
<td>40%</td>
<td>$ 80,000</td>
</tr>
<tr>
<td>Land</td>
<td>400,000</td>
<td>40%</td>
<td>160,000</td>
</tr>
<tr>
<td>Buildings — net</td>
<td>(400,000)</td>
<td>40%</td>
<td>(160,000)</td>
</tr>
<tr>
<td>Equipment — net</td>
<td>200,000</td>
<td>40%</td>
<td>80,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>160,000</td>
</tr>
<tr>
<td>Total allocated</td>
<td>$ 160,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Fair Value</th>
<th>Percent</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventories</td>
<td>$200,000</td>
<td>40%</td>
<td>$ 80,000</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>As reported</td>
<td>$40,000</td>
<td>$32,000</td>
<td>$52,000</td>
<td>$48,000</td>
<td>$172,000</td>
</tr>
<tr>
<td>Correct amounts</td>
<td>$20,000a</td>
<td>$32,000b</td>
<td>$52,000c</td>
<td>$48,000d</td>
<td>$152,000</td>
</tr>
<tr>
<td>Overstatement</td>
<td>$20,000</td>
<td>$-0-</td>
<td>$-0-</td>
<td>$-0-</td>
<td>$20,000</td>
</tr>
</tbody>
</table>

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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in Sue per books December 31</td>
<td>$400,000</td>
</tr>
<tr>
<td>Less: Overstatement</td>
<td>20,000</td>
</tr>
<tr>
<td>Correct investment in Sue balance December 31</td>
<td>$380,000</td>
</tr>
</tbody>
</table>

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 $182,000
must be expensed.
Book value acquired $190,000 × 70% 133,000
Excess fair value over book value $ 49,000

Excess allocated

<table>
<thead>
<tr>
<th></th>
<th>Fair Value</th>
<th>Book Value</th>
<th>Acquired</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventories</td>
<td>$ 50,000</td>
<td>$60,000</td>
<td>70%</td>
<td>$ (7,000)</td>
</tr>
<tr>
<td>Land</td>
<td>50,000</td>
<td>30,000</td>
<td>70%</td>
<td>14,000</td>
</tr>
<tr>
<td>Equipment — net</td>
<td>135,000</td>
<td>95,000</td>
<td>70%</td>
<td>28,000</td>
</tr>
<tr>
<td>Remainder to goodwill</td>
<td></td>
<td></td>
<td></td>
<td>14,000</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>14,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>22,750</td>
</tr>
<tr>
<td>Goodwill</td>
<td>14,000</td>
</tr>
</tbody>
</table>

Investment balance  $197,750

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