# Chapter Five

# Consolidation of Lessthan-Wholly-Owned Subsidiaries Acquired at More than Book Value

## Multi-Corporate Entities

Business Combinations

# **Consolidation Concepts** and **Procedures**

Intercompany Transfers Additional Consolidation Issues

Multinational Entities

Reporting Requirements

Partnerships

Governmental and Not-for-Profit Entities

Corporations in Financial Difficulty

# CISCO ACQUIRES A CONTROLLING INTEREST IN NUOVA

In many of the examples of corporate acquisitions discussed so far, the acquiring company has purchased 100 percent of the outstanding stock of the acquired company. However, the buyer doesn't always acquire 100 percent ownership of the target company. For example, in 2006 Cisco Systems Inc. acquired 80 percent of Nuova Systems in order to take advantage of Nuova's innovative data center technology. Individual investors still held the remaining 20 percent of the company. Cisco's initial investment in Nuova was \$50 million. Accounting for this type of investment can be very complicated. First, Cisco's \$50 million investment was not intended solely to purchase Nuova's tangible assets. Cisco also paid for Nuova's potential future earnings capability, for its innovation, and for the fair value (FV) of assets in excess of their book values as of the acquisition date. Because Cisco did not purchase 100 percent of Nuova, the Cisco consolidated financial statements in future years would have to account for the portion of the company owned by the noncontrolling interest (NCI) shareholders. This chapter explores the consolidation of less-than-wholly-owned subsidiaries when there is a positive differential.



#### **LEARNING OBJECTIVES**

When you finish studying this chapter, you should be able to:

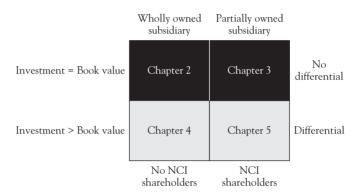
- LO 5-1 Understand and explain how the consolidation process differs when the subsidiary is less-than-wholly owned and there is a differential.
- LO 5-2 Make calculations and prepare elimination entries for the consolidation of a partially owned subsidiary when there is a complex positive differential.

- LO 5-3 Understand and explain what happens when a parent company ceases to consolidate a subsidiary.
- LO 5-4 Make calculations and prepare elimination entries for the consolidation of a partially owned subsidiary when there is a complex positive differential and other comprehensive income.

## A NONCONTROLLING INTEREST IN CONJUNCTION WITH A DIFFERENTIAL

LO 5-1

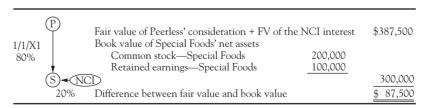
Understand and explain how the consolidation process differs when the subsidiary is less-thanwholly owned and there is a This chapter continues to build upon the foundation established in Chapters 2 through 4 related to the consolidation of majority-owned subsidiaries. In fact, Chapter 5 represents the culmination of our learning process related to procedures associated with the consolidation process. Chapter 5 combines the complexities introduced in Chapters 3 and 4. Specifically, Chapter 5 examines situations in which the acquiring company purchases less than 100 percent of the outstanding stock of the acquired company (similar to Chapter 3) and pays an amount higher than its proportionate share of the book value of net assets (resulting in a differential as introduced in Chapter 4). Once you master Chapter 5, you can handle virtually any consolidation problem!



## CONSOLIDATED BALANCE SHEET WITH MAJORITY-OWNED SUBSIDIARY

The consolidation process for a less-than-wholly-owned subsidiary with a differential is the same as the process for a wholly owned subsidiary with a differential except that the claims of the noncontrolling interest must be considered. The example of Peerless Products Corporation and Special Foods Inc. from Chapter 4 will serve as a basis for illustrating consolidation procedures when the parent has less than full ownership of a subsidiary. Assume that on January 1, 20X1, Peerless acquires 80 percent of the common stock of Special Foods for \$310,000. At that date, the fair value of the noncontrolling interest is estimated to be \$77,500. The ownership situation can be viewed as follows, when Special Foods' total fair value is equal to the sum of the fair value of the consideration given and the fair value of the noncontrolling interest:





Peerless records the acquisition on its books with the following entry:

(1)	Investment in Special Foods	310,000
	Cash	310,000

Record purchase of Special Foods stock.

FIGURE 5–1 Balance Sheets of Peerless Products and Special Foods, January 1, 20X1, Immediately after Combination

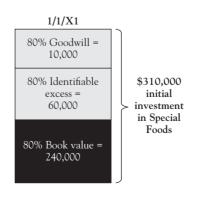
	Peerless Products	Special Foods
Assets		
Cash	\$ 40,000	\$ 50,000
Accounts Receivable	75,000	50,000
Inventory	100,000	60,000
Land	175,000	40,000
Buildings and Equipment	800,000	600,000
Accumulated Depreciation	(400,000)	(300,000)
Investment in Special Foods Stock	310,000	
Total Assets	\$1,100,000	\$500,000
Liabilities and Stockholders' Equity		
Accounts Payable	\$ 100,000	\$100,000
Bonds Payable	200,000	100,000
Common Stock	500,000	200,000
Retained Earnings	300,000	100,000
Total Liabilities and Equity	\$1,100,000	\$500,000

FIGURE 5–2 Values of Select Assets of Special Foods

	Book Value	Fair Value	Fair Value Increment
Inventory	\$ 60,000	\$ 65,000	\$ 5,000
Land	40,000	50,000	10,000
Buildings and Equipment	300,000	360,000	60,000
	\$400,000	<u>\$475,000</u>	<u>\$75,000</u>

The balance sheets of Peerless and Special Foods appear immediately after acquisition in Figure 5–1. On the acquisition date, the fair values of all of Special Foods' assets and liabilities are equal to their book values except as shown in Figure 5–2.

The excess of the \$387,500 total fair value of the consideration given and the noncontrolling interest on the date of combination over the \$300,000 book value of Special Foods is \$87,500. Of this total \$87,500 differential, \$75,000 relates to the excess of the acquisition-date fair value over the book value of Special Foods' net identifiable assets, as shown in Figure 5–2. The remaining \$12,500 of the differential, the excess of the consideration given and the noncontrolling interest over the fair value of Special Foods' net identifiable assets, is assigned to goodwill. Because Peerless acquires only 80 percent of Special Foods' outstanding common stock, Peerless' share of the total differential is \$70,000 (\$87,500  $\times$  0.80). Specifically, Peerless' share of the excess fair value over book value of identifiable net assets (NA) is \$60,000 (\$75,000  $\times$  0.80) and its share of the goodwill is \$10,000 (\$12,500  $\times$  0.80). Peerless' share of the book value of Special Foods' net assets is \$240,000 (0.80  $\times$  [CS \$200,000 + RE \$100,000]). As a result, Peerless' acquisition price of \$310,000 applies to the book value and differential components of Special Foods' fair value as follows:



Assuming that Peerless decides to prepare a consolidated balance sheet on the acquisition date, the book value component of the acquisition price is divided between Peerless and the noncontrolling interest as follows:

#### **Book Value Calculations:**

	NCI 20% +	Peerless 80% =	Common Stock	+ Retained Earnings
Book value at acquisition	60,000	240,000	200,000	100,000

This analysis leads to the following basic elimination entry:



## Basic Investment Account Elimination Entry:1

Common stock	200,000		← Common stock balance
Retained earnings	100,000		← Beginning balance in RE
Investment in Special Foods NCI in NA of Special Foods		240,000	← Peerless' share of Special Foods' NA ← NCI's share of BV

The basic elimination entry here is identical to the entry in Chapter 4 with one small exception: The credit to Investment in Special Foods was \$300,000 in Chapter 4 when Peerless purchased 100 percent of Special Foods' common stock. In this example, Peerless purchased only 80 percent of the common stock, so the \$300,000 book value of net assets is shared with the NCI shareholders. The differential can be allocated between Peerless and the noncontrolling interest as follows:

#### **Excess Value (Differential) Calculations:**

	NCI 20%	+ Peerless 80% =	Inventory	+ Land	+ Building	+ Acc. Depr.	+ Goodwill
Beginning balance	17,500	70,000	5,000	10,000	60,000	0	12,500

From this analysis, we can construct the excess value reclassification entry:

## Excess Value (Differential) Reclassification Entry:

Inventory Land Building Goodwill	5,000 10,000 60,000 12,500		<ul> <li>← Excess value at acquisition</li> <li>← Excess value at acquisition</li> <li>← Excess value at acquisition</li> <li>← Calculated value from acquisition</li> </ul>
Investment in Special Foods NCI in NA of Special Foods	,	-	← Peerless' share of differential ← NCI's share of differential

Again, this entry is identical to the one in the 100 percent owned Chapter 4 example except that the credit to Investment in Special Foods from the Chapter 4 example is now shared with the NCI shareholders. As explained in Chapter 4, Special Foods had accumulated depreciation on the acquisition date of \$300,000. The following elimination entry nets this accumulated depreciation out against the cost of the building and equipment.

### **Optional Accumulated Depreciation Elimination Entry:**

The combination of these last two elimination entries makes the building and equipment appear as if they were purchased on the acquisition date for their fair market values and recorded as new assets with zero accumulated depreciation as of that date.

<sup>&</sup>lt;sup>1</sup> To view a video explanation of this topic, visit advancedstudyguide.com.

FIGURE 5-3 Worksheet for Consolidated Balance Sheet, January 1, 20X1, Date of Combination; 80 Percent Acquisition at More than Book Value

	Peerless	Special	Elimination	on Entries	
	Products	Foods	DR	CR	Consolidated
<b>Balance Sheet</b>					
Cash	40,000	50,000			90,000
Accounts Receivable	75,000	50,000			125,000
Inventory	100,000	60,000	5,000		165,000
Investment in Special Foods	310,000			240,000	0
·				70,000	
Land	175,000	40,000	10,000		225,000
Buildings & Equipment	800,000	600,000	60,000	300,000	1,160,000
Less: Accumulated Depreciation	(400,000)	(300,000)	300,000		(400,000)
Goodwill			12,500		12,500
Total Assets	1,100,000	500,000	387,500	610,000	1,377,500
Accounts Payable	100,000	100,000			200,000
Bonds Payable	200,000	100,000			300,000
Common Stock	500,000	200,000	200,000		500,000
Retained Earnings	300,000	100,000	100,000		300,000
NCI in NA of Special Foods	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		60,000	77,500
				17,500	,
Total Liabilities & Equity	1,100,000	500,000	300,000	77,500	1,377,500



Figure 5–3 illustrates Peerless' consolidation worksheet on the date of acquisition at January 1, 20X1. Once the elimination entries are placed in the worksheet, each row is summed across to get the consolidated totals. Note that the asset amounts included in the Consolidated column, and thus in the consolidated balance sheet, consist of book values for Peerless' assets and liabilities plus acquisition-date fair values for Special Foods' assets and liabilities plus goodwill.

# CONSOLIDATED FINANCIAL STATEMENTS WITH A MAJORITY-OWNED SUBSIDIARY

LO 5-2

Make calculations and prepare elimination entries for the consolidation of a partially owned subsidiary when there is a complex positive differential. Consolidation subsequent to acquisition involves the preparation of a complete set of consolidated financial statements, as discussed in Chapter 4. To continue the illustration from the previous section beyond the date of acquisition, assume Peerless Products and Special Foods report the income and dividends during 20X1 and 20X2 shown in Figure 5–4. With respect to the assets to which the \$87,500 differential relates, assume that the entire inventory is sold during 20X1, the buildings and equipment have a remaining economic life of 10 years from the date of combination, and Special Foods uses straight-line depreciation. Furthermore, assume that management determines at the end of 20X1 that the goodwill is impaired and should be written down by \$3,125. Management has determined that the goodwill arising in the acquisition of Special Foods relates proportionately to the controlling and noncontrolling interests, as does the impairment. Finally, assume that Peerless accounts for its investment in Special Foods using the equity method.



.com

## **Initial Year of Ownership**

The business combination of Peerless Products and Special Foods occurs at the beginning of 20X1. Accordingly, Peerless records the acquisition on January 1, 20X1, as previously shown.

## Parent Company Entries

During 20X1, Peerless makes the usual equity-method entries to record income and dividends from its subsidiary (see Figure 5-4). Unlike Chapter 4, because Peerless purchased

FIGURE 5-4 **Income and Dividend Information about** Peerless Products and **Special Foods for the** Years 20X1 and 20X2

	Peerless Products	Special Foods
20X1:		
Separate operating income, Peerless	\$140,000	
Net income, Special Foods		\$50,000
Dividends	60,000	30,000
20X2:		
Separate operating income, Peerless	160,000	
Net income, Special Foods		75,000
Dividends	60,000	40,000

only 80 percent of the voting stock, it must share Special Foods' income and dividends with the subsidiary's noncontrolling stockholders. Accordingly, Peerless recognizes only its proportionate share of Special Foods' net income and dividends. Peerless records the following entries during 20X1:

(2)	Investment in Special Foods	40,000	
	Income from Special Foods		40,000
	Record Peerless' 80% share of Special Foods' 20X1 income.		
(3)	Cash	24,000	
	Investment in Special Foods		24,000

Record Peerless' 80% share of Special Foods' 20X1 dividend.

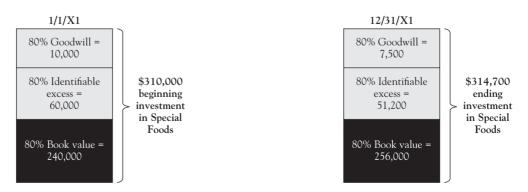
In addition, Peerless must write off a portion of the differential with the following entry:

(4)	Income from Special Foods	11,300
	Investment in Special Foods	11,300

Record amortization of excess acquisition price.

Special Foods' undervalued inventory, comprising \$5,000 of the total differential, was sold during the year. Therefore, Peerless' \$4,000 portion ( $$5,000 \times 80\%$ ) must be written off by reducing both the investment account and the parent's income from the subsidiary. Also, Peerless' portion of the excess fair value of Special Foods' buildings and equipment must be amortized at \$4,800 per year [( $$60,000 \div 10$ )  $\times 0.80$ ] over the remaining 10-year life. Finally, Peerless' portion of the goodwill impairment, 2,500 (\$3,125  $\times$  0.80), is also included in this adjustment. Thus, the entire write-off of the differential is \$11,300 (\$4,000 + \$4,800 + \$2,500). A more detailed calculation of Peerless' share of the differential amortization is illustrated below in the "Excess Value (Differential) Calculations."

The following diagrams illustrate the breakdown of the book value and excess value components of the investment account at the beginning and end of the year.



The book value component can be summarized as follows:

#### **Book Value Calculations:**

	NCI 20% +	Peerless 80%	= Common Stock	+ Retained Earnings
Original book value	60,000	240,000	200,000	100,000
+ Net Income	10,000	40,000		50,000
<ul><li>Dividends</li></ul>	(6,000)	(24,000)		(30,000)
Ending book value	64,000	256,000	200,000	120,000

The boxed numbers in the chart above comprise the basic elimination entry:

#### **Basic Investment Account Elimination Entry:**

Retained earnings Income from Special Foods NCI in NI of Special Foods Dividends declared Investment in Special Foods	256,000	← Common stock balance ← Beginning balance in RE ← Peerless' share of Special Foods' NI ← NCI's share of Special Foods' NI ← 100% of Special Foods' dividends ← Peerless' share of Special Foods' NA
NCI in NA of Special Foods		$\longleftarrow$ NCI's share of net amount of BV

We then analyze the differential and its changes during the period:

#### **Excess Value (Differential) Calculations:**

	NCI 20% +	Peerless 80%	=	Inventory	+	Land	+	Building	+	Acc. Depr.	+	Goodwill
Beginning balance	17,500	70,000		5,000		10,000		60,000		0		12,500
Amortization	(2,825)	(11,300)		(5,000)						(6,000)		(3,125)
Ending balance	14,675	58,700		0		10,000		60,000		(6,000)		9,375

The entire differential amount assigned to the inventory already passed through cost of goods sold during the year. Thus, there is no longer a differential related to inventory at the end of the year. The only other amortization item is the excess value assigned to the building, amortized over a 10-year period ( $$60,000 \div 10 = $6,000 \text{ per year}$ ). Finally, the goodwill is deemed to be impaired and worth only \$9,375.

Because Peerless' share of the amortization of the differential was already written off from the investment account against the Income from Special Foods account on its books, the changes shown in the middle row of this chart are simply reclassified from the Income from Special Foods account to the various income statement accounts to which they apply using the following worksheet entry:

#### **Amortized Excess Value Reclassification Entry:**

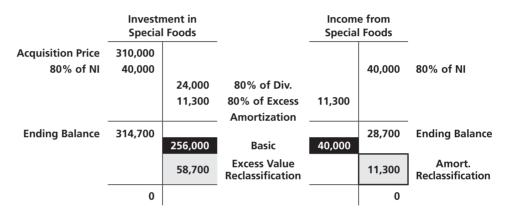
Cost of goods sold Depreciation expense Goodwill impairment loss Income from Special Foods	5,000 6,000 3,125 11,300	← Extra cost of goods sold ← Depreciation of excess building value ← Goodwill impairment ← Peerless' share of amortization
NCI in NI of Special Foods	2,825	← NCI's share of amortization

Finally, the remaining unamortized differential shown in the bottom row of the chart above is reclassified to the accounts that need to be revalued to their amortized acquisitiondate fair values:

#### **Excess Value (Differential) Reclassification Entry:**

Land Building	10,000 60,000		<ul><li>← Remaining excess value</li><li>← Remaining excess value</li></ul>
Goodwill	9,375		← Calculated value from acquisition
Accumulated depreciation		6,000	← Excess building value ÷10 years
Investment in Special Foods		58,700	← Peerless' share of differential
NCI in NA of Special Foods		14,675	← NCI's share of differential

In sum, these worksheet entries (1) eliminate the balances in the Investment in Special Foods and Income from Special Foods accounts, (2) reclassify the amortization of excess value to the proper income statement accounts, and (3) reclassify the remaining differential to the appropriate balance sheet accounts as of the end of the accounting period. The following T-accounts illustrate how Peerless' equity method investment-related accounts are eliminated.



Again, we repeat the same accumulated depreciation elimination entry this year (and every year as long as Special Foods owns the assets) that we used in the initial year.

#### **Optional Accumulated Depreciation Elimination Entry:**

Accumulated depreciation 300,000	Accumulated depreciation at the time
Building and equipment 300,000	of the acquisition netted against cost

## Consolidation Worksheet—Initial Year of Ownership

After the subsidiary income accruals are entered on Peerless' books, the adjusted trial balance data of the consolidating companies are entered in the three-part consolidation worksheet as shown in Figure 5–5. The last column in the worksheet will serve as a basis for preparing consolidated financial statements at the end of 20X1.

Once the appropriate elimination entries are placed in the consolidation worksheet in Figure 5–5, the worksheet is completed by summing each row across, taking into consideration the debit or credit effect of the eliminations.

# Consolidated Net Income and Retained Earnings



As can be seen from the worksheet in Figure 5–5, total consolidated net income for 20X1 is \$175,875 and the amount of that income accruing to the controlling interest, shown as the last number in the income statement section of the worksheet in the Consolidated column, is \$168,700. The amount of retained earnings reported in the consolidated balance sheet at December 31, 20X1, shown as the last number in the retained earnings section of the worksheet in the Consolidated column, is \$408,700. Figure 5–6 on page 211 illustrates the computation of these amounts.

FIGURE 5-5 December 31, 20X1, Equity-Method Worksheet for Consolidated Financial Statements, Initial Year of Ownership; 80 Percent Acquisition at More than Book Value

	Peerless	Special	Eliminatio	on Entries	
	Products	Foods	DR	CR	Consolidated
Income Statement					
Sales	400,000	200,000			600,000
Less: COGS	(170,000)	(115,000)	5,000		(290,000)
Less: Depreciation Expense	(50,000)	(20,000)	6,000		(76,000)
Less: Other Expenses	(40,000)	(15,000)			(55,000)
Less: Impairment Loss			3,125		3,125
Income from Special Foods	28,700		40,000	11,300	0
Consolidated Net Income	168,700	50,000	54,125	11,300	175,875
NCI in Net Income	,	·	10,000	2,825	(7,175)
Controlling Interest in Net Income	168,700	50,000	64,125	14,125	168,700
Statement of Retained Earnings					
Beginning Balance	300,000	100,000	100,000		300,000
Net Income	168,700	50,000	64,125	14,125	168,700
Less: Dividends Declared	(60,000)	(30,000)		30,000	(60,000)
Ending Balance	408,700	120,000	164,125	44,125	408,700
Balance Sheet					
Cash	194,000	75,000			269,000
Accounts Receivable	75,000	50,000			125,000
Inventory	100,000	75,000			175,000
Investment in Special Foods	314,700			256,000	0
				58,700	
Land	175,000	40,000	10,000		225,000
Buildings & Equipment	800,000	600,000	60,000	300,000	1,160,000
Less: Accumulated Depreciation	(450,000)	(320,000)	300,000	6,000	(476,000)
Goodwill			9,375		9,375
Total Assets	1,208,700	520,000	379,375	620,700	1,487,375
Accounts Payable	100,000	100,000			200,000
Bonds Payable	200,000	100,000			300,000
Common Stock	500,000	200,000	200,000		500,000
Retained Earnings	408,700	120,000	164,125	44,125	408,700
NCI in NA of Special Foods				64,000 14,675	78,675
Total Liabilities & Equity	1,208,700	520,000	364,125	122,800	1,487,375

## **Second Year of Ownership**

The equity-method and consolidation procedures employed during the second and subsequent years of ownership are the same as those used during the first year and are illustrated by continuing the Peerless Products and Special Foods example through 20X2. No further impairment of the goodwill arising from the business combination occurs in 20X2.

#### Parent Company Entries

Given the income and dividends as shown in Figure 5–4, Peerless Products records the following entries on its separate books during 20X2:

(5)	Investment in Special Foods	60,000
	Income from Special Foods	60,000

Record Peerless' 80% share of Special Foods' 20X2 income.

FIGURE 5-6 **Consolidated Net Income and Retained** Earnings, 20X1; 80 Percent Acquisition at More than Book Value

Consolidated net income, 20X1:  Peerless' separate operating income  Special Foods' net income	\$140,000 50,000
Write-off of differential related to inventory sold in 20X1  Amortization of differential related to buildings and equipment in 20X1	(5,000) (6,000)
Goodwill impairment loss	(3,125)
Consolidated net income	<u>\$175,875</u>
Income to controlling interest, 20X1:	
Consolidated net income	\$175,875
Income to noncontrolling interest	(7,175)
Income to controlling interest	<u>\$168,700</u>
Consolidated retained earnings, December 31, 20X1:	
Peerless' retained earnings on date of combination, January 1, 20X1	\$300,000
Income to controlling interest, 20X1	168,700
Dividends declared by Peerless, 20X1	(60,000)
Consolidated retained earnings	<u>\$408,700</u>

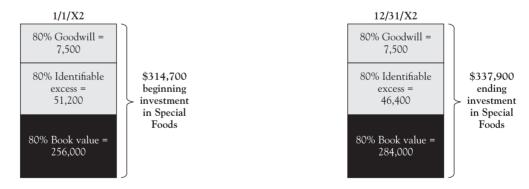
(6)	Cash	32,000	
	Investment in Special Foods		32,000
	Record Peerless' 80% share of Special Foods' 20X2 dividend.		
(7)	Income from Special Foods	4,800	
	Investment in Special Foods		4,800

Record amortization of excess acquisition price.



## Consolidation Worksheet—Second Year Following Combination

The consolidation procedures in the second year following the acquisition are very similar to those in the first year. Consistent with the process illustrated in 20X1, we follow the same process for 20X2. In order to determine the worksheet entries for 20X2, we first summarize the changes in the parent's investment account during 20X2 as follows:



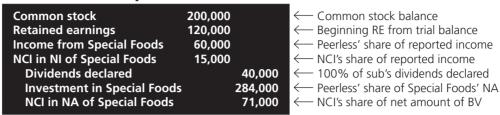
The book value component can be summarized as follows:

## **Book Value Calculations:**

	NCI 20% + Peerless 80% = Common Stock + Retained Earnings							
Beginning book value + Net income	64,000 15,000	256,000 60,000	200,000	120,000 75,000				
<ul><li>Dividends</li></ul>	(8,000)	(32,000)		(40,000)				
Ending book value	71,000	284,000	200,000	155,000				

The boxed numbers in the preceding chart comprise the basic elimination entry:

#### **Basic Elimination Entry:**



The entire differential amount assigned to the inventory already passed through cost of goods sold during the prior year period. The only other amortization item is the excess value assigned to the building, which continues to be written off over a 10-year period  $(\$60,000 \div 10 = \$6,000).$ 

#### **Excess Value (Differential) Calculations:**

	NCI 20% -	+ Peerless 80% =	Land	+ Building	+ Acc. Depr.	+ Goodwill
Beginning balances	14,675	58,700	10,000	60,000	(6,000)	9,375
Amortization	(1,200)	(4,800)			(6,000)	
Ending balance	13,475	53,900	10,000	60,000	(12,000)	9,375

Because the amortization of the differential was already written off from the investment account against the Income from Special Foods account, the change to the differential shown in the middle row of this chart is simply reclassified from the Income from Special Foods account to the income statement account to which it applies during the consolidation process. Then, the remaining amount of the differential from the last row of this chart is reclassified to the various balance accounts that need to be revalued to their amortized acquisition-date fair values:

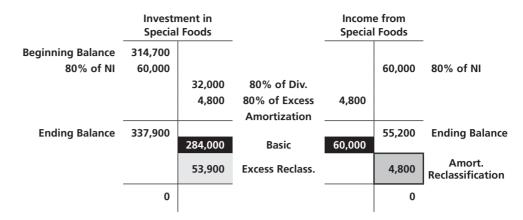
#### **Amortized Excess Value Reclassification Entry:**

Depreciation expense Income from Special Foods NCI in NI of Special Foods	6,000	4,800	← Depreciation of excess building value ← Peerless' share of amortization of diff. ← NCI's share of amortization of differential
---	-------	-------	--

## **Excess Value (Differential) Reclassification Entry:**

Land Building Goodwill	10,000 60,000 9.375	<ul> <li>← Remaining excess value</li> <li>← Remaining excess value</li> <li>← Calculated value from acquisition</li> </ul>
Accumulated depreciation	12,000	· ·
Investment in Special Foods	53,900	Peerless' share of excess value
NCI in NA of Special Foods	13,47	← NCI's share of excess value

Again, these worksheet entries (1) eliminate the balances in the Investment in Special Foods and Income from Special Foods accounts, (2) reclassify the amortization of excess value to the proper income statement accounts, and (3) reclassify the remaining differential to the appropriate balance sheet accounts at the end of the accounting period. The following T-accounts illustrate how Peerless' Investment in Special Foods and Income from Special Foods accounts are eliminated.



Again, we repeat the same accumulated depreciation elimination entry this year (and every year as long as Special Foods owns the assets) that we used in the initial year.

#### **Optional Accumulated Depreciation Elimination Entry:**

Accumulated depreciation 300,000		Accumulated depreciation at the time
Building and equipment	300,000	of the acquisition netted against cost

Figure 5–7 illustrates the worksheet to prepare a complete set of consolidated financial statements for the year 20X2. Figure 5-8 shows the computation of 20X2 consolidated net income and consolidated retained earnings at the end of 20X2.

#### Consolidated Financial Statements

Figure 5–9 on page 215 presents a consolidated income statement and retained earnings statement for the year 20X2 and a consolidated balance sheet as of December 31, 20X2.

## DISCONTINUANCE OF CONSOLIDATION

LO 5-3

Understand and explain what happens when a parent company ceases to consolidate a subsidiary.

A parent that has been consolidating a subsidiary in its financial statements should exclude that company from future consolidation if the parent can no longer exercise control over it. Control might be lost for a number of reasons, such as (1) the parent sells some or all of its interest in the subsidiary, (2) the subsidiary issues additional common stock, (3) the parent enters into an agreement to relinquish control, or (4) the subsidiary comes under the control of the government or other regulator.

If a parent loses control of a subsidiary and no longer holds an equity interest in the former subsidiary, it recognizes a gain or loss for the difference between any proceeds received from the event leading to loss of control (e.g., sale of interest, expropriation of subsidiary) and the carrying amount of the parent's equity interest. If the parent loses control but maintains a noncontrolling equity interest in the former subsidiary, it must recognize a gain or loss for the difference, at the date control is lost, between (1) the sum of any proceeds received by the parent and the fair value of its remaining equity interest in the former subsidiary and (2) the carrying amount of the parent's total interest in the subsidiary.

As an example, assume that Peerless Products sells three-quarters of its 80 percent interest in Special Foods on January 1, 20X2, for \$246,000, leaving it holding 20 percent of Special Foods' outstanding stock. On that date, assume that the fair value of Special Foods as a whole is \$410,000 and the carrying amount of Peerless' 80 percent share of Special Foods is \$314,700 (as shown earlier in the chapter). Assume the fair value of

FIGURE 5-7 December 31, 20X2, Equity-Method Worksheet for Consolidated Financial Statements, Second Year of Ownership; 80 Percent Acquisition at More than Book Value

	Peerless	Peerless Special Elimination Entries		n Entries	
	Products	Foods	DR	CR	Consolidated
Income Statement					
Sales	450,000	300,000			750,000
Less: COGS	(180,000)	(160,000)			(340,000)
Less: Depreciation Expense	(50,000)	(20,000)	6,000		(76,000)
Less: Other Expenses	(60,000)	(45,000)			(105,000)
Less: Impairment Loss					0
Income from Special Foods	55,200		60,000	4,800	0
Consolidated Net Income	215,200	75,000	66,000	4,800	229,000
NCI in Net Income	·	·	15,000	1,200	(13,800)
Controlling Interest Net Income	215,200	75,000	81,000	6,000	215,200
Statement of Retained Earnings					
Beginning Balance	408,700	120,000	120,000		408,700
Net Income	215,200	75,000	81,000	6,000	215,200
Less: Dividends Declared	(60,000)	(40,000)		40,000	(60,000)
Ending Balance	563,900	155,000	201,000	46,000	563,900
Balance Sheet					
Cash	221,000	85,000			306,000
Accounts Receivable	150,000	80,000			230,000
Inventory	180,000	90,000			270,000
Investment in Special Foods	337,900			284,000	0
				53,900	
Land	175,000	40,000	10,000		225,000
Buildings & Equipment	800,000	600,000	60,000	300,000	1,160,000
Less: Accumulated Depreciation	(500,000)	(340,000)	300,000	12,000	(552,000)
Goodwill			9,375		9,375
Total Assets	1,363,900	555,000	379,375	649,900	1,648,375
Accounts Payable	100,000	100,000			200,000
Bonds Payable	200,000	100,000			300,000
Common Stock	500,000	200,000	200,000		500,000
Retained Earnings	563,900	155,000	201,000	46,000	563,900
NCI in NA of Special Foods				71,000 13,475	84,475
Total Liabilities & Equity	1,363,900	555,000	401,000	130,475	1,648,375

FIGURE 5–8 Consolidated Net Income and Retained Earnings, 20X2; 80 Percent Acquisition at More than Book Value

Consolidated net income, 20X2: Peerless' separate operating income Special Foods' net income Amortization of differential related to buildings & equipment in 20X2	\$160,000 75,000 (6,000)
Consolidated net income	\$229,000
Income to controlling interest, 20X2: Consolidated net income Income to noncontrolling interest Income to controlling interest	\$229,000 (13,800) \$215,200
Consolidated retained earnings, December 31, 20X2: Peerless' retained earnings on date of combination, January 1, 20X1 Income to controlling interest, 20X1 Dividends declared by Peerless, 20X1	\$300,000 168,700 (60,000)
Consolidated retained earnings, December 31, 20X1 Income to controlling interest, 20X2 Dividends declared by Peerless, 20X2	\$408,700 215,200 (60,000)
Consolidated retained earnings, December 31, 20X2	\$563,900

FIGURE 5-9 Consolidated Financial Statements for Peerless Products Corporation and Special Foods Inc., 20X2

I I GOILL 5 5	Comsonauteu	I muneiur stute	11101103 101 1 0011	ess i roducts corporation at	a special roods	
			Consolidated Inc	ORATION AND SUBSIDIARY come Statement December 31, 20X2		
	Sales Cost of Goods S	Sold			\$750,000 (340,000)	
	Gross Margin Expenses: Depreciation Other Expe	on & Amortization		\$ 76,000 105,000	\$410,000	
	Total Expenses	rises		103,000	(181,000)	
	Consolidated N	et Income controlling Interest			\$229,000 (13,800)	
	Income to Cont	rolling Interest			\$215,200	
		Cons	solidated Retain	PORATION AND SUBSIDIAR' ed Earnings Statement I December 31, 20X2	Y	
		gs, January 1, 20X. rolling Interest, 20X red, 20X2			\$408,700 215,200 (60,000)	
	Retained Earnin	gs, December 31, 2	20X2		\$563,900	
		PEERLESS PR	ODUCTS CORP Consolidated December			
Assets Cash Accounts Re	eceivable		\$ 306,000 230,000	Liabilities Accounts Payable Bonds Payable	\$200,000 300,000	
Inventory Land Buildings & I Accumulated	Equipment d Depreciation	\$1,160,000 (552,000)	270,000 225,000	Stockholders' Equity Controlling Interest Common Stock	\$500,000	\$500,000
			608,000	Retained Earnings	563,900	
Goodwill			9,375	Total Controlling Interest		1,063,900
				Noncontrolling Interest		84,475
Total Assets			\$1,648,375	Total Liabilities & Equity		\$1,648,375

Peerless' remaining 20 percent interest in Special Foods is \$82,000. Peerless' gain on the sale of Special Foods stock is computed as follows:

Cash proceeds received Fair value of Peerless' remaining equity interest in Special Foods	\$246,000 82,000
Peerless' total interest in Special Foods at date of sale	\$328,000 314,700
Gain on sale of 60 percent interest in Special Foods	\$ 13,300

Peerless reports the \$13,300 gain in 20X2 income as follows:

(8)	Cash	246,000
	Investment in Special Foods Stock	232,700
	Gain on sale of investment.	13,300

Record the sale of 75% of the investment in Special Foods Stock.

Note that because Peerless no longer has a significant influence, the investment will be accounted for using the cost basis (\$82,000) going forward.

## TREATMENT OF OTHER COMPREHENSIVE INCOME

LO 5-4

Make calculations and prepare elimination entries for the consolidation of a partially owned subsidiary when there is a complex positive differential and other comprehensive income.

ASC 220-10-55 requires that companies separately report other comprehensive income (OCI), which includes all revenues, expenses, gains, and losses that under generally accepted accounting principles are excluded from net income.<sup>2</sup> Comprehensive income is the sum of net income and other comprehensive income. ASC 220-10-55 permits several different options for reporting comprehensive income, but the consolidation process is the same regardless of the reporting format.

Other comprehensive income accounts are temporary accounts that are closed at the end



FYI

Levi Strauss & Co. reported a \$138 million gain in other comprehensive income (OCI) in 2010. The portion of this gain that accrued to the NCI shareholders was \$2.1 million; the remaining \$135.9 million was attributable to the parent company's shareholders.

of each period. Instead of being closed to Retained Earnings as revenue and expense accounts are, other comprehensive income accounts are closed to a special stockholders' equity account, Accumulated Other Comprehensive Income (AOCI).

#### Modification of the Consolidation Worksheet

When a parent or subsidiary has recorded other comprehensive income, the consolidation worksheet normally includes an additional section for other comprehensive income. This section of the worksheet facilitates computation of the amount of other comprehensive income to be reported; the portion, if any, of other comprehensive income to be assigned to the noncontrolling interest; and the amount of accumulated other comprehensive income to be reported in the consolidated balance sheet. Although this extra section of the worksheet for comprehensive income could be placed after the income statement section of the standard worksheet, the format used here is to place it at the bottom of the worksheet. If neither the parent nor any subsidiary reports other comprehensive income, the section can be omitted from the worksheet. When other comprehensive income is reported, the worksheet is prepared in the normal manner, with the additional section added to the bottom. The only modification within the standard worksheet is an additional stockholders' equity account included in the balance sheet portion of the worksheet for the cumulative effects of the other comprehensive income.

To illustrate the consolidation process when a subsidiary reports other comprehensive income, assume that during 20X2 Special Foods purchases \$20,000 of investments classified as available-for-sale. By December 31, 20X2, the fair value of the securities increases to \$30,000. Other than the effects of accounting for Special Foods' investment in securities, the financial statement information reported by Peerless Products and Special Foods at December 31, 20X2, is identical to that presented in Figure 5–8.

# Adjusting Entry Recorded by Subsidiary

At December 31, 20X2, Special Foods, the subsidiary, recognizes the increase in the fair value of its available-for-sale securities by recording the following adjusting entry:

(9)10,000 Investment in Available-for-Sale Securities Unrealized Gain on Investments (OCI) 10,000

Record the increase in fair value of available-for sale securities.

The unrealized gain is not included in the subsidiary's net income but is reported by the subsidiary as an element of OCI.

<sup>&</sup>lt;sup>2</sup> Other comprehensive income elements include foreign currency translation adjustments, unrealized gains and losses on certain derivatives and investments in certain types of securities, and certain minimum pension liability adjustments.

# Adjusting Entry Recorded by Parent Company

In 20X2, Peerless records all its normal entries relating to its investment in Special Foods as if the subsidiary had not reported other comprehensive income. In addition, at December 31, 20X2, Peerless Products separately recognizes its proportionate share of the subsidiary's unrealized gain from the increase in the value of the available-for-sale securities:

(10)Investment in Special Foods 8 000 Other Comprehensive Income from Special Foods 8.000

> Record share of the increase in value of available-for-salesecurities held by subsidiary.

# Consolidation Worksheet—Second Year Following Combination

The worksheet to prepare a complete set of consolidated financial statements for the year 20X2 is illustrated in Figure 5–10. In the worksheet, Peerless' balance in the Investment in Special Foods Stock account is more than the balance in Figure 5–8. Specifically, because of the adjusting entry just mentioned, Peerless' \$8,000 proportionate share of Special Foods' unrealized gain is included in the separate section of the worksheet for comprehensive income (Other Comprehensive Income from Subsidiary—Unrealized Gain on Investments). Special Foods' trial balance has been changed to reflect (1) the reduction in the cash balance resulting from the investment acquisition, (2) the investment in available-for-sale securities, and (3) an unrealized gain of \$10,000 on the investment

## **Consolidation Procedures**

The normal elimination entries (the basic elimination entry, the amortized excess cost reclassification entry, the differential reclassification entry, and the accumulated depreciation elimination entry) were used in preparing the consolidation worksheet for 20X2 presented in Figure 5–7.

One additional entry is needed for the treatment of the subsidiary's other comprehensive income. First, the proportionate share of the subsidiary's other comprehensive income recorded by the parent in the adjusting entry previously mentioned must be eliminated to avoid double-counting the subsidiary's other comprehensive income. Thus, the adjusting entry is reversed in the worksheet. Moreover, a proportionate share of the subsidiary's other comprehensive income must be allocated to the noncontrolling interest:

#### Other Comprehensive Income Entry:

OCI from Special Foods OCI to the NCI	8,000 2,000	
	2,000	
Investment in Special Foods		8,000
NCI in NA of subsidiary		2,000

The amount of consolidated other comprehensive income reported in the consolidated financial statements is equal to the subsidiary's \$10,000 amount. The noncontrolling interest's \$2,000 proportionate share of the subsidiary's other comprehensive income is deducted to arrive at the \$8,000 other comprehensive income allocated to the controlling

Although consolidated net income is the same in Figure 5–10 as in Figure 5–7, the other comprehensive income section of the worksheet in Figure 5-10 gives explicit recognition to the unrealized gain on available-for-sale securities held by Special Foods. This permits recognition in the consolidated financial statements under any of the alternative formats permitted by the FASB.

FIGURE 5–10 December 31, 20X2, Comprehensive Income Illustration, Second Year of Ownership; 80 Percent Acquisition at More than Book Value

	Peerless	Special	Eliminatio	n Entries	
	Products	Foods	DR	CR	Consolidated
Income Statement					
Sales	450,000	300,000			750,000
Less: COGS	(180,000)	(160,000)			(340,000)
Less: Depreciation Expense	(50,000)	(20,000)	6,000		(76,000)
Less: Other Expenses	(60,000)	(45,000)	0,000		(105,000)
Less: Impairment Loss	(00,000)	(43,000)			(103,000)
Income from Special Foods	55,200		60,000	4,800	0
	<u> </u>	75.000			
Consolidated Net Income NCI in Net Income	215,200	75,000	66,000 <b>15,000</b>	4,800 1,200	229,000 (13,800)
	215 200	75 000			
Controlling Interest in Net Income	215,200	75,000	81,000	<u>6,000</u>	215,200
Statement of Retained Earnings					
Beginning Balance	408,700	120,000	120,000		408,700
Add Net Income	215,200	75,000	81,000	6,000	215,200
Less: Dividends Declared	(60,000)	(40,000)		40,000	(60,000)
Ending Balance	563,900	155,000	201,000	46,000	563,900
Balance Sheet					
Cash	221,000	65,000			286,000
Accounts Receivable	150,000	80,000			230,000
Inventory	180,000	90,000			270,000
Investment in Subsidiary		30,000		284,000	270,000
investment in Subsidiary	345,900				U
				53,900 8,000	
Investment in AFS Securities		30,000		0,000	30,000
Land	175,000	40,000	10,000		225,000
Buildings & Equipment	800,000	600,000	60,000	300,000	1,160,000
Less: Accumulated Depreciation	(500,000)	(340,000)		12,000	
Goodwill	(500,000)	(340,000)	300,000 9,375	12,000	(552,000) 9,375
Total Assets	1,371,900	565,000	379,375	657,900	1,658,375
			3/3,3/3	037,900	
Accounts Payable	100,000	100,000			200,000
Bonds Payable	200,000	100,000			300,000
Common Stock	500,000	200,000	200,000		500,000
Retained Earnings	563,900	155,000	201,000	46,000	563,900
Accumulated Other Comprehensive Income,					
12/31/X2	8,000	10,000	10,000	0	8,000
NCI in NA of Special Foods				71,000	86,475
				13,475	,
				2,000	
Total Liabilities & Equity	1,371,900	565,000	411,000	130,475	1,658,375
Other Comprehensive Income					
Accumulated Other Comprehensive Income,					
1/1/X2	0	0			0
Other Comprehensive Income from Special Foods	8,000		8,000		0
Unrealized Gain on Investments	3,000	10,000	_,000		10,000
Other Comprehensive Income to NCI		, 0 0 0	2,000		(2,000)
Accumulated Other Comprehensive					,,,,,,
Income, 12/31/X2	8,000	10,000	10,000	0	8,000
	3,000	. 0,000	,		

Consolidated financial statements for the other comprehensive income example are presented in Figure 5-11. Note that consolidated other comprehensive income includes the full \$10,000 unrealized gain. The noncontrolling interest's share is then deducted,

FIGURE 5-11 **Consolidated Financial Statements for Peerless Products Corporation** and Special Foods Inc., 20X2, Including Other **Comprehensive Income** 

Consolidated Income S For the Year Ended Decem		
Sales		\$750,000
Cost of Goods Sold		(340,000)
Gross Margin		\$410,000
Expenses:  Depreciation & Amortization Other Expenses	\$ 76,000 105,000	
Total Expenses		(181,000)
Consolidated Net Income Income to Noncontrolling Interest		\$229,000 (13,800)
Income to Controlling Interest		\$215,200
PEERLESS PRODUCTS CORPORATI Consolidated Statement of Com For the Year Ended Decem	prehensive Income	
Consolidated Net Income Other Comprehensive Income:		\$229,000
Unrealized Gain on Investments		10,000
Total Consolidated Comprehensive Income	L L	\$239,000
Less: Comprehensive Income Attribute to Noncontrolling In	terest	15,800
Comprehensive Income Attribute to Controlling Interest		\$223,200
Consolidated Statement of Fi December 31, 20		
Δεερτε		
Assets Cash		\$ 286,000
Cash Accounts Receivable		230,000
Cash Accounts Receivable Inventory		230,000 270,000
Cash Accounts Receivable		230,000
Cash Accounts Receivable Inventory Investment in Available-for-Sale Securities Land Buildings & Equipment	\$1,160,000	230,000 270,000 30,000
Cash Accounts Receivable Inventory Investment in Available-for-Sale Securities Land	\$1,160,000 (552,000)	230,000 270,000 30,000 225,000
Cash Accounts Receivable Inventory Investment in Available-for-Sale Securities Land Buildings & Equipment		230,000 270,000 30,000
Cash Accounts Receivable Inventory Investment in Available-for-Sale Securities Land Buildings & Equipment Accumulated Depreciation		230,000 270,000 30,000 225,000 608,000 9,375
Cash Accounts Receivable Inventory Investment in Available-for-Sale Securities Land Buildings & Equipment Accumulated Depreciation Goodwill Total Assets		230,000 270,000 30,000 225,000
Cash Accounts Receivable Inventory Investment in Available-for-Sale Securities Land Buildings & Equipment Accumulated Depreciation Goodwill		230,000 270,000 30,000 225,000 608,000 9,375
Cash Accounts Receivable Inventory Investment in Available-for-Sale Securities Land Buildings & Equipment Accumulated Depreciation  Goodwill  Total Assets Liabilities Accounts Payable Bonds Payable Total Liabilities Stockholders' Equity	(552,000) \$ 200,000	230,000 270,000 30,000 225,000 608,000 9,375
Cash Accounts Receivable Inventory Investment in Available-for-Sale Securities Land Buildings & Equipment Accumulated Depreciation  Goodwill  Total Assets Liabilities Accounts Payable Bonds Payable Total Liabilities Stockholders' Equity Controlling Interest: Common Stock Retained Earnings	\$ 200,000 300,000 \$ 500,000 563,900	230,000 270,000 30,000 225,000 608,000 9,375 \$1,658,375
Cash Accounts Receivable Inventory Investment in Available-for-Sale Securities Land Buildings & Equipment Accumulated Depreciation  Goodwill  Total Assets Liabilities Accounts Payable Bonds Payable Total Liabilities Stockholders' Equity Controlling Interest: Common Stock	\$ 200,000 300,000 \$ 500,000	230,000 270,000 30,000 225,000 608,000 9,375 \$1,658,375
Cash Accounts Receivable Inventory Investment in Available-for-Sale Securities Land Buildings & Equipment Accumulated Depreciation  Goodwill  Total Assets Liabilities Accounts Payable Bonds Payable Total Liabilities  Stockholders' Equity Controlling Interest: Common Stock Retained Earnings Accumulated Other Comprehensive Income Total Controlling Interest	\$ 200,000 \$ 200,000 \$ 500,000 \$ 563,900 8,000 \$ 1,071,900	230,000 270,000 30,000 225,000 608,000 9,375 \$1,658,375

along with its share of consolidated net income, to arrive at the consolidated comprehensive income allocated to the controlling interest. The amount of other comprehensive income allocated to the controlling interest is carried to the Accumulated Other Comprehensive Income that is reported in the consolidated balance sheet, and the noncontrolling interest's share is included in the Noncontrolling Interest amount in the consolidated balance sheet. The FASB requires that the amount of each other comprehensive income element allocated to the controlling and noncontrolling interests be disclosed in the consolidated statements or notes.

# **Consolidation Worksheet—Comprehensive Income** in Subsequent Years

Each year following 20X2, Special Foods will adjust the unrealized gain on investments on its books for the change in fair value of the available-for-sale securities. For example, if Special Foods' investment increased in value by an additional \$5,000 during 20X3, Special Foods would increase by \$5,000 the carrying amount of its investment in securities and recognize as an element of 20X3's other comprehensive income an unrealized gain of \$5,000. Under equity-method recording, Peerless would increase its Investment in Special Foods Stock account and record its \$4,000 share of the subsidiary's other comprehensive income.

The elimination entries required to prepare the consolidation worksheet at December 31, 20X3, would include the normal elimination entries (the basic elimination entry, the amortized excess cost reclassification entry, the differential reclassification entry, and the accumulated depreciation elimination entry). In addition, the basic elimination entry would be expanded to eliminate the subsidiary's \$10,000 beginning Accumulated Other Comprehensive Income balance and to increase the noncontrolling interest by its proportionate share of the subsidiary's beginning Accumulated Other Comprehensive Income amount ( $$10,000 \times 0.20$ ). The Other Comprehensive Income elimination entry allocates the 20X3 other comprehensive income to the noncontrolling interest:

## Other Comprehensive Income Entry:

OCI from Special Foods OCI to the NCI	4,000 1,000	
Investment in Special Foods NCI in NA of subsidiary	.,	4,000 1,000

# Summary of **Key Concepts**

The procedures and worksheet for consolidating less-than-wholly-owned subsidiaries are the same as discussed in Chapter 4 for wholly owned subsidiaries, with several modifications. The worksheet elimination entries are modified to include the noncontrolling shareholders' claim on the income and assets of the subsidiary. The noncontrolling interest has a claim on subsidiary assets based on its acquisition-date fair value. If the acquisition-date fair value of the consideration given in a business combination, plus the fair value of any noncontrolling interest, exceeds the book value of the subsidiary, the difference is referred to as a differential and increases both the controlling and noncontrolling interests. The subsidiary's assets and liabilities are valued in consolidation based on their full acquisition-date fair values, with goodwill recognized at acquisition for the difference between (1) the sum of the fair value of the consideration given in the combination and the fair value of the noncontrolling interest and (2) the fair value of the subsidiary's net identifiable assets. Any subsequent write-off of the differential reduces both the controlling and noncontrolling

Consolidated net income is equal to the parent's income from its own operations plus the subsidiary's net income adjusted for any amortization or write-off of the differential. The amount of consolidated net income attributable to the noncontrolling interest is equal to the noncontrolling interest's proportionate share of the subsidiary's net income less a proportionate share of any differential write-off. The income attributable to the controlling interest is equal to consolidated net income less the income attributable to the noncontrolling interest.

A subsidiary's other comprehensive income for the period must be recognized in consolidated other comprehensive income and allocated between the controlling and noncontrolling interests. The consolidation worksheet is modified to accommodate the other comprehensive income items by adding a special section at the bottom.

# **Kev Terms**

accumulated other comprehensive income (AOCI), 216 comprehensive income, 216 other comprehensive income (OCI), 216

#### Appendix **5**A Additional Consolidation Details

Chapters 3, 4, and 5 provide a conceptual foundation for preparing consolidated financial statements and a description of the basic procedures used in preparing consolidated statements. Before moving on to intercompany transactions in Chapters 6 through 8, several additional items should be considered to provide completeness and clarity.

# SUBSIDIARY VALUATION ACCOUNTS AT ACQUISITION

ASC 805-20-30 indicates that all assets and liabilities acquired in a business combination should be valued at their acquisition-date fair values and no valuation accounts are to be carried over. Although the application of this rule is clear-cut in merger-type business combinations, its application in consolidation following a stock acquisition is less clear. A subsidiary maintains an ongoing set of books and, unless push-down accounting is employed, it will carry forward its accounts. For some valuation accounts, such as accumulated depreciation, theory has dictated that the acquisition-date amount of the valuation account should be offset against the related asset account each time consolidated statements are prepared. Nevertheless, as an expediency, and because of a lack of materiality, companies generally have not made this offset, with no effect on the net amount of the asset. That is not expected to change under ASC 805-20-30. For some other valuation accounts, depending on their nature and materiality and how the amounts work out over time, they may have to be offset each time consolidated statements are prepared, at least for some number of periods. This is the reason for the optional accumulated depreciation elimination entry.

# **NEGATIVE RETAINED EARNINGS OF SUBSIDIARY** AT ACQUISITION

A parent company may acquire a subsidiary with a negative or debit balance in its retained earnings account. An accumulated deficit of a subsidiary at acquisition causes no special problems in the consolidation process. The basic investment account elimination entry is the same in the consolidation worksheet except that the debit balance in the subsidiary's Retained Earnings account is eliminated with a credit entry. Thus, the basic investment account elimination entry appears as follows:

#### **Basic Investment Account Elimination Entry:**

Common stock	XX	
Income from Special Foods	XX	
NCI in NI of Special Foods	XX	
Retained earnings		XX
Dividends declared		XX
Investment in Special Foods		XX
NCI in NA of Special Foods		XX
	Income from Special Foods NCI in NI of Special Foods Retained earnings Dividends declared Investment in Special Foods	Income from Special Foods XX NCI in NI of Special Foods XX Retained earnings Dividends declared Investment in Special Foods

# OTHER STOCKHOLDERS' EQUITY ACCOUNTS

The discussion of consolidated statements up to this point has dealt with companies having stockholders' equity consisting only of retained earnings and a single class of capital stock issued at par. Typically, companies have more complex stockholders' equity structures, often including preferred stock and various types of additional contributed capital. In general, all stockholders' equity accounts accruing to the common shareholders receive the same treatment as common stock and are eliminated at the time common stock is eliminated. The treatment of preferred stock in the consolidation process is discussed in Chapter 9.

# SUBSIDIARY'S DISPOSAL OF DIFFERENTIAL-**RELATED ASSETS**

The disposal of an asset usually has income statement implications. If the asset is held by a subsidiary and is one to which a differential is assigned in the consolidation worksheet, both the parent's equity-method income and consolidated net income are affected. On the parent's books, the portion of the differential included in the subsidiary investment account that relates to the asset sold must be written off by the parent under the equity method as a reduction in both the income from the subsidiary and the investment account. In consolidation, the portion of the differential related to the asset sold is treated as an adjustment to consolidated income.

## Inventory

Any inventory-related differential is assigned to inventory for as long as the subsidiary holds the inventory units. In the period in which the inventory units are sold, the inventory-related differential is assigned to Cost of Goods Sold, as illustrated previously in Figure 5–5.

The inventory costing method used by the subsidiary determines the period in which the differential cost of goods sold is recognized. When the subsidiary uses FIFO inventory costing, the inventory units on hand on the date of combination are viewed as being the first units sold after the combination. Therefore, the differential normally is assigned to cost of goods sold in the period immediately after the combination. When the subsidiary uses LIFO inventory costing, the inventory units on the date of combination are viewed as remaining in the subsidiary's inventory. Thus, when the subsidiary uses LIFO inventory costing, the differential is not assigned to cost of goods sold unless the inventory level drops below its level at the date of combination.

#### Fixed Assets

A differential related to land held by a subsidiary is added to the Land balance in the consolidation worksheet each time a consolidated balance sheet is prepared. If the subsidiary sells the land to which the differential relates, the differential is treated in the consolidation worksheet as an adjustment to the gain or loss on the sale of the land in the period of the sale.

To illustrate, assume that on January 1, 20X1, Pluto purchases all the common stock of Star at \$10,000 more than book value. All the differential relates to land that Star had purchased earlier for \$25,000. So long as Star continues to hold the land, the \$10,000 differential is assigned to Land in the consolidation worksheet. If Star sells the land to an unrelated company for \$40,000, the following entry is recorded on Star's books:

(11)	Cash	40,000	
	Land		25,000
	Gain on Sale of Land		15,000
	Pocard sale of land		

While a gain of \$15,000 is appropriate for Star to report, the accounting basis of the land to the consolidated entity is \$35,000 (\$25,000 + \$10,000). Therefore, the consolidated enterprise must report a gain of only \$5,000. To reduce the \$15,000 gain reported by Star to the \$5,000 gain that should be reported by the consolidated entity, the following elimination is included in the consolidation worksheet for the year of the sale:

Eliminate Gain on Sale of Land:		
Gain on sale of land	10,000	
Income from Star		10,000

If, instead, Star sells the land for \$32,000, the \$7,000 (\$32,000 - \$25,000) gain recorded by Star is eliminated, and a loss of \$3,000 (\$32,000 - \$35,000) is recognized in the consolidated income statement. The elimination entry in this case is

#### Eliminate Gain and Record Loss on Sale of Land:

Gain on sale of land	7,000	
Loss on sale of land	3,000	
Income from Star	10,000	

When the equity method is used on the parent's books, the parent must adjust the carrying amount of the investment and its equity-method income in the period of the sale to write off the differential, as discussed in Chapter 2. Thereafter, the \$10,000 differential no longer exists.

The sale of differential-related equipment is treated in the same manner as land except that the amortization for the current and previous periods must be considered as well as any accumulated depreciation that may have existed at the acquisition date that is being removed from the records. If all of the assets associated with that accumulated depreciation are sold, there is no need for the optional entry after the sale of those assets.

Questions		
LO 5-1	Q5-1	Where is the balance assigned to the noncontrolling interest reported in the consolidated balance sheet?
LO 5-1	Q5-2	Why must a noncontrolling interest be reported in the consolidated balance sheet?
LO 5-1	Q5-3	How does the introduction of noncontrolling shareholders change the consolidation worksheet?
LO 5-1	Q5-4	How is the amount assigned to the noncontrolling interest normally determined when a consolidated balance sheet is prepared immediately after a business combination?
LO 5-2	Q5-5	What portion of consolidated retained earnings is assigned to the noncontrolling interest in the consolidated balance sheet?
LO 5-2	Q5-6	When majority ownership is acquired, what portion of the fair value of assets held by the subsidiary at acquisition is reported in the consolidated balance sheet?
LO 5-2	Q5-7	When majority ownership is acquired, what portion of the goodwill reported in the consolidated balance sheet is assigned to the noncontrolling interest?
LO 5-2	Q5-8	How is the income assigned to the noncontrolling interest normally computed?
LO 5-2	Q5-9	How is income assigned to the noncontrolling interest shown in the consolidation worksheet?
LO 5-2	Q5-10	How are dividends paid by a subsidiary to noncontrolling shareholders treated in the consolidation worksheet?
LO 5-3	Q5-11	Under what circumstances would a parent company cease consolidation of a subsidiary? Explain.
LO 5-4	Q5-12	How do other comprehensive income elements reported by a subsidiary affect the consolidated financial statements?
LO 5-4	Q5-13	What portion of other comprehensive income reported by a subsidiary is included in the consolidated statement of comprehensive income as accruing to parent company shareholders?
	Q5-14A	What effect does a negative retained earnings balance on the subsidiary's books have on consolidation procedures?
	Q5-15A	What type of adjustment must be made in the consolidation worksheet if a differential is assigned to land and the subsidiary disposes of the land in the current period?

# Cases

LO 5-2

Analysis

## **Consolidation Worksheet Preparation**

The newest clerk in the accounting office recently entered trial balance data for the parent company and its subsidiaries in the company's consolidation program. After a few minutes of additional work needed to eliminate the intercompany investment account balances, he expressed his satisfaction

<sup>&</sup>quot;A" indicates that the item relates to Appendix 5A.

at having completed the consolidation worksheet for 20X5. In reviewing the printout of the consolidation worksheet, other employees raised several questions, and you are asked to respond.

## Required

Indicate whether each of the following questions can be answered by looking at the data in the consolidation worksheet (indicate why or why not):

- a. Is it possible to tell if the parent is using the equity method in recording its ownership of each subsidiary?
- b. Is it possible to tell if the correct amount of consolidated net income has been reported?
- c. One of the employees thought the parent company had paid well above the fair value of net assets for a subsidiary purchased on January 1, 20X5. Is it possible to tell by reviewing the consolidation worksheet?
- d. Is it possible to determine from the worksheet the percentage ownership of a subsidiary held by the parent?

LO 5-2

#### C5-2 **Consolidated Income Presentation**

#### Research

Standard Company has a relatively high profit margin on its sales, and Jewel Company has a substantially lower profit margin. Standard holds 55 percent of Jewel's common stock and includes Jewel in its consolidated statements. Standard and Jewel reported sales of \$100,000 and \$60,000, respectively, in 20X4. Sales increased to \$120,000 and \$280,000 for the two companies in 20X5. The average profit margins of the two companies remained constant over the two years at 60 percent and 10 percent, respectively.

Standard's treasurer was aware that the subsidiary was awarded a major new contract in 20X5 and anticipated a substantial increase in net income for the year. She was disappointed to learn that consolidated net income allocated to the controlling interest had increased by only 38 percent even though sales were 2.5 times higher than in 20X4. She is not trained in accounting and does not understand the fundamental processes used in preparing Standard's consolidated income statement. She does know, however, that the earnings per share figures reported in the consolidated income statement are based on income allocated to the controlling interest and she wonders why that number isn't higher.

## Required

As a member of the accounting department, you have been asked to prepare a memo to the treasurer explaining how consolidated net income is computed and the procedures used to allocate income to the parent company and to the subsidiary's noncontrolling shareholders. Include in your memo citations to or quotations from the authoritative literature. To assist the treasurer in gaining a better understanding, prepare an analysis showing the income statement amounts actually reported for 20X4 and 20X5.

LO 5-1

#### **Pro Rata Consolidation**

## Research

Rose Corporation and Krome Company established a joint venture to manufacture components for both companies' use on January 1, 20X1, and have operated it quite successfully for the past four years. Rose and Krome both contributed 50 percent of the equity when the joint venture was created. Rose purchases roughly 70 percent of the output of the joint venture and Krome purchases 30 percent. Rose and Krome have equal numbers of representatives on the joint venture's board of directors and participate equally in its management. Joint venture profits are distributed at year-end on the basis of total purchases by each company.

Rose has been using the equity method to report its investment in the joint venture; however, Rose's financial vice president believes that each company should use pro rata consolidation. As a senior accountant at Rose, you have been asked to prepare a memo discussing those situations in which pro rata consolidation may be appropriate and to offer your recommendation as to whether Rose should continue to use the equity method or switch to pro rata consolidation. Include in your memo citations of and quotations from the authoritative literature to support your arguments.

LO 5-1

#### C5-4 **Elimination Procedures**

#### **Communication**

A new employee has been given responsibility for preparing the consolidated financial statements of Sample Company. After attempting to work alone for some time, the employee seeks assistance in gaining a better overall understanding of the way in which the consolidation process works.

Uploaded By: anonymous

#### Required

You have been asked to provide assistance in explaining the consolidation process.

- a. Why must the elimination entries be entered in the consolidation worksheet each time consolidated statements are prepared?
- b. How is the beginning-of-period noncontrolling interest balance determined?
- c. How is the end-of-period noncontrolling interest balance determined?
- d. Which of the subsidiary's account balances must always be eliminated?
- e. Which of the parent company's account balances must always be eliminated?

# **Changing Accounting Standards: Monsanto Company**



Research

Monsanto Company, a St. Louis-based company, is a leading provider of agricultural products for farmers. It sells seeds, biotechnology trait products, and herbicides worldwide.

#### Required

- a. How did Monsanto Company report its income to noncontrolling (minority) shareholders of consolidated subsidiaries in its 2007 consolidated income statement?
- b. How did Monsanto Company report its subsidiary noncontrolling (minority) interest in its 2007 consolidated balance sheet?
- c. Comment on Monsanto's treatment of its subsidiary noncontrolling interest.
- d. In 2007, Monsanto had several affiliates that were special-purpose or variable interest entities. What level of ownership did Monsanto have in these entities? Were any of these consolidated? Why?

# Exercises

LO 5-1, 5-2

#### E5-1 **Multiple-Choice Questions on Consolidation Process**

Select the most appropriate answer for each of the following questions.

- 1. If A Company acquires 80 percent of the stock of B Company on January 1, 20X2, immediately after the acquisition, which of the following is correct?
  - a. Consolidated retained earnings will be equal to the combined retained earnings of the two
  - b. Goodwill will always be reported in the consolidated balance sheet.
  - c. A Company's additional paid-in capital may be reduced to permit the carryforward of B Company retained earnings.
  - d. Consolidated retained earnings and A Company retained earnings will be the same.
- 2. Which of the following is correct?
  - a. The noncontrolling shareholders' claim on the subsidiary's net assets is based on the book value of the subsidiary's net assets.
  - b. Only the parent's portion of the difference between book value and fair value of the subsidiary's assets is assigned to those assets.
  - c. Goodwill represents the difference between the book value of the subsidiary's net assets and the amount paid by the parent to buy ownership.
  - d. Total assets reported by the parent generally will be less than total assets reported on the consolidated balance sheet.
- 3. Which of the following statements is correct?
  - a. Foreign subsidiaries do not need to be consolidated if they are reported as a separate operating group under segment reporting.
  - b. Consolidated retained earnings do not include the noncontrolling interest's claim on the subsidiary's retained earnings.
  - c. The noncontrolling shareholders' claim should be adjusted for changes in the fair value of the subsidiary assets but should not include goodwill.
  - d. Consolidation is expected any time the investor holds significant influence over the investee.

- 4. [AICPA Adapted] At December 31, 20X9, Grey Inc. owned 90 percent of Winn Corporation, a consolidated subsidiary, and 20 percent of Carr Corporation, an investee in which Grey cannot exercise significant influence. On the same date, Grey had receivables of \$300,000 from Winn and \$200,000 from Carr. In its December 31, 20X9, consolidated balance sheet, Grey should report accounts receivable from its affiliates of
  - a. \$500,000.
  - b. \$340,000.
  - c. \$230,000.
  - d. \$200,000.

#### E5-2 Multiple-Choice Questions on Consolidation [AICPA Adapted]

Select the correct answer for each of the following questions.

- 1. A 70 percent owned subsidiary company declares and pays a cash dividend. What effect does the dividend have on the retained earnings and noncontrolling interest balances in the parent company's consolidated balance sheet?
  - a. No effect on either retained earnings or noncontrolling interest.
  - b. No effect on retained earnings and a decrease in noncontrolling interest.
  - c. Decreases in both retained earnings and noncontrolling interest.
  - d. A decrease in retained earnings and no effect on noncontrolling interest.
- 2. How is the portion of consolidated earnings to be assigned to the noncontrolling interest in consolidated financial statements determined?
  - a. The parent's net income is subtracted from the subsidiary's net income to determine the noncontrolling interest.
  - b. The subsidiary's net income is extended to the noncontrolling interest.
  - c. The amount of the subsidiary's earnings recognized for consolidation purposes is multiplied by the noncontrolling interest's percentage of ownership.
  - d. The amount of consolidated earnings on the consolidated worksheets is multiplied by the noncontrolling interest percentage on the balance sheet date.
- 3. On January 1, 20X5, Post Company acquired an 80 percent investment in Stake Company. The acquisition cost was equal to Post's equity in Stake's net assets at that date. On January 1, 20X5, Post and Stake had retained earnings of \$500,000 and \$100,000, respectively. During 20X5, Post had net income of \$200,000, which included its equity in Stake's earnings, and declared dividends of \$50,000; Stake had net income of \$40,000 and declared dividends of \$20,000. There were no other intercompany transactions between the parent and subsidiary. On December 31, 20X5, what should the consolidated retained earnings be?
  - a. \$650,000.
  - b. \$666,000.
  - c. \$766,000.
  - d. \$770,000.

*Note:* Items 4 and 5 are based on the following information:

On January 1, 20X8, Ritt Corporation acquired 80 percent of Shaw Corporation's \$10 par common stock for \$956,000. On this date, the fair value of the noncontrolling interest was \$239,000, and the carrying amount of Shaw's net assets was \$1,000,000. The fair values of Shaw's identifiable assets and liabilities were the same as their carrying amounts except for plant assets (net) with a remaining life of 20 years, which were \$100,000 in excess of the carrying amount. For the year ended December 31, 20X8, Shaw had net income of \$190,000 and paid cash dividends totaling \$125,000.

- 4. In the January 1, 20X8, consolidated balance sheet, the amount of goodwill reported should be
  - a. \$0.
  - b. \$76,000.
  - c. \$95,000.
  - d. \$156,000.
- 5. In the December 31, 20X8, consolidated balance sheet, the amount of noncontrolling interest reported should be

- a. \$200,000.
- b. \$239,000.
- c. \$251,000.
- d. \$252,000.



#### E5-3 **Elimination Entries with Differential**

On June 10, 20X8, Game Corporation acquired 60 percent of Amber Company's common stock. The fair value of the noncontrolling interest was \$32,800 on that date. Summarized balance sheet data for the two companies immediately after the stock purchase are as follows:

	Game Corp.	Amber Co	mpany
Item	Book Value	Book Value	Fair Value
Cash	\$ 25,800	\$ 5,000	\$ 5,000
Accounts Receivable	30,000	10,000	10,000
Inventory	80,000	20,000	25,000
Buildings & Equipment (net)	120,000	50,000	70,000
Investment in Amber Stock	49,200		
Total	\$305,000	\$85,000	\$110,000
Accounts Payable	\$ 25,000	\$ 3,000	\$ 3,000
Bonds Payable	150,000	25,000	25,000
Common Stock	55,000	20,000	
Retained Earnings	75,000	37,000	
Total	\$305,000	<u>\$85,000</u>	\$ 28,000

## Required

- a. Give the elimination entries required to prepare a consolidated balance sheet immediately after the purchase of Amber Company shares.
- b. Explain how elimination entries differ from other types of journal entries recorded in the normal course of business.

#### LO 5-2

#### E5-4 **Computation of Consolidated Balances**

Slim Corporation's balance sheet at January 1, 20X7, reflected the following balances:

Cash & Receivables	\$ 80,000	Accounts Payable	\$ 40,000
Inventory	120,000	Income Taxes Payable	60,000
Land	70,000	Bonds Payable	200,000
Buildings & Equipment (net)	480,000	Common Stock	250,000
		Retained Earnings	200,000
Total Assets	\$750,000	Total Liabilities & Stockholders' Equity	\$750,000

Ford Corporation entered into an active acquisition program and acquired 80 percent of Slim's common stock on January 2, 20X7, for \$470,000. The fair value of the noncontrolling interest at that date was determined to be \$117,500. A careful review of the fair value of Slim's assets and liabilities indicated the following:

	Book Value	Fair Value
Inventory	\$120,000	\$140,000
Land	70,000	60,000
Buildings & Equipment (net)	480,000	550,000

Goodwill is assigned proportionately to Ford and the noncontrolling shareholders.

## Required

Compute the appropriate amount related to Slim to be included in the consolidated balance sheet immediately following the acquisition for each of the following items:

- a. Inventory.
- b. Land.
- c. Buildings and Equipment (net).
- d. Goodwill.
- e. Investment in Slim Corporation.
- f. Noncontrolling Interest.

#### LO 5-2 **Balance Sheet Worksheet** E5-5

Power Company owns 90 percent of Pleasantdale Dairy's stock. The balance sheets of the two companies immediately after the Pleasantdale acquisition showed the following amounts:

	Power Company	Pleasantdale Dairy
Cash & Receivables Inventory Land Buildings & Equipment (net) Investment in Pleasantdale Stock	\$ 130,000 210,000 70,000 390,000 270,000	\$ 70,000 90,000 40,000 220,000
Total Assets	\$1,070,000	\$420,000
Current Payables Long-Term Liabilities Common Stock Retained Earnings Total Liabilities & Stockholders' Equity	\$ 80,000 200,000 400,000 390,000 \$1,070,000	\$ 40,000 100,000 60,000 220,000 \$420,000

The fair value of the noncontrolling interest at the date of acquisition was determined to be \$30,000. The full amount of the increase over book value is assigned to land held by Pleasantdale. At the date of acquisition, Pleasantdale owed Power \$8,000 plus \$900 accrued interest. Pleasantdale had recorded the accrued interest, but Power had not.

## Required

Prepare and complete a consolidated balance sheet worksheet.

LO 5-2 Majority-Owned Subsidiary Acquired at Higher than Book Value E5-6

Zenith Corporation acquired 70 percent of Down Corporation's common stock on December 31, 20X4, for \$102,200. The fair value of the noncontrolling interest at that date was determined to be \$43,800. Data from the balance sheets of the two companies included the following amounts as of the date of acquisition:

Item	Zenith Corporation	Down Corporation
Cash	\$ 50,300	\$ 21,000
Accounts Receivable	90,000	44,000
Inventory	130,000	75,000
Land	60,000	30,000
Buildings & Equipment	410,000	250,000
Less: Accumulated Depreciation	(150,000)	(80,000)
Investment in Down Corporation Stock	102,200	
Total Assets	\$692,500	\$340,000

(continued)

Accounts Payable	\$152,500	\$ 35,000
Mortgage Payable	250,000	180,000
Common Stock	80,000	40,000
Retained Earnings	210,000	85,000
Total Liabilities & Stockholders' Equity	\$692,500	\$340,000

At the date of the business combination, the book values of Down's assets and liabilities approximated fair value except for inventory, which had a fair value of \$81,000, and buildings and equipment, which had a fair value of \$185,000. At December 31, 20X4, Zenith reported accounts payable of \$12,500 to Down, which reported an equal amount in its accounts receivable.

### Required

- a. Give the elimination entry or entries needed to prepare a consolidated balance sheet immediately following the business combination.
- b. Prepare a consolidated balance sheet worksheet.
- c. Prepare a consolidated balance sheet in good form.

#### E5-7 **Consolidation with Noncontrolling Interest**

Temple Corporation acquired 75 percent of Dynamic Corporation's voting common stock on December 31, 20X4, for \$390,000. At the date of combination, Dynamic reported the following:

Current Assets Long-Term Assets (net)	\$220,000 420,000	Current Liabilities Long-Term Liabilities	\$ 80,000
Long Term Assets (Net)	420,000	Common Stock Retained Earnings	120,000
Total	\$640,000	Total	\$640,000

At December 31, 20X4, the book values of Dynamic's net assets and liabilities approximated their fair values, except for buildings, which had a fair value of \$80,000 more than book value, and inventories, which had a fair value of \$36,000 more than book value. The fair value of the noncontrolling interest was determined to be \$130,000 at that date.

#### Required

Temple Corporation wishes to prepare a consolidated balance sheet immediately following the business combination. Give the elimination entry or entries needed to prepare a consolidated balance sheet at December 31, 20X4.

#### E5-8 **Multiple-Choice Questions on Balance Sheet Consolidation**

Power Corporation acquired 70 percent of Silk Corporation's common stock on December 31, 20X2. Balance sheet data for the two companies immediately following the acquisition follow:

Item	Power Corporation	Silk Corporation
Cash	\$ 44,000	\$ 30,000
Accounts Receivable	110,000	45,000
Inventory	130,000	70,000
Land	80,000	25,000
Buildings & Equipment	500,000	400,000
Less: Accumulated Depreciation	(223,000)	(165,000)
Investment in Silk Corporation Stock	150,500	
Total Assets	\$ 791,500	\$405,000
Accounts Payable	\$ 61,500	\$ 28,000
Taxes Payable	95,000	37,000
Bonds Payable	280,000	200,000
Common Stock	150,000	50,000
Retained Earnings	205,000	90,000
Total Liabilities & Stockholders' Equity	\$ 791,500	\$405,000

LO 5-2

LO 5-2

At the date of the business combination, the book values of Silk's net assets and liabilities approximated fair value except for inventory, which had a fair value of \$85,000, and land, which had a fair value of \$45,000. The fair value of the noncontrolling interest was \$64,500 on December 31, 20X2.

### Required

For each question below, indicate the appropriate total that should appear in the consolidated balance sheet prepared immediately after the business combination.

- 1. What amount of inventory will be reported?
  - a. \$179,000.
  - b. \$200,000.
  - c. \$210,500.
  - d. \$215,000.
- 2. What amount of goodwill will be reported?
  - a. \$0.
  - b. \$28,000.
  - c. \$40,000.
  - d. \$52,000.
- 3. What amount of total assets will be reported?
  - a. \$1,081,000.
  - b. \$1,121,000.
  - c. \$1,196,500.
  - d. \$1,231,500.
- 4. What amount of total liabilities will be reported?
  - a. \$265,000.
  - b. \$436,500.
  - c. \$622,000.
  - d. \$701,500.
- 5. What amount will be reported as noncontrolling interest?
  - a. \$42,000.
  - b. \$52,500.
  - c. \$60,900.
  - d. \$64,500.
- 6. What amount of consolidated retained earnings will be reported?
  - a. \$295,000.
  - b. \$268,000.
  - c. \$232,000.
  - d. \$205,000.
- 7. What amount of total stockholders' equity will be reported?
  - a. \$355,000.
  - b. \$397,000.
  - c. \$419,500.
  - d. \$495,000.

#### LO 5-2 **Majority-Owned Subsidiary with Differential**

Canton Corporation is a majority-owned subsidiary of West Corporation. West acquired 75 percent ownership on January 1, 20X3, for \$133,500. At that date, Canton reported common stock outstanding of \$60,000 and retained earnings of \$90,000, and the fair value of the noncontrolling interest was \$44,500. The differential is assigned to equipment, which had a fair value \$28,000 more than book value and a remaining economic life of seven years at the date of the business combination. Canton reported net income of \$30,000 and paid dividends of \$12,000 in 20X3.

#### Required

- a. Give the journal entries recorded by West during 20X3 on its books if it accounts for its investment in Canton using the equity method.
- b. Give the elimination entries needed at December 31, 20X3, to prepare consolidated financial statements.

#### LO 5-1, 5-2

## **Differential Assigned to Amortizable Asset**

Major Corporation acquired 90 percent of Lancaster Company's voting common stock on January 1, 20X1, for \$486,000. At the time of the combination, Lancaster reported common stock outstanding of \$120,000 and retained earnings of \$380,000, and the fair value of the noncontrolling interest was \$54,000. The book value of Lancaster's net assets approximated market value except for patents that had a market value of \$40,000 more than their book value. The patents had a remaining economic life of five years at the date of the business combination. Lancaster reported net income of \$60,000 and paid dividends of \$20,000 during 20X1.

#### Required

- a. What balance did Major report as its investment in Lancaster at December 31, 20X1, assuming Major uses the equity method in accounting for its investment?
- b. Give the elimination entry or entries needed to prepare consolidated financial statements at December 31, 20X1.

#### **Consolidation after One Year of Ownership** E5-11

Pioneer Corporation purchased 80 percent of Lowe Corporation's stock on January 1, 20X2. At that date, Lowe reported retained earnings of \$80,000 and had \$120,000 of stock outstanding. The fair value of its buildings was \$32,000 more than the book value.

Pioneer paid \$190,000 to acquire the Lowe shares. At that date, the noncontrolling interest had a fair value of \$47,500. The remaining economic life for all Lowe's depreciable assets was eight years on the date of combination. The amount of the differential assigned to goodwill is not impaired. Lowe reported net income of \$40,000 in 20X2 and declared no dividends.

#### Required

- a. Give the elimination entries needed to prepare a consolidated balance sheet immediately after Pioneer purchased Lowe stock.
- b. Give all elimination entries needed to prepare a full set of consolidated financial statements for



#### Consolidation Following Three Years of Ownership

Knox Corporation purchased 60 percent of Conway Company ownership on January 1, 20X7, for \$277,500. Conway reported the following net income and dividend payments:



Year	Net Income	Dividends Paid
20X7	\$45,000	\$25,000
20X8	55,000	35,000
20X9	30,000	10,000

On January 1, 20X7, Conway had \$250,000 of \$5 par value common stock outstanding and retained earnings of \$150,000, and the fair value of the noncontrolling interest was \$185,000. Conway held land with a book value of \$22,500 and a market value of \$30,000 and equipment with a book value of \$320,000 and a market value of \$360,000 at the date of combination. The remainder of the differential at acquisition was attributable to an increase in the value of patents, which had a remaining useful life of 10 years. All depreciable assets held by Conway at the date of acquisition had a remaining economic life of eight years.

#### Required

- a. Compute the increase in the fair value of patents held by Conway.
- b. Prepare the elimination entries needed at January 1, 20X7, to prepare a consolidated balance sheet.

- c. Compute the balance reported by Knox as its investment in Conway at December 31, 20X8.
- d. Prepare the journal entries recorded by Knox with regard to its investment in Conway during 20X9
- e. Prepare the elimination entries needed at December 31, 20X9, to prepare a three-part consolidation worksheet.

## LO 5-2 E5-13 Consolidation Worksheet for Majority-Owned Subsidiary

Proud Corporation acquired 80 percent of Stergis Company's voting stock on January 1, 20X3, at underlying book value. The fair value of the noncontrolling interest was equal to 20 percent of the book value of Stergis at that date. Proud uses the equity method in accounting for its ownership of Stergis during 20X3. On December 31, 20X3, the trial balances of the two companies are as follows:

	<b>Proud Corporation</b>		Stergis Company		
Item	Debit	Credit	Debit	Credit	
Current Assets	\$173,000		\$105,000		
Depreciable Assets	500,000		300,000		
Investment in Stergis Company Stock	136,000		·		
Depreciation Expense	25,000		15,000		
Other Expenses	105,000		75,000		
Dividends Declared	40,000		10,000		
Accumulated Depreciation	·	\$175,000	·	\$ 75,000	
Current Liabilities		50,000		40,000	
Long-Term Debt		100,000		120,000	
Common Stock		200,000		100,000	
Retained Earnings		230,000		50,000	
Sales		200,000		120,000	
Income from Subsidiary		24,000			
,	\$979,000	\$979,000	\$505,000	\$505,000	

## Required

- a. Give all elimination entries required as of December 31, 20X3, to prepare consolidated financial statements.
- b. Prepare a three-part consolidation worksheet.
- c. Prepare a consolidated balance sheet, income statement, and retained earnings statement for 20X3.

## LO 5-2 E5-14 Consolidation Worksheet for Majority-Owned Subsidiary for Second Year

This exercise is a continuation of E5-13. Proud Corporation acquired 80 percent of Stergis Company's voting stock on January 1, 20X3, at underlying book value. The fair value of the noncontrolling interest was equal to 20 percent of the book value of Stergis at that date. Proud uses the equity method in accounting for its ownership of Stergis. On December 31, 20X4, the trial balances of the two companies are as follows:

		Proud Cor	poration	Stergis Company	
Item		Debit	Credit	Debit	Credit
Current Assets	\$	235,000		\$150,000	
Depreciable Assets		500,000		300,000	
Investment in Stergis Company Stock		152,000			
Depreciation Expense		25,000		15,000	
Other Expenses		150,000		90,000	
Dividends Declared		50,000		15,000	
					/

(continued)

Accumulated Depreciation		\$	200,000		\$ 90,000
Current Liabilities			70,000		50,000
Long-Term Debt			100,000		120,000
Common Stock			200,000		100,000
Retained Earnings			284,000		70,000
Sales			230,000		140,000
Income from Subsidiary			28,000		
	\$1,112,000	\$1	,112,000	\$570,000	\$570,000

#### Required

- a. Give all elimination entries required on December 31, 20X4, to prepare consolidated financial statements.
- b. Prepare a three-part consolidation worksheet as of December 31, 20X4.

LO 5-4



#### E5-15 Preparation of Stockholders' Equity Section with Other Comprehensive Income

Broadmore Corporation acquired 75 percent of Stem Corporation's common stock on January 1, 20X8, for \$435,000. At that date, Stem reported common stock outstanding of \$300,000 and retained earnings of \$200,000, and the fair value of the noncontrolling interest was \$145,000. The book values and fair values of Stem's assets and liabilities were equal, except for other intangible assets, which had a fair value \$80,000 more than book value and a 10-year remaining life. Broadmore and Stem reported the following data for 20X8 and 20X9:

		Stem Corporation		Broadmore	Corporation
Year	Net Income	Comprehensive Income	Dividends Paid	Operating Income	Dividends Paid
20X8 20X9	\$40,000 60,000	\$50,000 65,000	\$15,000 30,000	\$120,000 140,000	\$70,000 70,000

## Required

- a. Compute consolidated comprehensive income for 20X8 and 20X9.
- b. Compute comprehensive income attributable to the controlling interest for 20X8 and 20X9.
- c. Assuming that Broadmore reported capital stock outstanding of \$320,000 and retained earnings of \$430,000 at January 1, 20X8, prepare the stockholders' equity section of the consolidated balance sheet at December 31, 20X8 and 20X9.

LO 5-4

#### E5-16 Elimination Entries for Subsidiary with Other Comprehensive Income

Palmer Corporation acquired 70 percent of Krown Corporation's ownership on January 1, 20X8, for \$140,000. At that date, Krown reported capital stock outstanding of \$120,000 and retained earnings of \$80,000, and the fair value of the noncontrolling interest was equal to 30 percent of the book value of Krown. During 20X8, Krown reported net income of \$30,000 and comprehensive income of \$36,000 and paid dividends of \$25,000.

#### Required

- a. Present all equity-method entries that Palmer would have recorded in accounting for its investment in Krown during 20X8.
- b. Present all elimination entries needed at December 31, 20X8, to prepare a complete set of consolidated financial statements for Palmer Corporation and its subsidiary.

#### E5-17A Consolidation of Subsidiary with Negative Retained Earnings

General Corporation acquired 80 percent of Strap Company's voting common stock on January 1, 20X4, for \$138,000. At that date, the fair value of the noncontrolling interest was \$34,500. Strap's balance sheet at the date of acquisition contained the following balances:

	Bal	P COMPANY ance Sheet uary 1, 20X4	
Cash	\$ 20,000	Accounts Payable	\$ 35,000
Accounts Receivable	35,000	Notes Payable	180,000
Land	90,000	Common Stock	100,000
Building & Equipment	300,000	Additional Paid-in Capital	75,000
Less: Accumulated Depreciation	(85,000)	Retained Earnings	_(30,000)
Total Assets	\$360,000	Total Liabilities & Stockholders' Equity	\$360,000

At the date of acquisition, the reported book values of Strap's assets and liabilities approximated fair value.

#### Required

Give the elimination entry or entries needed to prepare a consolidated balance sheet immediately following the business combination.

#### E5-18A **Complex Assignment of Differential**

On December 31, 20X4, Worth Corporation acquired 90 percent of Brinker Inc.'s common stock for \$864,000. At that date, the fair value of the noncontrolling interest was \$96,000. Of the \$240,000 differential, \$5,000 related to the increased value of Brinker's inventory, \$75,000 related to the increased value of its land, \$60,000 related to the increased value of its equipment, and \$50,000 was associated with a change in the value of its notes payable due to increasing interest rates. Brinker's equipment had a remaining life of 15 years from the date of combination. Brinker sold all inventory it held at the end of 20X4 during 20X5; the land to which the differential related also was sold during the year for a large gain. The amortization of the differential relating to Brinker's notes payable was \$7,500 for 20X5.

At the date of combination, Brinker reported retained earnings of \$120,000, common stock outstanding of \$500,000, and premium on common stock of \$100,000. For the year 20X5, it reported net income of \$150,000 but paid no dividends. Worth accounts for its investment in Brinker using the equity method.

## Required

- a. Present all entries that Worth would have recorded during 20X5 with respect to its investment in Brinker.
- b. Present all elimination entries that would have been included in the worksheet to prepare a full set of consolidated financial statements for the year 20X5.

## **Problems**

LO 5-1

#### P5-19 Multiple-Choice Questions on Applying the Equity Method [AICPA Adapted]

Select the correct answer for each of the following questions.

1. On July 1, 20X3, Barker Company purchased 20 percent of Acme Company's outstanding common stock for \$400,000 when the fair value of Acme's net assets was \$2,000,000. Barker does not have the ability to exercise significant influence over Acme's operating and financial policies. The following data concerning Acme are available for 20X3:

	Twelve Months Ended December 31, 20X3	Six Months Ended December 31, 20X3
Net income	\$300,000	\$160,000
Dividends declared and paid	190,000	100,000

In its income statement for the year ended December 31, 20X3, how much income should Barker report from this investment?

- a. \$20,000.
- b. \$32,000.
- c. \$38,000.
- d. \$60,000.
- 2. On January 1, 20X3, Miller Company purchased 25 percent of Wall Corporation's common stock; no differential resulted from the purchase. Miller appropriately uses the equity method for this investment, and the balance in Miller's investment account was \$190,000 on December 31, 20X3. Wall reported net income of \$120,000 for the year ended December 31, 20X3, and paid dividends on its common stock totaling \$48,000 during 20X3. How much did Miller pay for its 25 percent interest in Wall?
  - a. \$172,000.
  - b. \$202,000.
  - c. \$208,000.
  - d. \$232,000.
- 3. On January 1, 20X7, Robohn Company purchased for cash 40 percent of Lowell Company's 300,000 shares of voting common stock for \$1,800,000 when 40 percent of the underlying equity in Lowell's net assets was \$1,740,000. The payment in excess of underlying equity was assigned to amortizable assets with a remaining life of six years. As a result of this transaction, Robohn has the ability to exercise significant influence over Lowell's operating and financial policies. Lowell's net income for the year ended December 31, 20X7, was \$600,000. During 20X7, Lowell paid \$325,000 in dividends to its shareholders. The income reported by Robohn for its investment in Lowell should be
  - a. \$120,000.
  - b. \$130,000.
  - c. \$230,000.
  - d. \$240,000.
- 4. In January 20X0, Farley Corporation acquired 20 percent of Davis Company's outstanding common stock for \$800,000. This investment gave Farley the ability to exercise significant influence over Davis. The book value of the acquired shares was \$600,000. The excess of cost over book value was attributed to an identifiable intangible asset, which was undervalued on Davis' balance sheet and had a remaining economic life of 10 years. For the year ended December 31, 20X0, Davis reported net income of \$180,000 and paid cash dividends of \$40,000 on its common stock. What is the proper carrying value of Farley's investment in Davis on December 31, 20X0?
  - a. \$772,000.
  - b. \$780,000.
  - c. \$800,000.
  - d. \$808,000.

#### **Amortization of Differential**

Ball Corporation purchased 30 percent of Krown Company's common stock on January 1, 20X5, by issuing preferred stock with a par value of \$50,000 and a market price of \$120,000. The following amounts relate to Krown's balance sheet items at that date:

· · · · · · · · · · · · · · · · · · ·		
	<b>Book Value</b>	Fair Value
Cash & Receivables	\$ 200,000	\$200,000
Buildings & Equipment Less: Accumulated Depreciation	400,000 (100,000)	360,000
Total Assets	\$ 500,000	
Accounts Payable	\$ 50,000	50,000
Bonds Payable	200,000	200,000
Common Stock	100,000	
Retained Earnings	150,000	
Total Liabilities & Equities	\$ 500,000	

Krown purchased buildings and equipment on January 1, 20X0, with an expected economic life of 20 years. No change in overall expected economic life occurred as a result of the acquisition of Ball's stock. The amount paid in excess of the fair value of Krown's reported net assets is attributed to unrecorded copyrights with a remaining useful life of eight years. During 20X5, Krown reported net income of \$40,000 and paid dividends of \$10,000.

#### Required

Give all journal entries to be recorded on Ball Corporation's books during 20X5, assuming it uses the equity method in accounting for its ownership of Krown Company.

#### LO 5-1

#### P5-21 **Computation of Account Balances**

Easy Chair Company purchased 40 percent ownership of Stuffy Sofa Corporation on January 1, 20X1, for \$150,000. Stuffy Sofa's balance sheet at the time of acquisition was as follows:

	Bala	FA CORPOR ance Sheet ary 1, 20X1	ATION	
Cash		\$ 30,000	Current Liabilities	\$ 40,000
Accounts Receivable		120,000	Bonds Payable	200,000
Inventory		80,000	Common Stock	200,000
Land		150,000	Additional Paid-In Capital	40,000
Buildings & Equipment	\$ 30,000			
Less: Accumulated Depreciation	(120,000)	180,000	Retained Earnings	80,000
Total Assets		\$560,000	Total Liabilities & Equities	\$560,000

During 20X1 Stuffy Sofa Corporation reported net income of \$30,000 and paid dividends of \$9,000. The fair values of Stuffy Sofa's assets and liabilities were equal to their book values at the date of acquisition, with the exception of buildings and equipment, which had a fair value \$35,000 above book value. All buildings and equipment had remaining lives of five years at the time of the business combination. The amount attributed to goodwill as a result of its purchase of Stuffy Sofa shares is not impaired.

#### Required

- a. What amount of investment income will Easy Chair Company record during 20X1 under equity-method accounting?
- b. What amount of income will be reported under the cost method?
- c. What will be the balance in the investment account on December 31, 20X1, under (1) costmethod and (2) equity-method accounting?

## LO 5-1

#### P5-22 **Multistep Acquisition**

Jackson Corporation purchased shares of Phillips Corporation in the following sequence:

Date	Number of Shares Purchased	Amount Paid
January 1, 20X6	1,000 shares	\$25,000
January 1, 20X8	500 shares	15,000
January 1, 20X9	2,000 shares	70,000

The book value of Phillips' net assets at January 1, 20X6, was \$200,000. Each year since Jackson first purchased shares, Phillips has reported net income of \$70,000 and paid dividends of \$20,000. The amount paid in excess of the book value of Phillips' net assets was attributed to the increase in the value of identifiable intangible assets with a remaining life of five years at the date the shares of Phillips were purchased. Phillips has had 10,000 shares of voting common stock outstanding throughout the four-year period.

#### Required

Give the journal entries recorded on Jackson Corporation's books in 20X9 related to its investment in Phillips Corporation.

#### P5-23 **Complex Differential**

Essex Company issued common shares with a par value of \$50,000 and a market value of \$165,000 in exchange for 30 percent ownership of Tolliver Corporation on January 1, 20X2. Tolliver reported the following balances on that date:

<b>TOLLIVER CORPORATION</b>
Balance Sheet
January 1, 20X2

	<b>Book Value</b>	Fair Value
Assets		
Cash	\$ 40,000	\$ 40,000
Accounts Receivable	80,000	80,000
Inventory (FIFO basis)	120,000	150,000
Land	50,000	65,000
Buildings & Equipment	500,000	320,000
Less: Accumulated Depreciation	(240,000)	
Patent		25,000
Total Assets	\$550,000	\$680,000
Liabilities & Equities		
Accounts Payable	\$ 30,000	\$ 30,000
Bonds Payable	100,000	100,000
Common Stock	150,000	
Additional Paid-In Capital	20,000	
Retained Earnings	250,000	
Total Liabilities & Equities	\$550,000	

The estimated economic life of the patents held by Tolliver is 10 years. The buildings and equipment are expected to last 12 more years on average. Tolliver paid dividends of \$9,000 during 20X2 and reported net income of \$80,000 for the year.

#### Required

Compute the amount of investment income (loss) reported by Essex from its investment in Tolliver for 20X2 and the balance in the investment account on December 31, 20X2, assuming the equity method is used in accounting for the investment.

LO 5-1

#### P5-24 **Equity Entries with Differential**

On January 1, 20X0, Hunter Corporation issued 6,000 of its \$10 par value shares to acquire 45 percent of the shares of Arrow Manufacturing. Arrow Manufacturing's balance sheet immediately before the acquisition contained the following items:

ARROW MANUFACTURING
Balance Sheet
January 1, 20X0

	<b>Book Value</b>	Fair Value
Assets		
Cash & Receivables	\$ 30,000	\$ 30,000
Land	70,000	80,000
Buildings & Equipment (net)	120,000	150,000
Patent	80,000	80,000
Total Assets	\$300,000	
Liabilities & Equities		
Accounts Payable	\$ 90,000	90,000
Common Stock	150,000	
Retained Earnings	60,000	
Total Liabilities & Equities	\$300,000	

On the date of the stock acquisition, Hunter's shares were selling at \$35, and Arrow Manufacturing's buildings and equipment had a remaining economic life of 10 years. The amount of the differential assigned to goodwill is not impaired.

In the two years following the stock acquisition, Arrow Manufacturing reported net income of \$80,000 and \$50,000 and paid dividends of \$20,000 and \$40,000, respectively. Hunter used the equity method in accounting for its ownership of Arrow Manufacturing.

## Required

- a. Give the entry recorded by Hunter Corporation at the time of acquisition.
- b. Give the journal entries recorded by Hunter during 20X0 and 20X1 related to its investment in Arrow Manufacturing.
- c. What balance will be reported in Hunter's investment account on December 31, 20X1?

#### LO 5-1 P5-25 **Equity Entries with Differential**

Ennis Corporation acquired 35 percent of Jackson Corporation's stock on January 1, 20X8, by issuing 25,000 shares of its \$2 par value common stock. Jackson Corporation's balance sheet immediately before the acquisition contained the following items:

JACKSON CORPORATION  Balance Sheet  January 1, 20X8			
	<b>Book Value</b>	Fair Value	
Assets			
Cash & Receivables	\$ 40,000	\$ 40,000	
Inventory (FIFO basis)	80,000	100,000	
Land	50,000	70,000	
Buildings & Equipment (net)	240,000	320,000	
Total Assets	\$410,000	\$530,000	
Liabilities & Equities			
Accounts Payable	\$ 70,000	\$ 70,000	
Common Stock	130,000		
Retained Earnings	210,000		
Total Liabilities & Equities	\$410,000		

Shares of Ennis were selling at \$8 at the time of the acquisition. On the date of acquisition, the remaining economic life of buildings and equipment held by Jackson was 20 years. The amount of the differential assigned to goodwill is not impaired. For the year 20X8, Jackson reported net income of \$70,000 and paid dividends of \$10,000.

#### Required

- a. Give the journal entries recorded by Ennis Corporation during 20X8 related to its investment in Jackson Corporation.
- b. What balance will Ennis report as its investment in Jackson at December 31, 20X8?

#### P5-26 **Additional Ownership Level**

Balance sheet, income, and dividend data for Amber Corporation, Blair Corporation, and Carmen Corporation at January 1, 20X3, were as follows:

Account Balances	Amber Corporation	Blair Corporation	Carmen Corporation
Cash	\$ 70,000	\$ 60,000	\$ 20,000
Accounts Receivable	120,000	80,000	40,000
Inventory	100,000	90,000	65,000
Fixed Assets (net)	450,000	350,000	240,000
Total Assets	\$740,000	\$580,000	\$365,000

(continued)

LO 5-1

Accounts Payable	\$105,000	\$110,000	\$ 45,000
Bonds Payable	300,000	200,000	120,000
Common Stock	150,000	75,000	90,000
Retained Earnings	185,000	195,000	110,000
Total Liabilities & Equity	\$740,000	\$580,000	\$365,000
Income from Operations in 20X3 Net Income for 20X3 Dividends Declared & Paid	\$220,000	\$100,000	\$ 50,000
	60,000	30,000	25,000

On January 1, 20X3, Amber Corporation purchased 40 percent of the voting common stock of Blair Corporation by issuing common stock with a par value of \$40,000 and fair value of \$130,000. Immediately after this transaction, Blair purchased 25 percent of the voting common stock of Carmen Corporation by issuing bonds payable with a par value and market value of \$51,500.

On January 1, 20X3, the book values of Blair's net assets were equal to their fair values except for equipment that had a fair value \$30,000 more than book value and patents that had a fair value \$25,000 more than book value. At that date, the equipment had a remaining economic life of eight years, and the patents had a remaining economic life of five years. The book values of Carmen's assets were equal to their fair values except for inventory that had a fair value \$6,000 in excess of book value and was accounted for on a FIFO basis.

#### Required

- a. Compute the net income reported by Amber Corporation for 20X3, assuming Amber and Blair used the equity method in accounting for their intercorporate investments.
- b. Give all journal entries recorded by Amber relating to its investment in Blair during 20X3.

#### P5-27 **Correction of Error**

Hill Company paid \$164,000 to acquire 40 percent ownership of Dale Company on January 1, 20X2. Net book value of Dale's assets on that date was \$300,000. Book values and fair values of net assets held by Dale were the same except for equipment and patents. Equipment held by Dale had a book value of \$70,000 and fair value of \$120,000. All of the remaining purchase price was attributable to the increased value of patents with a remaining useful life of eight years. The remaining economic life of all depreciable assets held by Dale was five years.

Dale Company's net income and dividends for the three years immediately following the purchase of shares were

Year	Net Income	Dividends
20X2	\$40,000	\$15,000
20X3	60,000	20,000
20X4	70,000	25,000

The computation of Hill's investment income for 20X4 and entries in its investment account since the date of purchase were as follows:

20X4 Inve	estment	Income
-----------	---------	--------

Pro rata income accrual (\$70,000 $\times$ 0.40)		\$28,000
Amortize patents (\$44,000 ÷ 8 years)	\$5,500	
Dividends received ( $$25,000 \times 0.40$ )		10,000
20X4 investment income		\$32,500

LO 5-1

Investment	in	Dale	Com	pany
------------	----	------	-----	------

1/1/X2 purchase price	\$164,000	
20X2 income accrual	16,000	
Amortize patents		\$5,500
20X3 income accrual	24,000	
Amortize patents		5,500
20X4 income accrual	28,000	
Amortize patents		5,500
12/31/X4 balance	\$215,500	

Before making closing entries at the end of 20X4, Hill's new controller reviewed the reports and was convinced that both the balance in the investment account and the investment income that Hill reported for 20X4 were in error.

### Required

Prepare a correcting entry, along with supporting computations, to properly state the balance in the investment account and all related account balances at the end of 20X4.

## Majority-Owned Subsidiary Acquired at More Than Book Value

Porter Corporation acquired 70 percent of Darla Corporation's common stock on December 31, 20X4, for \$102,200. At that date, the fair value of the noncontrolling interest was \$43,800. Data from the balance sheets of the two companies included the following amounts as of the date of acquisition:

Item	Porter Corporation	Darla Corporation
Cash	\$ 50,300	\$ 21,000
Accounts Receivable	90,000	44,000
Inventory	130,000	75,000
Land	60,000	30,000
Buildings & Equipment	410,000	250,000
Less: Accumulated Depreciation	(150,000)	(80,000)
Investment in Darla Corporation Stock	102,200	
Total Assets	\$692,500	\$340,000
Accounts Payable	\$152,500	\$ 35,000
Mortgage Payable	250,000	180,000
Common Stock	80,000	40,000
Retained Earnings	210,000	85,000
Total Liabilities & Stockholders' Equity	\$692,500	\$340,000

At the date of the business combination, the book values of Darla's assets and liabilities approximated fair value except for inventory, which had a fair value of \$81,000, and buildings and equipment, which had a fair value of \$185,000. At December 31, 20X4, Porter reported accounts payable of \$12,500 to Darla, which reported an equal amount in its accounts receivable.

## Required

- a. Give the elimination entry or entries needed to prepare a consolidated balance sheet immediately following the business combination.
- b. Prepare a consolidated balance sheet worksheet.
- c. Prepare a consolidated balance sheet in good form.

#### **Balance Sheet Consolidation of Majority-Owned Subsidiary** P5-29

On January 2, 20X8, Total Corporation acquired 75 percent of Ticken Tie Company's outstanding common stock. In exchange for Ticken Tie's stock, Total issued bonds payable with a par value of

LO 5-2

Uploaded By: anonymous

\$500,000 and fair value of \$510,000 directly to the selling stockholders of Ticken Tie. At that date, the fair value of the noncontrolling interest was \$170,000. The two companies continued to operate as separate entities subsequent to the combination.

Immediately prior to the combination, the book values and fair values of the companies' assets and liabilities were as follows:

	Tota	al	Ticken Tie			
	Book Value	Fair Value	Book Value	Fair Value		
Cash Receivables Allowance for Bad Debts	\$ 12,000 41,000 (2,000)	\$ 12,000 39,000	\$ 9,000 31,000 (1,000)	\$ 9,000 30,000		
Inventory Land	86,000 55,000	89,000 200,000	68,000 50,000	72,000 70,000		
Buildings & Equipment Accumulated Depreciation Patent	960,000 (411,000)	650,000	670,000 (220,000)	500,000 40,000		
Total Assets	\$741,000	\$990,000	\$607,000	\$721,000		
Current Payables Bonds Payable Common Stock Additional Paid-in Capital Retained Earnings Total Liabilities & Equity	\$ 38,000 200,000 300,000 100,000 103,000 \$741,000	\$ 38,000 210,000	\$ 29,000 100,000 200,000 130,000 148,000 \$607,000	\$ 29,000 100,000		

At the date of combination, Ticken Tie owed Total \$6,000 plus accrued interest of \$500 on a shortterm note. Both companies have properly recorded these amounts.

#### Required

- a. Record the business combination on the books of Total Corporation.
- b. Present in general journal form all elimination entries needed in a worksheet to prepare a consolidated balance sheet immediately following the business combination on January 2, 20X8.
- c. Prepare and complete a consolidated balance sheet worksheet as of January 2, 20X8, immediately following the business combination.
- d. Present a consolidated balance sheet for Total and its subsidiary as of January 2, 20X8.

LO 5-1, 5-2

#### P5-30 **Incomplete Data**

Blue Corporation acquired controlling ownership of Skyler Corporation on December 31, 20X3, and a consolidated balance sheet was prepared immediately. Partial balance sheet data for the two companies and the consolidated entity at that date follow:

#### **BLUE CORPORATION AND SKYLER CORPORATION Balance Sheet Data** December 31, 20X3

Item	Blue Corporation	Skyler Corporation	Consolidated Entity
Cash	\$ 63,650	\$ 35,000	\$ 98,650
Accounts Receivable	98,000	?	148,000
Inventory	105,000	80,000	195,000
Buildings & Equipment	400,000	340,000	780,000
Less: Accumulated Depreciation	(215,000)	(140,000)	(355,000)
Investment in Skyler Corporation Stock	?		
Goodwill			9,000
Total Assets	\$620,000	\$380,000	<u>\$875,650</u>
			(continued)

Uploaded By: anonymous

#### **BLUE CORPORATION AND SKYLER CORPORATION Balance Sheet Data**

December 31, 20X3

Item	Blue Corporation	Skyler Corporation	Consolidated Entity
Accounts Payable	\$115,000	\$ 46,000	\$146,000
Wages Payable	?	?	94,000
Notes Payable	200,000	110,000	310,000
Common Stock	120,000	75,000	?
Retained Earnings	115,000	125,000	?
Noncontrolling Interest			90,650
Total Liabilities & Equities	\$ ?	\$380,000	\$875,650

During 20X3, Blue provided engineering services to Skyler and has not yet been paid for them. There were no other receivables or payables between Blue and Skyler at December 31, 20X3.

## Required

- a. What is the amount of unpaid engineering services at December 31, 20X3, on work done by Blue for Skyler?
- b. What balance in accounts receivable did Skyler report at December 31, 20X3?
- c. What amounts of wages payable did Blue and Skyler report at December 31, 20X3?
- d. What was the fair value of Skyler as a whole at the date of acquisition?
- e. What percentage of Skyler's shares were purchased by Blue?
- What amounts of capital stock and retained earnings must be reported in the consolidated balance sheet?

#### LO 5-2 P5-31 **Income and Retained Earnings**

Quill Corporation acquired 70 percent of North Company's stock on January 1, 20X9, for \$105,000. At that date, the fair value of the noncontrolling interest was equal to 30 percent of the book value of North Company. The companies reported the following stockholders' equity balances immediately after the acquisition:

	Quill	North
	Corporation	Company
Common Stock	\$120,000	\$ 30,000
Additional Paid-in Capital	230,000	80,000
Retained Earnings	290,000	40,000
Total	\$640,000	\$150,000

Quill and North reported 20X9 operating incomes of \$90,000 and \$35,000 and dividend payments of \$30,000 and \$10,000, respectively.

#### Required

- a. Compute the amount reported as net income by each company for 20X9, assuming Quill uses equity-method accounting for its investment in North.
- b. Compute consolidated net income for 20X9.
- c. Compute the reported balance in retained earnings at December 31, 20X9, for both companies.
- d. Compute consolidated retained earnings at December 31, 20X9.
- e. How would the computation of consolidated retained earnings at December 31, 20X9, change if Quill uses the cost method in accounting for its investment in North?

LO 5-2



#### P5-32 Consolidation Worksheet at End of First Year of Ownership

Power Corporation acquired 75 percent of Best Company's ownership on January 1, 20X8, for \$96,000. At that date, the fair value of the noncontrolling interest was \$32,000. The book value of Best's net assets at acquisition was \$100,000. The book values and fair values of Best's assets and liabilities were equal, except for Best's buildings and equipment, which were worth \$20,000 more than book value. Buildings and equipment are depreciated on a 10-year

Although goodwill is not amortized, the management of Power concluded at December 31, 20X8, that goodwill from its purchase of Best shares had been impaired and the correct carrying amount was \$2,500. Goodwill and goodwill impairment were assigned proportionately to the controlling and noncontrolling shareholders.

Trial balance data for Power and Best on December 31, 20X8, are as follows:

	Power Co	orporation	<b>Best Company</b>		
Item	Debit	Credit	Debit	Credit	
Cash	\$ 47,500		\$ 21,000		
Accounts Receivable	70,000		12,000		
Inventory	90,000		25,000		
Land	30,000		15,000		
Buildings & Equipment	350,000		150,000		
Investment in Best Co. Stock	96,375				
Cost of Goods Sold	125,000		110,000		
Wage Expense	42,000		27,000		
Depreciation Expense	25,000		10,000		
Interest Expense	12,000		4,000		
Other Expenses	13,500		5,000		
Dividends Declared	30,000		16,000		
Accumulated Depreciation		\$145,000		\$ 40,000	
Accounts Payable		45,000		16,000	
Wages Payable		17,000		9,000	
Notes Payable		150,000		50,000	
Common Stock		200,000		60,000	
Retained Earnings		102,000		40,000	
Sales		260,000		180,000	
Income from Subsidiary		12,375			
	\$931,375	\$931,375	\$395,000	\$395,000	

#### Required

- a. Give all elimination entries needed to prepare a three-part consolidation worksheet as of December 31, 20X8.
- b. Prepare a three-part consolidation worksheet for 20X8 in good form.

LO 5-2

#### P5-33 Consolidation Worksheet at End of Second Year of Ownership



This problem is a continuation of P5-32. Power Corporation acquired 75 percent of Best Company's ownership on January 1, 20X8, for \$96,000. At that date, the fair value of the noncontrolling interest was \$32,000. The book value of Best's net assets at acquisition was \$100,000. The book values and fair values of Best's assets and liabilities were equal, except for Best's buildings and equipment, which were worth \$20,000 more than book value. Buildings and equipment are depreciated on a 10-year basis.

Although goodwill is not amortized, the management of Power concluded at December 31, 20X8, that goodwill from its purchase of Best shares had been impaired and the correct carrying amount was \$2,500. Goodwill and goodwill impairment were assigned proportionately to the controlling and noncontrolling shareholders. No additional impairment occurred in 20X9.

Trial balance data for Power and Best on December 31, 20X9, are as follows:

	Power Co	orporation	Best Company		
Item	Debit	Credit	Debit	Credit	
Cash	\$ 68,500		\$ 32,000		
Accounts Receivable	85,000		14,000		
Inventory	97,000		24,000		
Land	50,000		25,000		
Buildings & Equipment	350,000		150,000		
Investment in Best Co. Stock	106,875				
Cost of Goods Sold	145,000		114,000		
Wage Expense	35,000		20,000		
Depreciation Expense	25,000		10,000		
Interest Expense	12,000		4,000		
Other Expenses	23,000		16,000		
Dividends Declared	30,000		20,000		
Accumulated Depreciation	,	\$ 170,000	,	\$ 50,000	
Accounts Payable		51,000		15,000	
Wages Payable		14,000		6,000	
Notes Payable		150,000		50,000	
Common Stock		200,000		60,000	
Retained Earnings		126,875		48,000	
Sales		290,000		200,000	
Income from Subsidiary		25,500			
	\$1,027,375	\$1,027,375	\$429,000	\$429,000	

## Required

- a. Give all elimination entries needed to prepare a three-part consolidation worksheet as of December 31, 20X9.
- b. Prepare a three-part consolidation worksheet for 20X9 in good form.
- c. Prepare a consolidated balance sheet, income statement, and retained earnings statement for

#### LO 5-2 **Comprehensive Problem: Differential Apportionment in Subsequent Period** P5-34

This problem is a continuation of P5-35. Mortar Corporation acquired 80 percent ownership of Granite Company on January 1, 20X7, for \$173,000. At that date, the fair value of the noncontrolling interest was \$43,250. The trial balances for the two companies on December 31, 20X8, included the following amounts:

	<b>Mortar Corporation</b>			n	<b>Granite Company</b>		
Item	Debit		Cred	dit	Debit	Credit	
Cash	\$	59,000			\$ 31,000		
Accounts Receivable		83,000			71,000		
Inventory		275,000			118,000		
Land		80,000			30,000		
Buildings & Equipment		500,000			150,000		
Investment in Granite Company Stock		206,200					
Cost of Goods Sold		490,000			310,000		
Depreciation Expense		25,000			15,000		
Other Expenses		62,000			100,000		
Dividends Declared		45,000			25,000		

(continued)

Uploaded By: anonymous

Accumulated Depreciation		\$	180,000		\$ 90,000
Accounts Payable			86,000		30,000
Mortgages Payable			200,000		70,000
Common Stock			300,000		50,000
Retained Earnings			385,000		140,000
Sales			650,000		470,000
Income from Subsidiary			24,200		
	\$1,825,200	<u>\$1,</u>	825,200	\$850,000	\$850,000

#### Additional Information

- 1. On January 1, 20X7, Granite reported net assets with a book value of \$150,000 and a fair value of \$191,250. The difference between fair value and book value of Granite's net assets is related entirely to Buildings and Equipment. Granite's depreciable assets had an estimated economic life of 11 years on the date of combination.
- 2. At December 31, 20X8, Mortar's management reviewed the amount attributed to goodwill and concluded goodwill was impaired and should be reduced to \$14,000. Goodwill and goodwill impairment were assigned proportionately to the controlling and noncontrolling shareholders.
- 3. Mortar used the equity method in accounting for its investment in Granite.
- 4. Detailed analysis of receivables and payables showed that Mortar owed Granite \$9,000 on December 31, 20X8.

#### Required

- a. Give all journal entries recorded by Mortar with regard to its investment in Granite during 20X8.
- b. Give all elimination entries needed to prepare a full set of consolidated financial statements for 20X8.
- c. Prepare a three-part consolidation worksheet as of December 31, 20X8.

LO 5-4

## Subsidiary with Other Comprehensive Income in Year of Acquisition

Amber Corporation acquired 60 percent ownership of Sparta Company on January 1, 20X8, at underlying book value. At that date, the fair value of the noncontrolling interest was equal to 40 percent of the book value of Sparta Company. Trial balance data at December 31, 20X8, for Amber and Sparta are as follows:

	Amber Co	orporation	Sparta Company		
Item	Debit	Credit	Debit	Credit	
Cash	\$ 27,000		\$ 8,000		
Accounts Receivable	65,000		22,000		
Inventory	40,000		30,000		
Buildings & Equipment	500,000		235,000		
Investment in Row Company Securities			40,000		
Investment in Sparta Company	108,000				
Cost of Goods Sold	150,000		110,000		
Depreciation Expense	30,000		10,000		
Interest Expense	8,000		3,000		
Dividends Declared	24,000		15,000		
Accumulated Depreciation		\$140,000		\$ 85,000	
Accounts Payable		63,000		20,000	
Bonds Payable		100,000		50,000	
Common Stock		200,000		100,000	
Retained Earnings		208,000		60,000	
Other Comprehensive Income from					
Subsidiary (OCI)—Unrealized Gain					
on Investments		6,000			
Unrealized Gain on Investments (OCI)				10,000	
Sales		220,000		148,000	
Income from Subsidiary		15,000			
	\$952,000	\$952,000	\$473,000	\$473,000	

#### **Additional Information**

Sparta purchased stock of Row Company on January 1, 20X8, for \$30,000 and classified the investment as available-for-sale securities. The value of Row's securities increased to \$40,000 at December 31, 20X8.

## Required

- a. Give all elimination entries needed to prepare a three-part consolidation worksheet as of December 31, 20X8.
- b. Prepare a three-part consolidation worksheet for 20X8 in good form.
- c. Prepare a consolidated balance sheet, income statement, and statement of comprehensive income for 20X8.

#### Subsidiary with Other Comprehensive Income in Year Following Acquisition P5-36

This problem is a continuation of P5-37. Amber Corporation acquired 60 percent ownership of Sparta Company on January 1, 20X8, at underlying book value. At that date, the fair value of the noncontrolling interest was equal to 40 percent of the book value of Sparta Company. Trial balance data at December 31, 20X9, for Amber and Sparta are as follows:

		<b>Amber Corporation</b>			<b>Sparta Company</b>		
Item		Debit		Credit	Debit	Credit	
Cash	\$	18,000			\$ 11,000		
Accounts Receivable		45,000			21,000		
Inventory		40,000			30,000		
Buildings & Equipment		585,000			257,000		
Investment in Row Company Securities					44,000		
Investment in Sparta Company		116,400					
Cost of Goods Sold		170,000			97,000		
Depreciation Expense		30,000			10,000		
Interest Expense		8,000			3,000		
Dividends Declared		40,000			20,000		
Accumulated Depreciation			\$	170,000		\$ 95,000	
Accounts Payable				75,000		24,000	
Bonds Payable				100,000		50,000	
Common Stock				200,000		100,000	
Retained Earnings				231,000		70,000	
Accumulated Other Comprehensive Income				6,000		10,000	
Other Comprehensive Income from							
Subsidiary (OCI)—Unrealized Gain on							
Investments				2,400			
Unrealized Gain on Investments (OCI)						4,000	
Sales				250,000		140,000	
Income from Subsidiary				18,000			
	\$	1,052,400	\$	1,052,400	\$493,000	\$493,000	

#### **Additional Information**

Sparta purchased stock of Row Company on January 1, 20X8, for \$30,000 and classified the investment as available-for-sale securities. The value of Row's securities increased to \$40,000 and \$44,000, respectively, at December 31, 20X8, and 20X9.

#### Required

- a. Give all elimination entries needed to prepare a three-part consolidation worksheet as of December 31, 20X9.
- b. Prepare a three-part consolidation worksheet for 20X9 in good form.

#### P5-37A **Comprehensive Problem: Majority-Owned Subsidiary**

Master Corporation acquired 80 percent ownership of Stanley Wood Products Company on January 1, 20X1, for \$160,000. On that date, the fair value of the noncontrolling interest was \$40,000, and Stanley reported retained earnings of \$50,000 and had \$100,000 of common stock outstanding. Master has used the equity method in accounting for its investment in Stanley.

Trial balance data for the two companies on December 31, 20X5, are as follows:

		Ma: Corpo			Stanley Wood Products Company		
Item		Debit		Credit	Debit	Credit	
Cash & Receivables	\$	81,000			\$ 65,000		
Inventory		260,000			90,000		
Land		80,000			80,000		
Buildings & Equipment		500,000			150,000		
Investment in Stanley Wood Products Stock		188,000					
Cost of Goods Sold		120,000			50,000		
Depreciation Expense		25,000			15,000		
Inventory Losses		15,000			5,000		
Dividends Declared		30,000			10,000		
Accumulated Depreciation			\$	205,000		\$105,000	
Accounts Payable				60,000		20,000	
Notes Payable				200,000		50,000	
Common Stock				300,000		100,000	
Retained Earnings				314,000		90,000	
Sales				200,000		100,000	
Income from Subsidiary	_		_	20,000			
	\$	1,299,000	\$1	1,299,000	<u>\$465,000</u>	\$465,000	

## Additional Information

- 1. On the date of combination, the fair value of Stanley's depreciable assets was \$50,000 more than book value. The differential assigned to depreciable assets should be written off over the following 10-year period.
- 2. There was \$10,000 of intercorporate receivables and payables at the end of 20X5.

#### Required

- a. Give all journal entries that Master recorded during 20X5 related to its investment in Stanley.
- b. Give all elimination entries needed to prepare consolidated statements for 20X5.
- c. Prepare a three-part worksheet as of December 31, 20X5.

#### LO 5-2

#### P5-38A **Comprehensive Problem: Differential Apportionment**

Mortar Corporation acquired 80 percent ownership of Granite Company on January 1, 20X7, for \$173,000. At that date, the fair value of the noncontrolling interest was \$43,250. The trial balances for the two companies on December 31, 20X7, included the following amounts:

	<b>Mortar Corporation</b>			Granite Company		
Item	Debit		Credit	Debit	Credit	
Cash	\$	38,000		\$ 25,000		
Accounts Receivable		50,000		55,000		
Inventory		240,000		100,000		
Land		80,000		20,000		
Buildings & Equipment		500,000		150,000		
Investment in Granite Company Stock		202,000				
Cost of Goods Sold		500,000		250,000		
Depreciation Expense		25,000		15,000		
Other Expenses		75,000		75,000		

Item	Mortar Corporation		<b>Granite Company</b>	
	Debit	Credit	Debit	Credit
Dividends Declared	50,000		20,000	
Accumulated Depreciation		\$ 155,000		\$ 75,000
Accounts Payable		70,000		35,000
Mortgages Payable		200,000		50,000
Common Stock		300,000		50,000
Retained Earnings		290,000		100,000
Sales		700,000		400,000
Income from Subsidiary		45,000		
	\$1,760,000	\$1,760,000	\$710,000	\$710,000

## **Additional Information**

- 1. On January 1, 20X7, Granite reported net assets with a book value of \$150,000 and a fair value of \$191,250.
- 2. Granite's depreciable assets had an estimated economic life of 11 years on the date of combination. The difference between fair value and book value of Granite's net assets is related entirely to buildings and equipment.
- 3. Mortar used the equity method in accounting for its investment in Granite.
- 4. Detailed analysis of receivables and payables showed that Granite owed Mortar \$16,000 on December 31, 20X7.

## Required

- a. Give all journal entries recorded by Mortar with regard to its investment in Granite during
- b. Give all elimination entries needed to prepare a full set of consolidated financial statements for
- c. Prepare a three-part consolidation worksheet as of December 31, 20X7.