

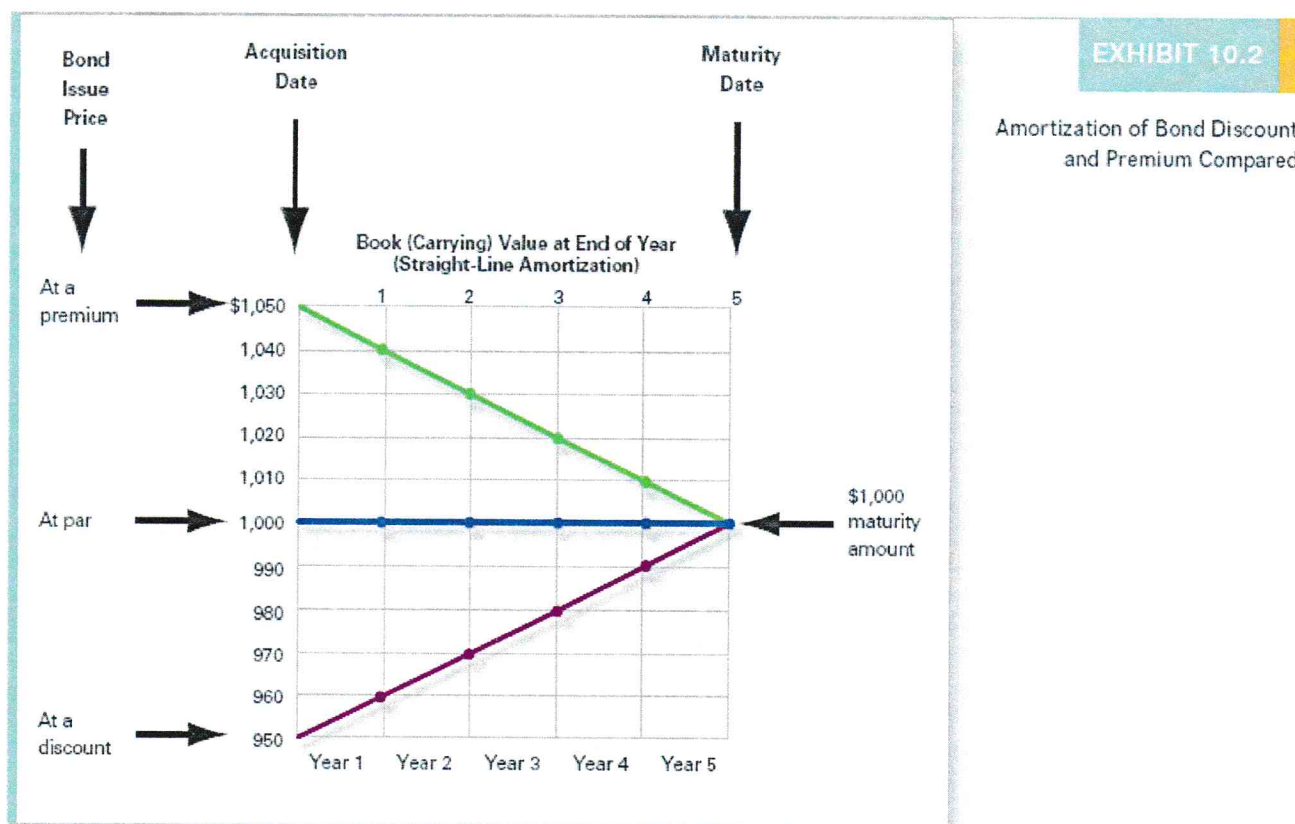
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**Part B: Reporting Interest Expense on Bonds Issued at a Premium Using Effective-Interest Amortization**

The effective-interest amortization method is basically the same for a discount or a premium. In either case, interest expense for a bond is computed by multiplying the current unpaid balance by the market rate of interest on the date the bonds were sold. The periodic amortization of a bond premium or discount is then calculated as the difference between interest expense and the amount of cash paid or accrued.

The first interest payment on AT&T bonds is made on June 30, 2014. The interest expense on that date is calculated by multiplying the unpaid balance of the debt by the market rate of interest ( $\$103,630 \times 8\% \times 1/2 = \$4,145$ ). The amount of cash paid is calculated by multiplying the principal by the stated rate of interest ( $\$100,000 \times 10\% \times 1/2 = \$5,000$ ). The difference between the interest expense and the cash paid (or accrued) is the amount of premium that has been amortized ( $\$5,000 - \$4,145 = \$855$ ).

---

Solution to SELF-STUDY QUIZ

1. \$9,000 ( $9\% \times \$100,000$ )
  2. \$8,329 [ $\$9,000 - (\$6,711 \div 10)$ ]
-

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Interest expense (+E, -SE) .....	4,145
Premium of bonds payable (-L) .....	855
Cash (-A) .....	5,000

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<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Stockholders' Equity</u>	
Cash	-5,000	Premium on bonds	-855	Interest expense (+E)	-4,145

The basic difference between effective-interest amortization of a bond discount and a bond premium is that the amortization of a discount increases the book value of the liability and the amortization of a premium reduces it. The following schedule illustrates the amortization of a premium over the life of a bond.

AMORTIZATION SCHEDULE: BOND PREMIUM (EFFECTIVE-INTEREST)				
Date	(a) Interest to Be Paid (10% × \$100,000 × 1/2)	(b) Interest Expense (8% × Beginning of Period Book Value × 1/2)	(c) Amortization (b) - (a)	(d) Book Value Beginning Book Value - (c)
1/1/2014				\$103,630
6/30/2014	\$5,000	\$4,145	\$855	102,775
12/31/2014	5,000	4,111	889	101,886
6/30/2015	5,000	4,075	925	100,961
12/31/2015	5,000	4,039*	961	100,000

\*Rounded.



PAUSE FOR FEEDBACK

### SELF-STUDY QUIZ

Assume that AT&T issued \$100,000 bonds that will mature in 10 years. The bonds pay interest at the end of each year at an annual rate of 9 percent. They were sold when the market rate was 8 percent at a price of \$106,711. What amount of interest was paid at the end of the first year? What amount of interest expense would be reported at the end of the first year using effective-interest amortization?

*After you have completed your answers, check them with the solutions at the bottom of the page.*

### KEY RATIO ANALYSIS



### Debt-to-Equity

#### ? ANALYTICAL QUESTION

What is the relationship between the amount of capital provided by owners and the amount provided by creditors?

**% RATIO AND COMPARISONS**

The debt-to-equity ratio is computed as follows:

$$\text{Debt-to-Equity} = \text{Total Liabilities} \div \text{Stockholders' Equity}$$

**LEARNING OBJECTIVE 10-5**

Analyze the debt-to-equity ratio.

---

**Solution to SELF-STUDY QUIZ**

1. \$9,000 ( $9\% \times \$100,000$ )
  2. \$8,537 ( $8\% \times \$106,711$ )
-

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The 2011 ratio for AT&T is:

$$\$164,547 \div \$105,797 = 1.6$$

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COMPARISONS OVER TIME		
AT&T		
2009	2010	2011
1.3	1.4	1.6

COMPARISONS WITH COMPETITORS	
Verizon	Sprint
2011	2011
5.1	3.3

### INTERPRETATIONS

**In General** A high ratio suggests that a company relies heavily on funds provided by creditors. Heavy reliance on creditors increases the risk that a company may not be able to meet its contractual financial obligations during a business downturn.

**Focus Company Analysis** The debt-to-equity ratio for AT&T has increased slightly over the past few years. Most analysts would see this as an insignificant change, especially in light of the strength of the ratio compared to Sprint and Verizon.

**A Few Cautions** The debt-to-equity ratio tells only part of the story with respect to the risks associated with debt. It does not help the analyst understand whether the company's operations can support its debt. Remember that debt carries an obligation to make cash payments for interest and principal. As a result, most analysts would evaluate the debt-to-equity ratio within the context of the amount of cash the company can generate from operating activities.

## EARLY RETIREMENT OF DEBT

### LEARNING OBJECTIVE 10-6

Report the early retirement of bonds.

Bonds are normally issued for long periods, such as 20 or 30 years. As mentioned earlier, bondholders who need cash prior to the maturity date can simply sell the bonds to another investor. This transaction does not affect the books of the company that issued the bonds. In several situations, a corporation may decide to retire bonds before their maturity date. A bond with a call feature may be called in for early retirement at the issuer's option. Typically, the bond indenture includes a call premium for bonds retired before the maturity date, which often is stated as a percentage of par value.

Assume that several years ago, AT&T issued bonds in the amount of \$1 million and that the bonds sold at par. If AT&T called the bonds in 2014 at 102 percent of par, the company's accountants would make the following journal entry:

Bonds payable (-L) .....	1,000,000
Loss on bond call (+Loss, -SE) .....	20,000
Cash (-A) .....	1,020,000

<u>Assets</u>		=	<u>Liabilities</u>		+	<u>Stockholders' Equity</u>	
Cash	-1,020,000		Bonds payable	-1,000,000		Loss	-20,000

The loss on the bond call is the amount over par that must be paid according to the bond indenture. This loss on the bond call would be reported on the income statement.

In some cases, a company may elect to retire debt early by purchasing it on the open market, just as an investor would. This approach is necessary when the bonds do not have a call feature. It might also be an attractive approach if the price of the bonds were to fall after the date of issue. What could cause the price of a bond to fall? The most common cause is a rise in interest rates. As you may have noticed during our discussion of present value concepts, bond prices move in the opposite direction of interest rates. If interest rates go up, bond prices fall, and vice versa. When interest rates have gone up, a company that wants to retire a bond before maturity may find buying the bond on the open market is less expensive than paying a call premium.

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**Part A: straight-line amortization****Page 520**

June 30, 2014		
Interest expense (+E, -SE) (\$6,000 - \$300) .....	5,700	
Premium on bonds payable* (-L) .....	300	
Cash (-A) (\$100,000 × 12% × 1/2) .....		6,000
<i>To record payment of interest.</i>		

\*\$6,000 ÷ 20 periods = \$300

**Part B: effective-interest amortization**

June 30, 2014		
Interest expense* (+E, -SE) .....	5,830	
Premium on bonds payable (-L) .....	170	
Cash (-A) (\$100,000 × 12% × 1/2) .....		6,000
<i>To record payment of interest.</i>		


\*\$106,000 × 11% × 1/2 = 5,830

## Chapter Supplement A

### *Bond Calculations Using Excel*

Instead of using the present value tables in Appendix A, most analysts and accountants use Excel to do the financial computations that are necessary when working with bonds. In Chapter 9, we showed you how to use Excel to compute the present value of both single payment and annuity problems. Because a bond involves both types of payments, you can use that process to compute the present value of each type of payment and add them together. Alternatively, you can use a single Excel process to compute the present value of a bond. We will illustrate the Excel process by using the bond example from this chapter. Assume that AT&T issued a \$100,000 bond that matured in two years and paid \$10,000 interest twice per year (4 payments of \$5,000 each.) When the bond was issued, the market rate of interest was 12 percent. The present value of this bond can be computed as follows:

- **Determine the present value of a bond.** The present value of a bond can be computed using an Excel function (you don't have to enter the formula yourself). On the toolbar, click on the insert function button (fx). A dropdown box called "insert function" will appear. You will be asked to "type a brief description of what you want to do and click 'go.'" You should enter "present value" and click the go button. A new screen will appear and you should highlight "PV," and click on the "ok" button. A new dropdown box will appear. Enter the amounts from the problem in this box: "Rate" is the market rate of interest per period. For this problem, enter 0.06. "Nper" is the number of periods. You should enter 4. "Pmt" is the cash interest payment per period, which is - 5000 for this problem. "Fv" is the maturity value of the bond or -100000 in this case. Notice that when using Excel, amounts must be entered as negative numbers because they represent payments. Also, you should not enter a comma between the numbers. The final box is

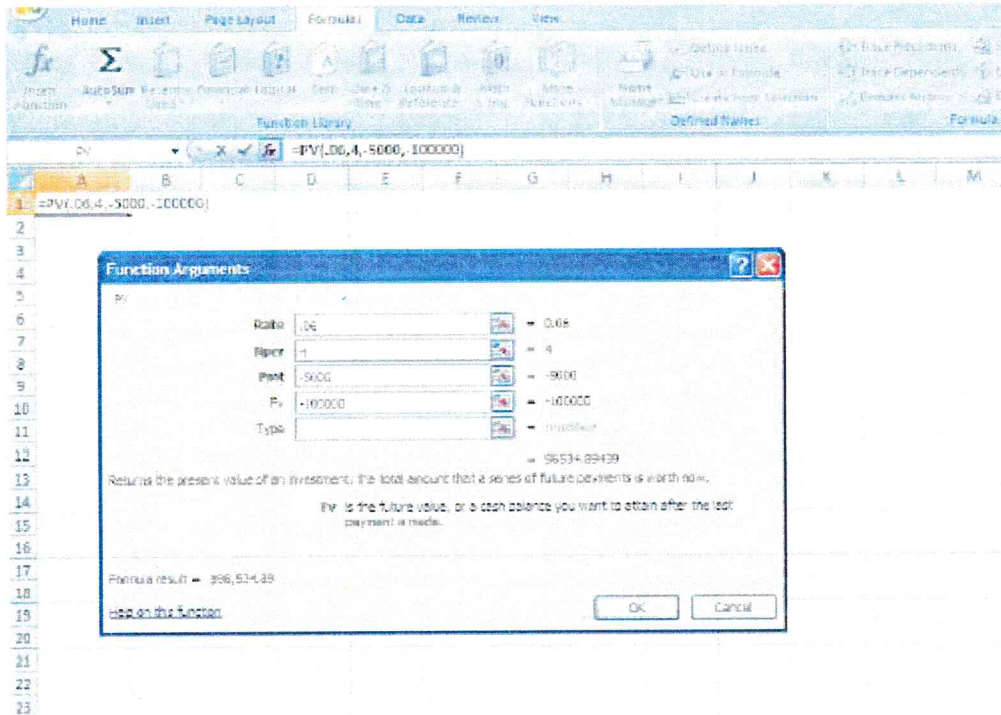


“type,” which permits you to do problems involving payments at either the beginning or end of the period. Most problems involve payments at the end of the period, so you do not need to enter anything in this box because the default is for end-of-period problems. Once you have entered the required data, click on “ok” and Excel will compute this value as \$96,534.89 and show it on your spreadsheet. Notice that this amount is slightly different from the amount computed using present value tables because the table numbers have been rounded. An Excel screen with the data entered follows:

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## Chapter Supplement B

### ***Bonds Issued at a Discount (Without Discount Account)***

For financial reporting purposes, it is not necessary to use a discount or premium account when recording bonds sold at a discount or premium. This supplement is intended for use as an alternative to the discussion in the chapter, which shows the use of discount and premium accounts.

Bonds sell at a discount when the market rate of interest is higher than the stated interest rate on them. Let's assume that the market rate of interest was 12 percent when AT&T sold its bonds (which have a par value of \$100,000). The bonds mature in two years and have a stated rate of 10 percent, payable twice a year on June 30 and December 31. Because the stated rate of interest was less than the market rate on the date of issue, the bonds sold at a discount.

To compute the cash issue price of the bonds, we can use the tables in Appendix A. As in the chapter example, the number of periods is four and we use an interest rate of 6 percent per period, which is the market rate of interest. The cash issue price of the AT&T bonds is computed as follows:

To compute the present value using Excel, enter:

$$f_x = PV(0.06, 4, -5000, -100000)$$

	<u>Present Value</u>
a. Single payment: $\$100,000 \times 0.7921$	\$79,210
b. Annuity: $\$5,000 \times 3.4651$	<u>17,326</u>
Issue (sale) price of bonds	<u>\$96,536*</u>

\*The amount of the discount:  $\$100,000 - \$96,536 = \$3,464$ .

The cash price of the bonds issued by AT&T is \$96,536. Some people refer to this price as 96.5, which means that the bonds were sold at 96.5 percent of their par value ( $\$96,536 \div \$100,000$ ).

The issuance of the AT&T bonds at a discount is recorded as follows:

Cash (+A) .....	96,536	
Bonds payable (+L) .....		96,536

<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Stockholders' Equity</u>
Cash		Bonds payable		
+96,536		+96,536		

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While AT&T received only \$96,536 when it sold the bonds, it must repay \$100,000 when the bonds mature. The extra cash that must be paid is an adjustment of interest expense to ensure that creditors earn the market rate of interest. To adjust interest expense, the borrower apportions or amortizes the bond discount to each interest period as an increase in interest expense. Therefore, the amortization of bond discount results in an increase in interest expense. Two amortization methods are often used by companies: (1) straight line and (2) effective interest. Many companies use straight-line amortization because it is easy to compute the required numbers. However, the effective-interest method is the method required by GAAP. You may wonder why companies are permitted to use a method that is not the one required by accounting rules. The answer is materiality. Companies are permitted to use the straight-line method because the results are normally not materially different from the effective-interest method. In this chapter supplement, we discuss only the effective-interest method.

**Reporting Interest Expense on Bonds Issued at a Discount Using Effective-Interest Amortization**

Under the effective-interest amortization method, interest expense for a bond is computed by multiplying the current unpaid balance times the market rate of interest that existed on the date the bonds were sold. The periodic amortization of a bond premium or discount is then calculated as the difference between interest expense and the amount of cash paid or accrued. This process can be summarized as follows:

**Step 1: Compute interest expense**

$$\text{Unpaid Balance} \times \text{Effective-Interest Rate} \times n/12$$

*n* = Number of Months in Each Interest Period

**Step 2: Compute amortization amount**

$$\text{Interest Expense} - \text{Cash Interest}$$

The first interest payment on AT&T bonds is made on June 30, 2014. Interest expense at the end of the first interest period (June 30, 2014) is calculated by multiplying the unpaid balance of the debt by the market rate of interest ( $\$96,536 \times 12\% \times 1/2 = \$5,792$ ). The amount of cash paid is calculated by multiplying the principal by the stated rate of interest ( $\$100,000 \times 10\% \times 1/2 = \$5,000$ ). The difference between the interest expense and the cash paid (or accrued) is the amount of discount that has been amortized ( $\$5,792 - \$5,000 = \$792$ ).

*Effective-interest amortization causes these amounts to change each period.*

Interest expense (+E, -SE) .....	5,792	
Bonds payable (+L) .....		792
Cash (-A) .....		5,000

<b>Assets</b>	=	<b>Liabilities</b>	+	<b>Stockholders' Equity</b>
Cash		Bonds payable		Interest expense (+E)
-5,000		+792		-5,792

Each period, the amortization of the bond discount increases the bond's book value (or unpaid balance). The amortization of bond discount can be thought of as interest earned by the bondholders but not paid to them. During the first interest period, the bondholders earned interest of \$5,792 but received only \$5,000 in cash. The additional \$792 was added to the principal of the bond and will be paid to bondholders when the bond matures.

Interest expense for the next interest period must reflect the change in the unpaid balance of bonds payable that occurred with amortization of the bond discount. The interest expense for the second half of 2014 is calculated by multiplying the unpaid balance ( $\$96,536 + \$792 = \$97,328$ ) on June 30, 2014, by the market rate of interest ( $\$97,328 \times 12\% \times 1/2 = \$5,840$ ). Thus amortization of the bond discount on December 31, 2014, is \$840.

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Interest expense (+E, -SE) .....	5,840
Bonds payable (+L) .....	840
Cash (-A) .....	5,000

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<b>Assets</b>	=	<b>Liabilities</b>	+	<b>Stockholders' Equity</b>
Cash	-5,000	Bonds payable	+840	Interest expense (+E) -5,840

Notice that interest expense for December 31, 2014, is more than interest expense for June 30, 2014. AT&T effectively borrowed more money during the second half of the year because of the unpaid interest. Because of the amortization of the bond discount, interest expense increases each year during the life of the bond. This process can be illustrated with the amortization schedule shown below:

AMORTIZATION SCHEDULE: BOND DISCOUNT (EFFECTIVE-INTEREST)				
Date	(a) Interest to Be Paid (10% × \$100,000 × 1/2)	(b) Interest Expense (12% × Beginning of Period Book Value × 1/2)	(c) Amortization (b) - (a)	(d) Book Value Beginning Book Value + (c)
1/1/2014				\$ 96,536
6/30/2014	\$5,000	\$5,792	\$792	97,328
12/31/2014	5,000	5,840	840	98,168
6/31/2015	5,000	5,890	890	99,058
12/31/2015	5,000	5,943	943	100,001*

\*This amount should be exactly \$100,000. The \$1 error is due to rounding.

Interest expense (column b) is computed by multiplying the market rate of interest by the book value of the bonds at the beginning of the period (column d). Amortization is computed by subtracting cash interest (column a) from interest expense (column b). The book value of the bonds (column d) is computed by adding amortization (column c) to the book value at the beginning of the period. In summary, under the effective-interest amortization method, interest expense changes each accounting period as the effective amount of the liability changes.



PAUSE FOR FEEDBACK

### SELF-STUDY QUIZ

Assume that AT&T issued \$100,000 bonds that will mature in 10 years. The bonds pay interest at the end of each year at an annual rate of 5 percent. They were sold when the market rate was 6 percent at a price of \$92,641. What amount of interest was paid at the end of the first year? What amount of interest expense would be reported at the end of the first year using effective-interest amortization?

*After you have completed your answers, check them with the solutions at the bottom of the page.*

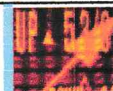
### Solution to SELF-STUDY QUIZ

- \$5,000 (5% × \$100,000)

2. \$5,558 ( $6\% \times \$92,641$ )

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So far, we have discussed common bonds that are issued by many corporations. For a number of reasons, corporations may issue bonds with unusual features. The concepts you have learned will help you understand these bonds. For example, a corporation might issue a bond that does not pay periodic cash interest. These bonds are often called *zero coupon bonds*. Why would an investor buy a bond that did not pay interest? Our discussion of bond discounts has probably given you a good idea of the answer. The coupon interest rate on a bond can be virtually any amount and the price of the bond will be adjusted so that investors earn the market rate of interest. A bond with a zero coupon interest rate is simply a deeply discounted bond that will sell for substantially less than its maturity value.

Let's use the \$100,000 AT&T bond to illustrate a zero coupon rate. Assume that market rate is 10 percent and the bond pays no cash interest. The bond matures in five years. The selling price of the bond is the present value of the maturity amount because no other cash payments will be made over the life of the bond. We can compute the present value with the tables contained in Appendix A, using the factor for five periods and an interest rate of 10 percent:

	Present Value
Single payment: \$100,000 × 0.6209	\$62,090

To compute the present value using Excel, enter:  
 = 100000/(1.10)^5

Accounting for a zero coupon bond is no different from accounting for other bonds sold at a discount. However, the amount of the discount is much larger. For example, the annual report for AT&T contained the following information concerning the company's zero coupon bonds:

AT&T

  
 REAL WORLD EXCERPT  
 Annual Report

AT&T INC. AND SUBSIDIARY DEBT DETAIL—MARCH 31, 2012

This chart shows the principal amount of AT&T Inc.'s and its subsidiaries' outstanding long-term debt issues as of the date above.

Entry (Original Issuer)	Amount Outstanding at Maturity	Coupon	Maturity Date	Total
BellSouth Telecommunications, Inc.	\$ 115,968,616	6.300%	12/15/15	\$ 115,968,616
Ameritech Capital Funding Corporation	\$ 52,502,760	9.100%	6/1/16	\$ 52,502,760
Various	\$ 3,143,969	Various	Various	\$ 3,143,969
BellSouth Corporation	\$1,000,000,000	4.463%	4/26/21	\$1,000,000,000
AT&T Inc.	\$1,030,000,000	Zero	11/27/22	\$ 616,127,631

While zero coupon bonds do not pay cash interest, they have been priced to provide the investor with a market rate of interest. Notice that the carrying value of the obligation (\$616,127,631) is much lower than the maturity value (\$1,000,000,000) because the payment has been discounted at the market rate of interest that existed on the issue date.

### ***Bonds Issued at a Premium (Without Premium Account)***

Bonds sell at a premium when the market rate of interest is lower than their stated interest rate. Let's assume that the market rate of interest is 8 percent while the AT&T bonds pay cash interest of 10 percent. The bonds pay interest semiannually and mature in two years. They are issued on January 1, 2014.

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The present value of AT&T 10 percent bonds can be computed from the tables contained in Appendix A using the factor for four periods and an interest rate of 4 percent per period:

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	Present Value
a. Single payment: $\$100,000 \times 0.8548$	\$ 85,480
b. Annuity: $\$5,000 \times 3.6299$	18,150
Issue (sale) price of bonds	\$103,630*

To compute the present value using Excel, enter:  
 $f_x = PV(0.04, 4, -5000, -100000)$

\*The amount of the premium:  $\$103,630 - \$100,000 = \$3,630$ .

When a bond is sold at a premium, the Bonds Payable account is credited for the present value of the bonds. The January 1, 2014, issuance of AT&T bonds at a premium would be recorded as follows:

Cash (+A) .....	103,630	
Bonds payable (+L) .....		103,630

Assets	=	Liabilities	+	Stockholders' Equity
Cash		Bonds payable		
+103,630		+103,630		

### Reporting Interest Expense on Bonds Issued at a Premium Using Effective-Interest Amortization

The effective-interest amortization method is basically the same for a discount or a premium. In either case, interest expense for a bond is computed by multiplying the current unpaid balance by the market rate of interest on the date the bonds were sold. The periodic amortization of a bond premium or discount is then calculated as the difference between interest expense and the amount of cash paid or accrued.

The first interest payment on AT&T bonds is made on June 30, 2014. The interest expense on that date is calculated by multiplying the unpaid balance of the debt by the market rate of interest ( $\$103,630 \times 8\% \times 1/2 = \$4,145$ ). The amount of cash paid is calculated by multiplying the principal by the stated rate of interest ( $\$100,000 \times 10\% \times 1/2 = \$5,000$ ). The difference between the interest expense and the cash paid (or accrued) is the amount of premium that has been amortized ( $\$5,000 - \$4,145 = \$855$ ).

Interest expense (+E, -SE) .....	4,145	
Bonds payable (-L) .....	855	
Cash (-A) .....		5,000

Assets	=	Liabilities	+	Stockholders' Equity
Cash		Bonds payable		Interest expense (+E)
-5,000		-855		-4,145

The basic difference between effective-interest amortization of a bond discount and a bond premium is that the amortization of a discount increases the book value of the liability and the amortization of a premium reduces it. The following schedule illustrates the amortization of a premium over the life of a bond.

<b>AMORTIZATION SCHEDULE: BOND PREMIUM (EFFECTIVE-INTEREST)</b>				
<b>Date</b>	<b>(a) Interest to Be Paid (10% × \$100,000 × 1/2)</b>	<b>(b) Interest Expense (8% × Beginning Book Value × 1/2)</b>	<b>(c) Amortization (b) – (a)</b>	<b>(d) Book Value Beginning Book Value – (c)</b>
1/1/2014				\$103,630
6/30/2014	\$5,000	\$4,145	\$855	102,775
12/31/2014	5,000	4,111	889	101,886
6/30/2015	5,000	4,075	925	100,961
12/31/2015	5,000	4,039*	961	100,000

\*Rounded.

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## SELF-STUDY QUIZ

Assume that AT&T issued \$100,000 bonds that will mature in 10 years. The bonds pay interest at the end of each year at an annual rate of 9 percent. They were sold when the market rate was 8 percent. The bonds were sold at a price of \$106,711. What amount of interest was paid at the end of the first year? What amount of interest expense would be reported at the end of the first year using effective-interest amortization?

*After you have completed your answers, check them with the solutions at the bottom of the page.*

## CHAPTER TAKE-AWAYS

### 10-1. Describe the characteristics of bonds. p. 501

Bonds have a number of characteristics designed to meet the needs of both the issuing corporation and the creditor. A complete listing of bond characteristics is discussed in the chapter.

Corporations use bonds to raise long-term capital. Bonds offer a number of advantages compared to stock, including the ability to earn a higher return for stockholders, the tax deductibility of interest, and the fact that control of the company is not diluted. Bonds do carry additional risk, however, because interest and principal payments are not discretionary.

### 10-2. Report bonds payable and interest expense for bonds sold at par and analyze the times interest earned ratio. p. 505

Three types of events must be recorded over the life of a typical bond: (1) the receipt of cash when the bond is first sold, (2) the periodic payment of cash interest, and (3) the repayment of principal at the maturity of the bond. Bonds are reported at the present value of the future cash flows specified in the bond contract. When the market interest rate and the coupon interest rate are the same, the bond will sell at par, which is the same as the maturity value of the bond.

The times interest earned ratio measures a company's ability to meet its interest obligations with resources from its profit-making activities. It is computed by comparing interest expense to earnings (including net income, interest expense, and income tax expense).

### 10-3. Report bonds payable and interest expense for bonds sold at a discount. p. 508

Bonds are sold at a discount whenever the coupon interest rate is less than the market rate of interest. A discount is the dollar amount of the difference between the par value of the bond and its selling price. The discount is recorded as a contra-liability when the bond is sold and is amortized over the life of the bond as an adjustment to interest expense.

### 10-4. Report bonds payable and interest expense for bonds sold at a premium. p. 513

Bonds are sold at a premium whenever the coupon interest rate is more than the market rate of interest. A premium is the dollar amount of the difference between the selling price of the bond and its par value. The premium is recorded as a liability when the bond is sold and is amortized over the life of the bond as an adjustment to interest expense.

**10-5. Analyze the debt-to-equity ratio. p. 516**

The debt-to-equity ratio compares the amount of capital supplied by creditors to the amount supplied by owners. It is a measure of a company's debt capacity. It is an important ratio because of the high risk associated with debt capital that requires interest and principal payments.

**10-6. Report the early retirement of bonds. p. 517**

A corporation may retire bonds before their maturity date. The difference between the book value and the amount paid to retire the bonds is reported as a gain or loss, depending on the circumstances.

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Solution to SELF-STUDY QUIZ

1. \$9,000 ( $9\% \times \$100,000$ )
  2. \$8,537 ( $8\% \times \$106,711$ )
-

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**10-7. Explain how financing activities are reported on the statement of cash flows. p. 518**

**Page 527**

Cash flows associated with transactions involving long-term creditors are reported in the Financing Activities section of the statement of cash flows. Interest expense is reported in the Operating Activities section.

**KEY RATIO**

**Times interest earned ratio** measures a company's ability to generate resources from current operations to meet its interest obligations. The ratio is computed as follows (p. 507):

$$\text{Times Interest Earned} = \frac{\text{Net Income} + \text{Interest Expense} + \text{Income Tax Expense}}{\text{Interest Expense}}$$

**Debt-to-equity ratio** measures the balance between debt and equity. Debt funds are viewed as being riskier than equity funds. The ratio is computed as follows (p. 516):

$$\text{Debt-to-Equity} = \frac{\text{Total Liabilities}}{\text{Stockholders' Equity}}$$

**FINDING FINANCIAL INFORMATION**

### Balance Sheet

#### Under Current Liabilities

Bonds are normally listed as long-term liabilities. An exception occurs when the bonds are within one year of maturity. Such bonds are reported as current liabilities with the following title: Current Portion of Long-Term Debt

#### Under Noncurrent Liabilities

Bonds are listed under a variety of titles, depending on the characteristics of the bond. Titles include:

- Bonds Payable
- Debentures
- Convertible Bonds

### Statement of Cash Flows

#### Under Financing Activities

- + Cash inflows from long-term creditors
- Cash outflows to long-term creditors

#### Under Operating Activities

The cash outflow associated with interest expense is reported as an operating activity.

### Income Statement

Bonds are shown only on the balance sheet, never on the income statement. Interest expense associated with bonds is reported on the income statement. Most companies report interest expense in a separate category on the income statement.

### Notes

#### Under Summary of Significant Accounting Policies

Description of pertinent information concerning accounting treatment of liabilities. Normally, there is minimal information. Some companies report the method used to amortize bond discounts and premiums.

#### Under a Separate Note

Most companies include a separate note called "Long-Term Debt" that reports information about each major debt issue, including amount and interest rate. The note also provides detail concerning debt covenants.