

Intercompany Profit Transactions - Inventories



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GENERAL OVERVIEW

- When there have been intercompany inventory transactions, eliminating entries are needed to remove the revenue and expenses related to the intercompany transfers recorded by the individual companies
- The eliminations ensure that only the cost of the inventory to the consolidated entity is included in the consolidated balance sheet when the inventory is still on hand and is charged to cost of goods sold in the period the inventory is resold to nonaffiliates

Transfers at cost

- The balance sheet inventory amounts at the end of the period require no adjustment for consolidation because the purchasing affiliate's inventory carrying amount is the same as the cost to the transferring affiliate and the consolidated entity
- When inventory is resold to a nonaffiliate, the amount recognized as cost of goods sold by the affiliate making the outside sale is the cost to the consolidated entity



Transfers at cost

- An eliminating entry is needed to remove both the revenue from the intercorporate sale and the related cost of goods sold recorded by the seller
- Consolidated net income is not affected by the eliminating entry



Transfers at a profit or loss

- Companies use different approaches in setting intercorporate transfer prices
- The elimination process must remove the effects of such sales from the consolidated statements

Transfers at a profit or loss

- The workpaper eliminations needed for consolidation in the period of transfer must adjust accounts in:
 - Consolidated income statement: Sales and cost of goods sold
 - Consolidated balance sheet: Inventory
- The resulting financial statements appear as if the intercompany transfer had not occurred



Effect of type of inventory system

- Most companies use either a perpetual or a periodic inventory control system to keep track of inventory and cost of goods sold
- The choice between these inventory systems results in different entries on the books of the individual companies and, therefore, slightly different workpaper eliminating entries in preparing consolidated financial statements

DOWNSTREAM SALE OF INVENTORY

- For consolidation purposes, profits recorded on an intercorporate inventory sale are recognized in the period in which the inventory is resold to an unrelated party
 - Until the point of resale, all intercorporate profits must be deferred
 - When a company sells an inventory item to an affiliate, one of three situations results:
 1. The item is resold to a nonaffiliate during the same period
 2. The item is resold to a nonaffiliate during the next period
 3. The item is held for two or more periods by the purchasing affiliate

Downstream Sale of Inventory - Illustration

Peerless Products acquires 80 percent of the common stock of Special Foods on December 31, 20X0, for its book value of \$240,000. The fair value of noncontrolling interest on that date is equal to its book value of \$60,000. On March 1, 20X1, Peerless buys inventory for \$7,000 and resells it to Special Foods for \$10,000 on April 1.

Peerless records the following entries on its books:

March 1, 20X1

Inventory	7,000	
 Cash		7,000
Purchase of inventory.		

April 1, 20X1

Cash	10,000	
 Sales		10,000
Sale of inventory to Special Foods.		

Cost of Goods Sold	7,000	
 Inventory		7,000
Cost of inventory sold to Special Foods.		

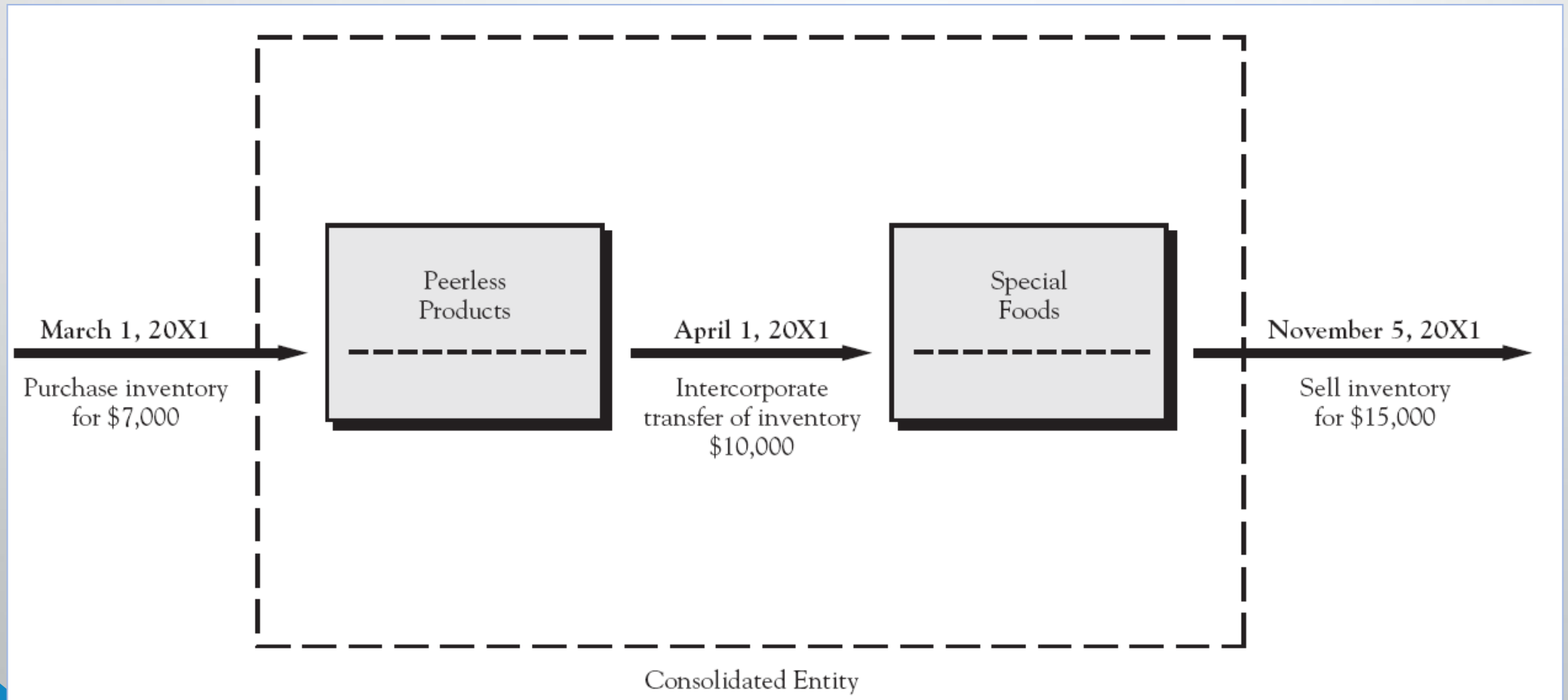
Special Foods records the purchase of the inventory:

April 1, 20X1

Inventory	10,000	
 Cash		10,000
Purchase of inventory from Peerless.		

Downstream Sale of Inventory - Illustration

- Resale in period of intercorporate transfer



Downstream Sale of Inventory - Illustration

Special Foods records the sale:

November 5, 20X1

Cash	15,000	
Sales		15,000
Sale of inventory to Nonaffiliated.		
Cost of Goods Sold	10,000	
Inventory		10,000
Cost of inventory sold to Nonaffiliated.		

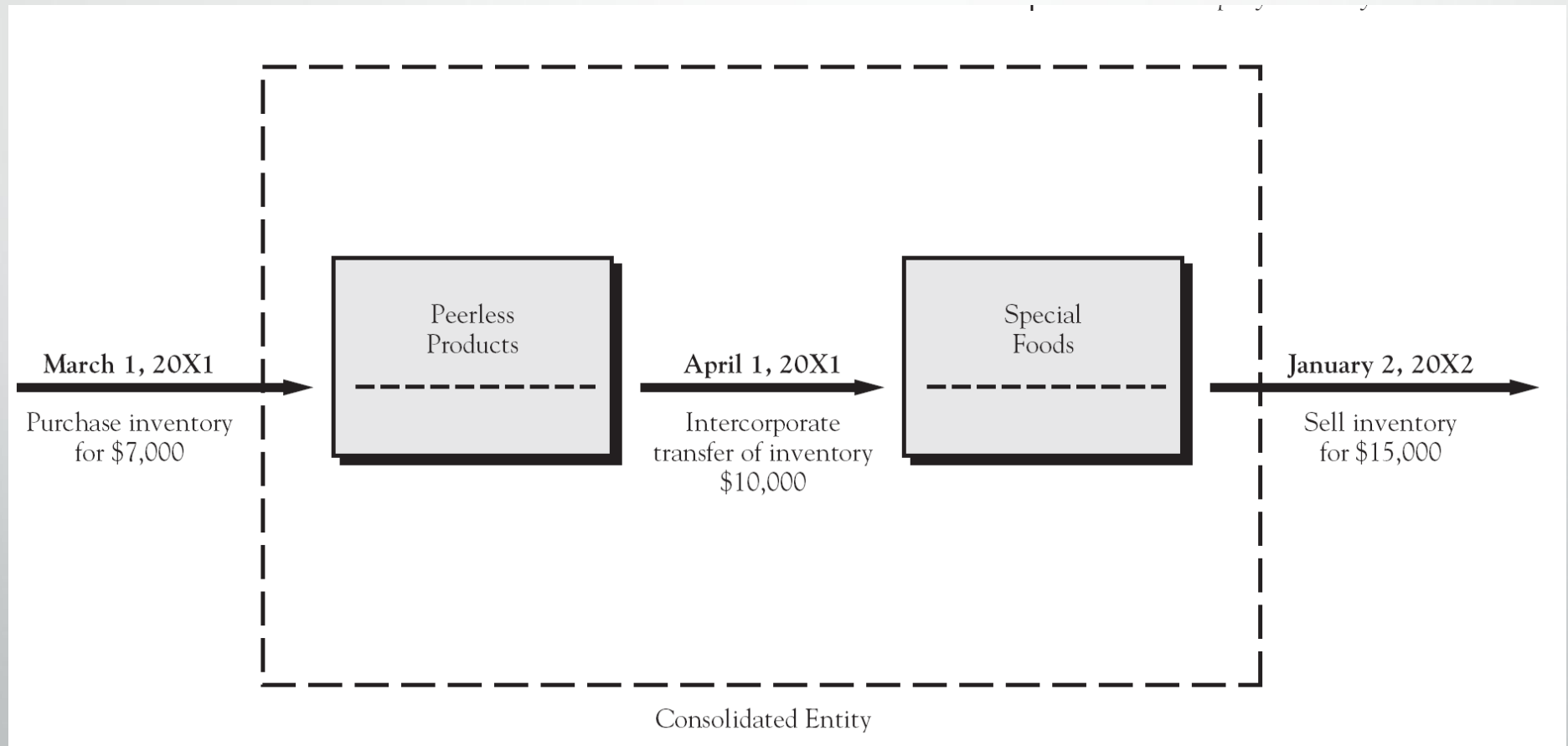
Eliminating Entry:

Sales	10,000	
Cost of Goods Sold		10,000
Eliminate intercompany inventory sale.		

- This entry does not affect consolidated net income
- No elimination of intercompany profit is needed because all the intercompany profit has been realized through resale of the inventory to the external party during the current period

Downstream Sale of Inventory - Illustration

- Resale in period following intercorporate transfer



Using the basic equity method, Peerless records its share of Special Foods' income and dividends for 20X1 in the normal manner:

Cash	24,000	
Investment in Special Foods Stock		24,000
Record dividends from Special Foods: \$30,000 x .80		
Investment in Special Foods Stock	40,000	
Income from Subsidiary		40,000
Record equity-method income: \$50,000 x .80		

As a result of these entries, the ending balance of the investment account is \$256,000 (\$240,000 + \$40,000 - \$24,000).

The consolidation workpaper prepared at the end of 20X1 appears in Figure 7-1 of the text.

Eliminating Entries:

E(10)	Income from Subsidiary	40,000	
	Dividends Declared		24,000
	Investment in Special Foods Stock		16,000
	Eliminate income from subsidiary.		
E(11)	Income to Noncontrolling Interest	10,000	
	Dividends Declared		6,000
	Noncontrolling Interest		4,000
	Assign income to noncontrolling interest. $\$10,000 = \$50,000 \times .20$		
E(12)	Common Stock—Special Foods	200,000	
	Retained Earnings, January 1	100,000	
	Investment in Special Foods Stock		240,000
	Noncontrolling Interest		60,000
	Eliminate beginning investment balance.		
E(13)	Sales	10,000	
	Cost of Goods Sold		7,000
	Inventory		3,000
	Eliminate intercompany downstream sale of inventory.		

Only entry E(13) relates to the elimination of unrealized inventory profits

Downstream Sale of Inventory - Illustration

- Consolidated Net Income—20X1

Peerless's separate income	\$140,000
Less: Unrealized intercompany profit on downstream inventory sale	<u>(3,000)</u>
Peerless's separate realized income	\$137,000
Special Foods' net income	<u>50,000</u>
Consolidated net income, 20X1	\$187,000
Income to noncontrolling interest ($\$50,000 \times .20$)	<u>(10,000)</u>
Income to controlling interest	<u><u>\$177,000</u></u>

During 20X2, Special Foods receives \$15,000 when it sells to Nonaffiliated Corporation the inventory that it had purchased for \$10,000 from Peerless in 20X1. Also, Peerless records its pro rata portion of Special Foods' net income and dividends for 20X2 with the normal basic equity-method entries:

Cash	32,000	
Investment in Special Foods Stock		32,000
Record dividends from Special Foods: $\$40,000 \times .80$		
Investment in Special Foods Stock	60,000	
Income from Subsidiary		60,000
Record equity-method income: $\$75,000 \times .80$		

The consolidation workpaper prepared at the end of 20X2 is shown in Figure 7–2 in the text. Four elimination entries are needed:

Downstream Sale of Inventory - Illustration

Investment in Special Foods Stock			
Original cost	240,000		
(9) 20X1 Equity accrual (\$50,000 × .80)	<u>40,000</u>	(8) 20X1 Dividends (\$30,000 × .80)	<u>24,000</u>
Balance, 12/31/X1	<u><u>256,000</u></u>		
(15) 20X2 Equity accrual (\$75,000 × .80)	<u>60,000</u>	(14) 20X2 Dividends (\$40,000 × .80)	<u>32,000</u>
Balance, 12/31/X2	<u><u>284,000</u></u>		

Downstream Sale of Inventory - Illustration

Eliminating Entries:

E(16)	Income from Subsidiary	60,000	
	Dividends Declared		32,000
	Investment in Special Foods Stock		28,000
	Eliminate income from subsidiary.		
E(17)	Income to Noncontrolling Interest	15,000	
	Dividends Declared		8,000
	Noncontrolling Interest		7,000
	Assign income to noncontrolling interest. \$15,000 = \$75,000 x .20		
E(18)	Common Stock—Special Foods	200,000	
	Retained Earnings, January 1	120,000	
	Investment in Special Foods Stock		256,000
	Noncontrolling Interest		64,000
	Eliminate beginning investment balance.		
E(19)	Retained Earnings, January 1	3,000	
	Cost of Goods Sold		3,000
	Eliminate beginning inventory profit.		

Entry E(19) is needed to adjust cost of goods sold to the proper consolidated balance and to reduce beginning retained earnings.

Downstream Sale of Inventory - Illustration

- Consolidated Net Income—20X2

Peerless's separate income	\$160,000
Realization of deferred intercompany profit on downstream inventory sale	<u>3,000</u>
Peerless's separate realized income	\$163,000
Special Foods' net income	<u>75,000</u>
Consolidated net income, 20X2	\$238,000
Income to noncontrolling interest ($\$75,000 \times .20$)	<u>(15,000)</u>
Income to controlling interest	<u><u>\$223,000</u></u>

- Inventory held two or more periods
 - Prior to liquidation, an eliminating entry is needed in the consolidation workpaper each time consolidated statements are prepared to restate the inventory to its cost to the consolidated entity

For example, if Special Foods continues to hold the inventory purchased the following eliminating entry is needed in the consolidation workpaper each time a consolidated balance sheet is prepared for years following the year of intercompany sale, for as long as the inventory is held:

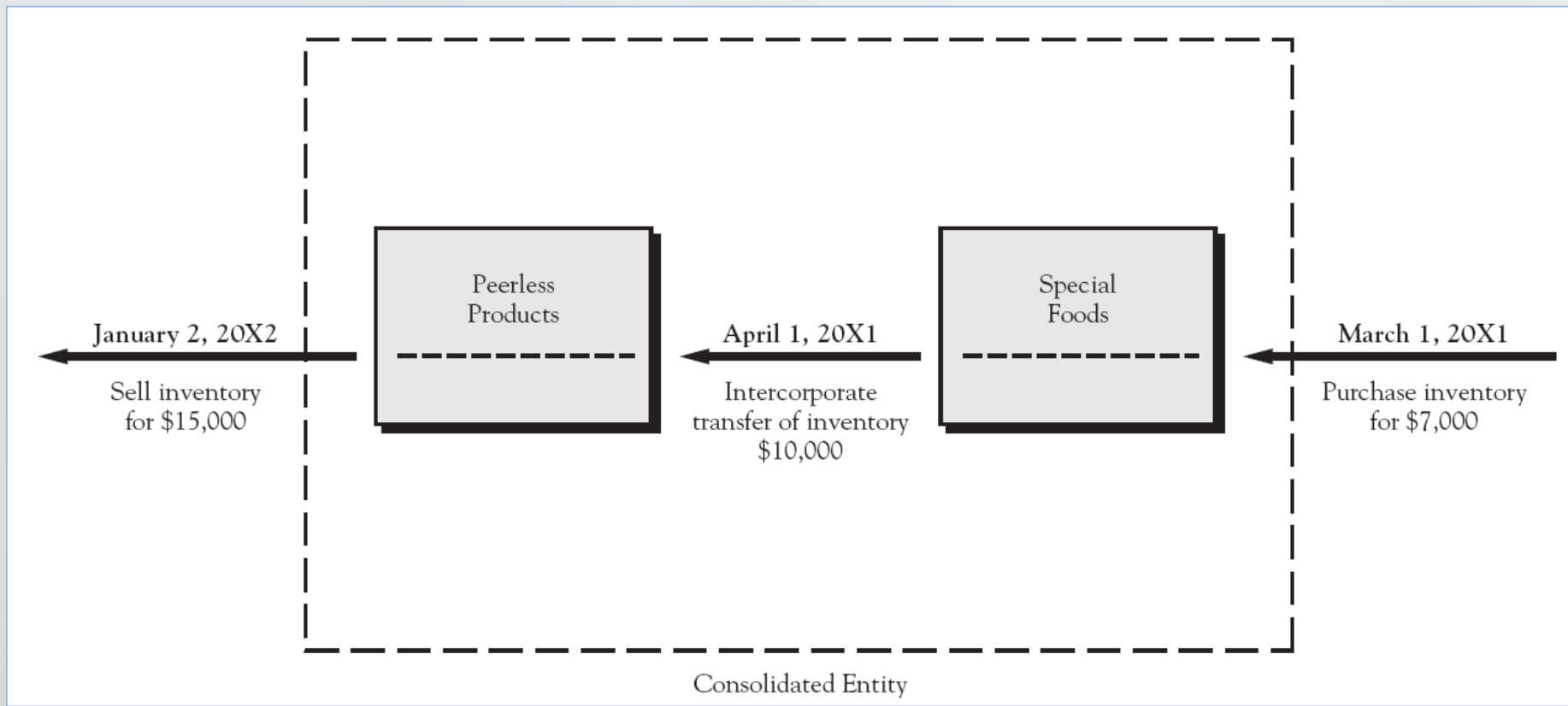
E(20)	Retained Earnings, January 1	3,000	
	Inventory		3,000
	Eliminate beginning inventory profit.		

UPSTREAM SALE OF INVENTORY

When an upstream sale of inventory occurs and the inventory is resold by the parent to a nonaffiliate during the same period, all the parent's equity-method entries and the eliminating entries in the consolidation workpaper are identical to those in the downstream case

Upstream Sale of Inventory

When the inventory is not resold to a nonaffiliate before the end of the period, workpaper eliminating entries are different from the downstream case only by the apportionment of the unrealized intercompany profit to both the controlling and noncontrolling interests



20X1: Peerless records the following basic equity-method entries:

Cash		24.000	
Investment in Special Foods Stock			24.000
Record dividends from Special Foods: $\$30,000 \times .80$			
Investment in Special Foods Stock		40.000	
Income from Subsidiary			40.000
Record equity-method income: $\$50,000 \times .80$			

Eliminating Entries:

E(23)	Income from Subsidiary	40,000	
	Dividends Declared		24,000
	Investment in Special Foods Stock		16,000
	Eliminate income from subsidiary.		
E(24)	Income to Noncontrolling Interest	9,400	
	Dividends Declared		6,000
	Noncontrolling Interest		3,400
	Assign income to noncontrolling interest: $\$9,400 = (\$50,000 - \$3,000) \times .20$		
E(25)	Common Stock—Special Foods	200,000	
	Retained Earnings, January 1	100,000	
	Investment in Special Foods Stock		240,000
	Noncontrolling Interest		60,000
	Eliminate beginning investment balance.		
E(26)	Sales		
	Cost of Goods Sold	3,000	7,000
	Inventory		3,000
	Eliminate intercompany upstream sale of inventory.		

All eliminating entries are the same in the upstream case as in the downstream case except for entry E(24).

Refer Figure 7-3 in the text for the Consolidation Workpaper.

- Consolidated Net Income—20X1

Peerless's separate income		\$140,000
Special Foods' net income	\$50,000	
Less: Unrealized intercompany profit on upstream inventory sale	<u>(3,000)</u>	
Special Foods' realized net income		<u>47,000</u>
Consolidated net income, 20X1		\$187,000
Income to noncontrolling interest ($\$47,000 \times .20$)		<u>(9,400)</u>
Income to controlling interest		<u><u>\$177,600</u></u>

Basic Equity-Method Entries—20X2

Cash	32,000	
Investment in Special Foods Stock		32,000
Record dividends from Special Foods: \$40,000 x .80		
Investment in Special Foods Stock	60,000	
Income from Subsidiary		60,000
Record equity-method income: \$75,000 x .80		

As in the downstream illustration, the investment account balance at the end of 20X2 is \$284,000.

The consolidation workpaper used to prepare consolidated financial statements at the end of 20X2 appears in Figure 7-4 in the text.

Eliminating Entries:

E(29)	Income from Subsidiary	60,000	
	Dividends Declared		32,000
	Investment in Special Foods Stock		28,000
	Eliminate income from subsidiary.		
(E30)	Income to Noncontrolling Interest	15,600	
	Dividends Declared		8,000
	Noncontrolling Interest		7,600
	Assign income to noncontrolling interest: $\$15,600 = (\$75,000 - \$3,000) \times .20$		
E(31)	Common Stock—Special Foods	200,000	
	Retained Earnings, January 1	120,000	
	Investment in Special Foods Stock		256,000
	Noncontrolling Interest		64,000
	Eliminate beginning investment balance.		
E(32)	Retained Earnings, January 1	2,400	
	Noncontrolling Interest	600	
	Cost of Goods Sold		3,000
	Eliminate beginning inventory profit: $\$2,400 = \$3,000 \times .80$ $\$600 = \$3,000 \times .20$		

Workpaper entry E(32) deals explicitly with the elimination of the inventory profit on the upstream sale.

Upstream Sale of Inventory - Illustration

- Consolidated Net Income—20X2

Peerless's separate income		\$160,000
Special Foods' net income	\$75,000	
Realization of deferred intercompany profit on upstream inventory sale	<u>3,000</u>	
Special Foods' realized net income		<u>78,000</u>
Consolidated net income, 20X2		\$238,000
Income to noncontrolling interest ($\$78,000 \times .20$)		<u>(15,600)</u>
Income to controlling interest		<u><u>\$222,400</u></u>

ADDITIONAL CONSIDERATIONS

Sale from one subsidiary to another

- Transfers of inventory often occur between companies that are under common control or ownership
- The eliminating entries are identical to those presented earlier for sales from a subsidiary to its parent
- The full amount of any unrealized intercompany profit is eliminated, with the profit elimination allocated proportionately against the ownership interests of the selling subsidiary



Costs associated with transfers

- When one affiliate transfers inventory to another, some additional cost is often incurred
- Such costs should be treated in the same way as if the affiliates were operating divisions of a single company



Lower of cost or market

- A company might write down inventory purchased from an affiliate under this rule if the market value at the end of the period is less than the intercompany transfer price

Assume that a parent company purchases inventory for \$20,000 and sells it to its subsidiary for \$35,000. The subsidiary still holds the inventory at year-end and determines that its market value (replacement cost) is \$25,000 at that time. The subsidiary writes the inventory down from \$35,000 to its lower market value of \$25,000 at the end of the year and records the following entry:

Loss on Decline in Value of Inventory	10,000	
Inventory		10,000
Write down inventory to market value.		


The following eliminating entry is needed in the consolidation workpaper:

E(34)	Sales	35,000	
	Cost of Goods Sold		20,000
	Inventory		5,000
	Loss on Decline in Value of Inventory		10,000
	Eliminate intercompany sale of inventory.		



Sales and purchases before affiliation

- The consolidation treatment of profits on inventory transfers that occurred before the business combination depends on whether the companies were at that time independent and the sale transaction was the result of arm's-length bargaining
- As a general rule, the effects of transactions that are not the result of arm's-length bargaining must be eliminated



In the absence of evidence to the contrary, companies that have joined together in a business combination are viewed as having been separate and independent prior to the combination

- If the prior sales were the result of arm's-length bargaining, they are viewed as transactions between unrelated parties
- No elimination or adjustment is needed in preparing consolidated statements subsequent to the combination, even if an affiliate still holds the inventory



THANK YOU