

GLOBAL  
EDITION



# Advanced Accounting

THIRTEENTH EDITION

Floyd A. Beams • Joseph H. Anthony  
Bruce Bettinghaus • Kenneth A. Smith



Pearson

# ADVANCED ACCOUNTING

\$99,000. Although not supported by a separate theory, constructive gains and losses are sometimes assigned 100 percent to the parent on the basis of expediency. The accounting is less complicated.

Changes in market interest rates generate gains or losses for a debt issuer, so accounting procedures should assign such gains and losses to the issuer, irrespective of the form of the transaction (direct retirement by the issuer or purchase by an affiliate). Failure to assign the full amount of a constructive gain or loss to the issuer results in recognizing form over substance in debt retirement transactions. The substance of a transaction should be considered over its form (incidentally, this is what consolidation is all about); therefore, agency theory is conceptually superior, and, accordingly, we assign constructive gains and losses to the issuer throughout this text.

Most long-term corporate debt is in the form of outstanding bonds, so the analysis in this chapter relates to bonds even though it also applies to long-term notes and other types of debt instruments. Straight-line rather than effective interest amortization of premiums and discounts is used in the illustrations throughout the chapter to make the illustrations easier to follow and to help students learn the concepts involved without the added complexity of effective interest computations. It should be understood that the *effective interest method is generally superior* to the straight-line method.<sup>1</sup> This discussion of intercompany bond transactions among affiliates also applies to investments accounted for under the equity method.

The first illustration in this section assumes that a subsidiary purchases parent bonds (the parent company is the bond issuer) and assigns the constructive gain or loss to the parent. In the second illustration, the parent purchases bonds issued by a subsidiary, and we assign the constructive gain or loss to the subsidiary.

### Subsidiary Acquisition of Parent Bonds

Son Corporation is an 80 percent–owned affiliate of Pop Corporation, and Pop issues \$2,000,000 par of 10 percent, 10-year bonds at par value to the public on December 30, 2015. On December 31, 2016, Son purchases \$200,000 of the bonds for \$209,000 in the open market. Son's purchase results in the constructive retirement of \$200,000 of Pop bonds and a constructive loss of \$9,000 (\$209,000 paid to retire bonds with a book value of \$200,000).

Pop adjusts investment income and investment accounts at December 31, 2016 to record the constructive loss under the equity method. The entry on Pop's books is:

Income from Son (–R, –SE)	9,000	
Investment in Son (–A)		9,000
To adjust income from Son for the constructive loss on bonds.		

Without this entry, the income of Pop on an equity basis would not equal its share of consolidated net income.

We charge the \$9,000 constructive loss against Pop's share of Son's reported income because Pop is the bond issuer. Agency theory assigns the full amount of any constructive gain or loss on bonds to the issuer. The parent is the issuer, so the analysis is similar to one for a downstream sale, and we charge the full amount to Pop.

The \$9,000 constructive loss appears in the consolidated income statement of Pop and Subsidiary for 2016, and the 10 percent bond issue is reported at \$1,800,000 in the consolidated balance sheet at December 31, 2016. The following workpaper adjustment accomplishes this:

Loss on constructive retirement of bonds (Lo, –SE)	9,000	
10% bonds payable (–L)	200,000	
Investment in bonds (–A)		209,000
To enter loss and eliminate reciprocal bond investment and liability amounts.		

### LEARNING OBJECTIVE 7.2

<sup>1</sup>GAAP (ASC 835-30-15) generally requires the effective interest method of amortization, but it does not apply to transactions between parent and subsidiary companies and between subsidiaries of a common parent.

### Parent Acquisition of Subsidiary Bonds

Assume that Son sold \$2,000,000 par of 10 percent, 10-year bonds to the public at par on December 30, 2015, and that Pop acquires \$200,000 par of these bonds for \$209,000 on December 31, 2016, in the open market. The purchase by Pop results in a constructive retirement of \$200,000 par of Son bonds and a constructive loss of \$9,000 to the consolidated entity. We assign only 80 percent of the constructive loss to controlling stockholders because the purchase of subsidiary bonds is equivalent to an upstream sale, in which the intercompany transactions affect noncontrolling interest share.

In accounting for its investment in Son under the equity method, Pop recognizes 80 percent of the constructive loss at December 31, 2016 with the following entry:

Income from Son (–R, –SE)	7,200	
Investment in Son (–A)		7,200
Recognize the constructive loss on acquisition of Son's bonds.		

The workpaper adjustment in the year of intercompany bond purchase is the same as that illustrated for the intercompany purchase of Pop's bonds. However, the \$7,200 decrease in consolidated net income consists of the \$9,000 constructive loss less the \$1,800 noncontrolling interest share of the loss, which reduces noncontrolling interest share.

To summarize, when the parent is the issuer, no allocation of gains and losses from intercompany bond transactions is necessary. When the subsidiary is the issuer, intercompany gains and losses on bonds must be allocated between controlling and noncontrolling interest shares in the consolidated income statement. In a one-line consolidation, the parent company recognizes only its proportionate share of the constructive gain or loss on purchases of bonds issued by a subsidiary.

### PARENT BONDS PURCHASED BY SUBSIDIARY

A constructive retirement of parent bonds occurs when an affiliate purchases outstanding bonds of the parent. The purchaser records the amount paid as an investment in bonds. This is the only entry made by either the purchaser or the issuer at the time of the intercompany purchase. The separate accounts of the affiliates do *not* record any gain or loss that results from the constructive retirement, although it is included in investment income on the parent's books under the equity method. The difference between the bond liability and bond investment accounts on the books of the parent and subsidiary reflects the constructive gain or loss.

To illustrate, assume that Sun is a 70 percent–owned subsidiary of Pam, acquired at a fair value equal to its \$6,300,000 book value on December 31, 2016, when Sun had capital stock of \$5,000,000 and retained earnings of \$4,000,000.

Pam has \$10,000,000 par of 10 percent bonds outstanding with a \$100,000 unamortized premium on January 2, 2017, at which time Sun purchases \$1,000,000 par of these bonds for \$950,000 from an investment broker. The purchase results in a constructive retirement of 10 percent of Pam's bonds and a \$60,000 constructive gain, computed as follows (in thousands):

Book value of bonds purchased	\$1,010
[10% × (\$10,000,000 par + \$100,000 premium)]	
Less: Purchase price	(950)
Constructive gain on bond retirement	<u>\$ 60</u>

The only entry Sun makes when purchasing the Pam bonds is (in thousands):

Investment in Pam bonds (+A)	950	
Cash (–A)		950
To record acquisition of Pam bonds at 95, and classify as a held to maturity investment.		

## Equity Method

If we prepare consolidated financial statements immediately after the constructive retirement, the workpaper entry to eliminate the intercompany bond investment and liability balances<sup>2</sup> includes the \$60,000 gain as follows (in thousands):

<i>January 2, 2017</i>		
<b>10% bonds payable (– L)</b>	<b>1,010</b>	
<b>Investment in Pam bonds (– A)</b>		<b>950</b>
<b>Gain on retirement of bonds (Ga, + SE)</b>		<b>60</b>

As a result of this workpaper entry, the Investment in Pam bonds is eliminated, the consolidated income statement reflects the gain and the consolidated balance sheet shows the bond liability to holders outside the consolidated entity at \$9,090,000 (\$9,000,000 par plus \$90,000 unamortized premium).

During 2017, Pam amortizes the bond premium on its books and Sun amortizes the discount on its bond investment. Assuming that interest is paid on January 1 and July 1, that the bonds mature on January 1, 2022 (five years after purchase), and that straight-line amortization is used at year end, Pam amortizes 20 percent of the bond premium annually and Sun amortizes 20 percent of the discount annually as follows (in thousands):

### PAM'S BOOKS

*July 1*

Interest expense (E, –SE)	500	
Cash (–A)		500
(\$10,000,000 par × 10% × 1/2 year)		

*December 31*

Interest expense (E, –SE)	500	
Interest payable (+L)		500
(\$10,000,000 par × 10% × 1/2 year)		

*December 31*

Bonds payable (–L)	20	
Interest expense (–E, +SE)		20
(\$100,000 premium ÷ 5 years)		

### SUN'S BOOKS

*July 1*

Cash (+A)	50	
Interest income (R, +SE)		50
(\$1,000,000 par × 10% × 1/2 year)		

*December 31*

Interest receivable (+A)	50	
Interest income (R, +SE)		50
(\$1,000,000 par × 10% × 1/2 year)		

*December 31*

Investment in Pam bonds (+A)	10	
Interest income (R, +SE)		10
(\$50,000 discount ÷ 5 years)		

At December 31, 2017, after posting the foregoing entries, the ledgers of Pam and Sun show the following balances (in thousands):

### Pam's Books

10% bonds payable (including \$80,000 unamortized premium)	\$10,080
Interest expense	980

### Sun's Books

Investment in Pam bonds	\$ 960
Interest income	\$ 110

<sup>2</sup>We employ the net method in accounting for bonds throughout the chapter. We do not separately record premiums and discounts.

The difference between the bond investment (\$960,000) and 10 percent of Pam's bond liability (\$1,008,000) is now \$48,000 rather than \$60,000. The reason is that there has been a piecemeal realization and recognition of the constructive gain on the separate books of Pam and Sun. This piecemeal recognition occurred during 2017 as Pam amortized the \$2,000 premium and Sun amortized the \$10,000 discount on bonds that were constructively retired on January 2, 2017. This difference is reflected in interest expense and income accounts relating to the constructively retired bonds. That is, interest income of \$110,000 less 10 percent of \$980,000 interest expense equals \$12,000, or 20 percent of the original constructive gain. The workpaper entries to eliminate reciprocal bond accounts at December 31, 2017, are (in thousands):

<b>a</b>	<b>10% bonds payable (– L)</b>	<b>1,008</b>	
	<b>Investment in Pam bonds (– A)</b>		<b>960</b>
	<b>Gain on retirement of bonds (Ga, + SE)</b>		<b>48</b>
<b>b</b>	<b>Interest income (– R, – SE)</b>	<b>110</b>	
	<b>Interest expense (– E, + SE)</b>		<b>98</b>
	<b>Gain on retirement of bonds (Ga, + SE)</b>		<b>12</b>
<b>f</b>	<b>Interest payable (– L)</b>	<b>50</b>	
	<b>Interest receivable (– A)</b>		<b>50</b>

Because 2017 is the year in which the bonds are constructively retired, the combined gain that is entered by the workpaper entries is \$60,000, the original gain. If the workpaper entries were combined, the gain would appear as a single amount. Note that the amount of piecemeal recognition of a constructive gain or loss is always the difference between the intercompany interest expense and income amounts that are eliminated. The fact that the piecemeal recognition was 20 percent of the \$60,000 gain is the result of straight-line amortization, a relationship that would not hold under the effective interest method.

The first three columns of the consolidation workpaper in Exhibit 7-1 include financial statements for Pam and Sun. Except for the Investment in Sun and the Income from Sun accounts, the amounts shown reflect all previous assumptions and computations.

We compute Pam's investment income of \$202,000 as follows (in thousands):

70% of Sun's reported income of \$220,000	\$154
Add: Constructive gain on bonds	60
	<u>214</u>
Less: Piecemeal recognition of constructive gain (\$60,000 ÷ 5 years)	12
Income from Sun	<u>\$202</u>

On December 31, 2017, separate entries on the books of Pam to record the investment income from Sun under a one-line consolidation are as follows (in thousands):

Investment in Sun (+A)	154	
Income from Sun (R, +SE)		154
To record investment income from Sun (\$220,000 × 70%)		
Investment in Sun (+A)	60	
Income from Sun (R, +SE)		60
To adjust income from Sun for 100% of the \$60,000 constructive gain on bonds.		
Income from Sun (–R, –SE)	12	
Investment in Sun (–A)		12
To adjust income from Sun for the piecemeal recognition of the constructive gain on bonds that occurred during 2017. (Either \$60,000 gain ÷ 5 years or \$110,000 interest income – \$98,000 interest expense)		

We add the \$60,000 constructive gain to Pam's share of the reported income of Sun because it is realized from the consolidated viewpoint. We recognize this constructive gain on the books of the

<b>PAM CORPORATION AND SUBSIDIARY CONSOLIDATION WORKPAPER FOR THE YEAR ENDED DECEMBER 31, 2017 (IN THOUSANDS)</b>					
	Pam	70% Sun	<i>Adjustments and Eliminations</i>		Consolidated Statements
			Debits	Credits	
<i>Income Statement</i>					
Sales	\$ 4,000	\$ 2,000			\$ 6,000
Income from Sun	202		c 202		
Gain on retirement of bonds				a 48 b 12	60
Interest income		110	b 110		
Expenses including cost of sales	(1,910)	(1,890)			(3,800)
Interest expense	(980)			b 98	(882)
Noncontrolling interest share (\$220 × 30%)			d 66		(66)
<b>Controlling interest share</b>	<b>\$ 1,312</b>	<b>\$ 220</b>			<b>\$ 1,312</b>
<i>Retained Earnings Statement</i>					
Retained earnings—Pam	\$ 4,900				\$ 4,900
Retained earnings—Sun		\$ 4,000	e 4,000		
<b>Add: Controlling interest share</b>	<b>1,312</b>	<b>220</b>			<b>1,312</b>
<b>Retained earnings—December 31</b>	<b>\$ 6,212</b>	<b>\$ 4,220</b>			<b>\$ 6,212</b>
<i>Balance Sheet</i>					
Other assets	\$39,880	\$19,100			\$58,980
Interest receivable		50		f 50	
Investment in Sun	6,502			c 202 e 6,300	
Investment in Pam bonds		960		a 960	
	<b>\$46,382</b>	<b>\$20,110</b>			<b>\$58,980</b>
Other liabilities	\$ 9,590	\$10,890			\$20,480
Interest payable	500		f 50		450
10% bond payable	10,080		a 1,008		9,072
Common stock	20,000	5,000	e 5,000		20,000
<b>Retained earnings</b>	<b>6,212</b>	<b>4,220</b>			<b>6,212</b>
	<b>\$46,382</b>	<b>\$20,110</b>			
Noncontrolling interest				d 66 e 2,700	2,766
			10,436	10,436	<b>\$58,980</b>

**EXHIBIT 7-1****Parent-Company Bonds Held by Subsidiary**

affiliates as they continue to account for the \$1,000,000 par of bonds constructively retired on January 2, 2017.

Pam's investment income for 2017 increases by \$48,000 from the constructive retirement of the bonds (\$60,000 constructive gain less \$12,000 piecemeal recognition of the gain). In the years 2018, 2019, 2020, and 2021, Pam's investment income will be reduced \$12,000 each year as the constructive gain is recognized on the books of Pam and Sun. In other words, in addition to recording its



share of the reported income of Sun in each of these four years, Pam makes the following entry to adjust its income from Sun for the piecemeal recognition of the constructive gain (in thousands):

Income from Sun (–R, –SE)	12	
Investment in Sun (–A)		12

At January 1, 2022, the maturity date of the bonds, the full amount of the constructive gain will have been recognized, and Pam's Investment in Sun account will equal 70 percent of the equity of Sun.

The following workpaper entries consolidate the financial statements of Pam Corporation and Subsidiary at December 31, 2017 (see Exhibit 7-1) (in thousands):

<b>a</b>	<b>10% bonds payable (–L)</b>	<b>1,008</b>	
	Gain on retirement of bonds (Ga, + SE)		<b>48</b>
	Investment in Pam bonds (–A)		<b>960</b>
	To enter gain and eliminate reciprocal bond investment and bond liability amounts, including unamortized premium.		
<b>b</b>	<b>Interest income (–R, –SE)</b>	<b>110</b>	
	Interest expense (–E, + SE)		<b>98</b>
	Gain on retirement of bonds (Ga, + SE)		<b>12</b>
	To eliminate reciprocal interest income and interest expense amounts.		
<b>c</b>	<b>Income from Sun (–R, –SE)</b>	<b>202</b>	
	Investment in Sun (–A)		<b>202</b>
	To establish reciprocity, eliminate investment income and adjust the investment account to its beginning of the period balance.		
<b>d</b>	<b>Noncontrolling interest share (–SE)</b>	<b>66</b>	
	Noncontrolling interest (+ SE)		<b>66</b>
	To enter noncontrolling interest share of Sun's income.		
<b>e</b>	<b>Retained earnings—Sun (–SE)</b>	<b>4,000</b>	
	Common stock—Sun (–SE)	<b>5,000</b>	
	Investment in Sun (–A)		<b>6,300</b>
	Noncontrolling interest January 1, 2017 (+ SE)		<b>2,700</b>
	To eliminate reciprocal investment and equity accounts and set up beginning noncontrolling interest.		
<b>f</b>	<b>Interest payable (–L)</b>	<b>50</b>	
	Interest receivable (–A)		<b>50</b>
	To eliminate reciprocal interest payable and interest receivable amounts.		

The first workpaper entry eliminates 10 percent of Pam's bond liability and 100 percent of Sun's bond investment and also enters \$48,000 of the gain on retirement of bonds. This \$48,000 is that part of the \$60,000 constructive gain not recognized on the separate books of Pam and Sun as of December 31, 2017.

Entry b eliminates reciprocal interest expense and income. The difference between the interest expense and income amounts represents that part of the constructive gain recognized on the books of Pam and Sun through amortization in 2017. This amount is \$12,000, and when credited to the gain on retirement of bonds, it brings the gain up to the original \$60,000. As mentioned earlier, if entries a and b had been combined, we would enter the constructive gain in the workpaper as one amount.

Workpaper entry c eliminates investment income and adjusts the Investment in Sun account to its beginning-of-the-period balance. Entry d enters the noncontrolling interest share of Sun's net