

CHAPTER 14

NON-CURRENT LIABILITIES

This IFRS Supplement provides expanded discussions of accounting guidance under International Financial Reporting Standards (IFRS) for the topics in Intermediate Accounting. The discussions are organized according to the chapters in *Intermediate Accounting* (13th or 14th Editions) and therefore can be used to supplement the U.S. GAAP requirements as presented in the textbook. Assignment material is provided for each supplement chapter, which can be used to assess and reinforce student understanding of IFRS.

EFFECTIVE-INTEREST METHOD

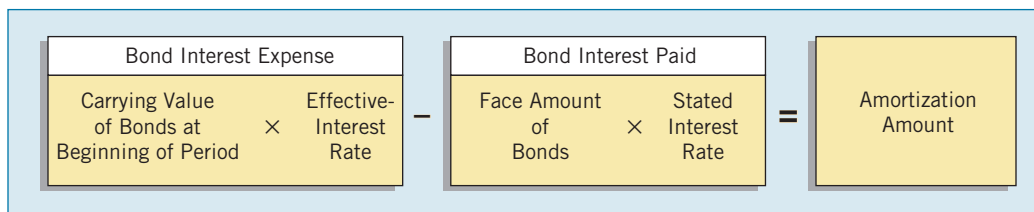
As discussed earlier, by paying more or less at issuance, investors earn a rate different than the coupon rate on the bond. Recall that the issuing company pays the contractual interest rate over the term of the bonds but also must pay the face value at maturity. If the bond is issued at a discount, the amount paid at maturity is more than the issue amount. If issued at a premium, the company pays less at maturity relative to the issue price.

The company records this adjustment to the cost as **bond interest expense** over the life of the bonds through a process called **amortization**. **Amortization of a discount increases bond interest expense. Amortization of a premium decreases bond interest expense.**

The required procedure for amortization of a discount or premium is the **effective-interest method** (also called **present value amortization**). Under the effective-interest method, companies: [1]

1. Compute bond interest expense first by multiplying the **carrying value** (book value) of the bonds at the beginning of the period by the effective-interest rate.¹
2. Determine the bond discount or premium amortization next by comparing the bond interest expense with the interest (cash) to be paid.

Illustration 14-1 depicts graphically the computation of the amortization.



The effective-interest method produces a periodic interest expense equal to a **constant percentage of the carrying value of the bonds**.²

¹The **carrying value** is the face amount minus any unamortized discount or plus any unamortized premium. The term *carrying value* is synonymous with *book value*.

²The issuance of bonds involves engraving and printing costs, legal and accounting fees, commissions, promotion costs, and other similar charges. These costs should be recorded as a reduction to the issue amount of the bond payable and then amortized into expense over the life of the bond, through an adjustment to the effective-interest rate. [2] For example, if the face value of the bond is \$100,000 and issue costs are \$1,000, then the bond payable (net of the bond issue costs) is recorded at \$99,000. Thus, the effective-interest rate will be higher, based on the reduced carrying value.



Under U.S. GAAP, companies are permitted to use the straight-line method of amortization for bond discount or premium, provided that the amount recorded is not materially different than that resulting from effective-interest amortization. However, the effective-interest method is preferred and is generally used.

ILLUSTRATION 14-1
Bond Discount and
Premium Amortization
Computation

Bonds Issued at a Discount

To illustrate amortization of a discount under the effective-interest method, Evermaster Corporation issued \$100,000 of 8 percent term bonds on January 1, 2011, due on January 1, 2016, with interest payable each July 1 and January 1. Because the investors required an effective-interest rate of 10 percent, they paid \$92,278 for the \$100,000 of bonds, creating a \$7,722 discount. Evermaster computes the \$7,722 discount as follows.³

ILLUSTRATION 14-2 Computation of Discount on Bonds Payable

Maturity value of bonds payable		\$100,000
Present value of \$100,000 due in 5 years at 10%, interest payable semiannually (Table 6-2); $FV(PVF_{10,5\%})$; $(\$100,000 \times .61391)$	\$61,391	
Present value of \$4,000 interest payable semiannually for 5 years at 10% annually (Table 6-4); $R(PVF-OA_{10,5\%})$; $(\$4,000 \times 7.72173)$	<u>30,887</u>	
Proceeds from sale of bonds		<u>(92,278)</u>
Discount on bonds payable		<u><u>\$ 7,722</u></u>

The five-year amortization schedule appears in Illustration 14-3.

ILLUSTRATION 14-3 Bond Discount Amortization Schedule

SCHEDULE OF BOND DISCOUNT AMORTIZATION				
EFFECTIVE-INTEREST METHOD—SEMIANNUAL INTEREST PAYMENTS				
5-YEAR, 8% BONDS SOLD TO YIELD 10%				
Date	Cash Paid	Interest Expense	Discount Amortized	Carrying Amount of Bonds
1/1/11				\$ 92,278
7/1/11	\$ 4,000 ^a	\$ 4,614 ^b	\$ 614 ^c	92,892 ^d
1/1/12	4,000	4,645	645	93,537
7/1/12	4,000	4,677	677	94,214
1/1/13	4,000	4,711	711	94,925
7/1/13	4,000	4,746	746	95,671
1/1/14	4,000	4,783	783	96,454
7/1/14	4,000	4,823	823	97,277
1/1/15	4,000	4,864	864	98,141
7/1/15	4,000	4,907	907	99,048
1/1/16	<u>4,000</u>	<u>4,952</u>	<u>952</u>	100,000
	<u>\$40,000</u>	<u>\$47,722</u>	<u>\$7,722</u>	

^a\$4,000 = $\$100,000 \times .08 \times 6/12$ ^c\$614 = $\$4,614 - \$4,000$
^b\$4,614 = $\$92,278 \times .10 \times 6/12$ ^d\$92,892 = $\$92,278 + \614

Evermaster records the issuance of its bonds at a discount on January 1, 2011, as follows.

Cash	92,278	
Bonds Payable		92,278

It records the first interest payment on July 1, 2011, and amortization of the discount as follows.

Bond Interest Expense	4,614	
Bonds Payable		614
Cash		4,000

³Because companies pay interest semiannually, the interest rate used is 5% ($10\% \times \frac{6}{12}$). The number of periods is 10 (5 years \times 2).

Evermaster records the interest expense accrued at December 31, 2011 (year-end), and amortization of the discount as follows.

Bond Interest Expense	4,645	
Bond Interest Payable		4,000
Bonds Payable		645

Bonds Issued at a Premium

Now assume that for the bond issue described above, investors are willing to accept an effective-interest rate of 6 percent. In that case, they would pay \$108,530 or a premium of \$8,530, computed as follows.

Maturity value of bonds payable		\$ 100,000
Present value of \$100,000 due in 5 years at 6%, interest payable semiannually (Table 6-2); $FV(PVF_{10,3\%})$; $(\$100,000 \times .74409)$	\$74,409	
Present value of \$4,000 interest payable semiannually for 5 years at 6% annually (Table 6-4); $R(PVF-OA_{10,3\%})$; $(\$4,000 \times 8.53020)$	<u>34,121</u>	
Proceeds from sale of bonds		<u>(108,530)</u>
Premium on bonds payable		<u>\$ 8,530</u>

ILLUSTRATION 14-4
Computation of Premium on Bonds Payable

The five-year amortization schedule appears in Illustration 14-5.

SCHEDULE OF BOND PREMIUM AMORTIZATION				
EFFECTIVE-INTEREST METHOD—SEMIANNUAL INTEREST PAYMENTS				
5-YEAR, 8% BONDS SOLD TO YIELD 6%				
Date	Cash Paid	Interest Expense	Premium Amortized	Carrying Amount of Bonds
1/1/11				\$108,530
7/1/11	\$ 4,000 ^a	\$ 3,256 ^b	\$ 744 ^c	107,786 ^d
1/1/12	4,000	3,234	766	107,020
7/1/12	4,000	3,211	789	106,231
1/1/13	4,000	3,187	813	105,418
7/1/13	4,000	3,162	838	104,580
1/1/14	4,000	3,137	863	103,717
7/1/14	4,000	3,112	888	102,829
1/1/15	4,000	3,085	915	101,914
7/1/15	4,000	3,057	943	100,971
1/1/16	<u>4,000</u>	<u>3,029</u>	<u>971</u>	100,000
	<u>\$40,000</u>	<u>\$31,470</u>	<u>\$8,530</u>	

^a\$4,000 = \$100,000 × .08 × 6/12 ^c\$744 = \$4,000 – \$3,256
^b\$3,256 = \$108,530 × .06 × 6/12 ^d\$107,786 = \$108,530 – \$744

ILLUSTRATION 14-5
Bond Premium Amortization Schedule

Evermaster records the issuance of its bonds at a premium on January 1, 2011, as follows.

Cash	108,530	
Bonds Payable		108,530

Evermaster records the first interest payment on July 1, 2011, and amortization of the premium as follows.

Bond Interest Expense	3,256	
Bonds Payable		744
Cash		4,000

Evermaster should amortize the discount or premium as an adjustment to interest expense over the life of the bond in such a way as to result in a **constant rate of interest**


**U.S. GAAP
PERSPECTIVE**

Under U.S. GAAP, unamortized bond issues costs are reported as an asset and amortized to expense over the life of the bonds. IFRS requires that the issue costs reduce the carrying amount of the bond, which increases the effective-interest rate.

when applied to the carrying amount of debt outstanding at the beginning of any given period.⁴

Accruing Interest

In our previous examples, the interest payment dates and the date the financial statements were issued were essentially the same. For example, when Evermaster sold bonds at a premium, the two interest payment dates coincided with the financial reporting dates. However, what happens if Evermaster prepares financial statements at the end of February 2011? In this case, the company **prorates** the premium by the appropriate number of months to arrive at the proper interest expense, as follows.

ILLUSTRATION 14-6
 Computation of Interest
 Expense

Interest accrual ($\$4,000 \times \%$)	\$1,333.33
Premium amortized ($\$744 \times \%$)	(248.00)
Interest expense (Jan.-Feb.)	<u>\$1,085.33</u>

Extinguishment with Modification of Terms

Practically every day, the *Wall Street Journal* or the *Financial Times* runs a story about some company in financial difficulty. Notable recent examples are **Nakheel** (ARE), **Parmalat** (ITA), and **General Motors** (USA). In many of these situations, the creditor may grant a borrower concessions with respect to settlement. The creditor offers these concessions to ensure the highest possible collection on the loan. For example, a creditor may offer one or a combination of the following modifications:

1. Reduction of the stated interest rate.
2. Extension of the maturity date of the face amount of the debt.
3. Reduction of the face amount of the debt.
4. Reduction or deferral of any accrued interest.


**U.S. GAAP
PERSPECTIVE**

U.S. GAAP uses the term *troubled debt restructurings* and has developed specific guidelines related to that category of loans. IFRS generally assumes that all restructurings be accounted for as extinguishments of debt.

As with other extinguishments, when a creditor grants favorable concessions on the terms of a loan, the debtor has an economic gain. Thus, the accounting for modifications is similar to that for other extinguishments. That is, the original obligation is extinguished, the new payable is recorded at fair value, and a gain is recognized for the difference in the fair value of the new obligation and the carrying value of the old obligation.⁵

To illustrate, assume that on December 31, 2010, Morgan National Bank enters into a debt modification agreement with Resorts Development Company, which is experiencing

⁴The issuer may call some bonds at a stated price after a certain date. This call feature gives the issuing corporation the opportunity to reduce its bonded indebtedness or take advantage of lower interest rates. Whether callable or not, a company must amortize any premium or discount over the bond's life to maturity because early redemption (call of the bond) is not a certainty.

⁵An exception to the general rule is when the modification of terms is not substantial. A **substantial modification** is defined as one in which the discounted cash flows under the terms of the new debt (using the historical effective-interest rate) differ by at least 10 percent of the carrying value of the original debt. If a modification is not substantial, the difference (gain) is deferred and amortized over the remaining life of the debt at the (historical) effective-interest rate. [3] In the case of a non-substantial modification, in essence, the new loan is a continuation of the old loan. Therefore, the debtor should record interest at the historical effective-interest rate.

financial difficulties. The bank restructures a \$10,500,000 loan receivable issued at par (interest paid to date) by:

- Reducing the principal obligation from \$10,500,000 to \$9,000,000;
- Extending the maturity date from December 31, 2010, to December 31, 2014; and
- Reducing the interest rate from the historical effective rate of 12 percent to 8 percent. Given Resorts Development's financial distress, its market-based borrowing rate is 15 percent.

IFRS requires the modification to be accounted for as an extinguishment of the old note and issuance of the new note, measured at fair value. Illustration 14-7 shows the calculation of the fair value of the modified note, using Resorts Development's market discount rate of 15 percent.

Present value of restructured cash flows:	
Present value of \$9,000,000 due in 4 years at 15%, interest payable annually (Table 6-2); $FV(PVF_{4,15\%})$; (\$9,000,000 × .57175)	\$5,145,750
Present value of \$720,000 interest payable annually for 4 years at 15% (Table 6-4); $R(PVF-OA_{4,15\%})$; (\$720,000 × 2.85498)	<u>2,055,586</u>
Fair value of note	<u>\$7,201,336</u>

ILLUSTRATION 14-7
Fair Value of Restructured Note

The gain on the modification is \$3,298,664, which is the difference between the prior carrying value (\$10,500,000) and the fair value of the restructured note, as computed in Illustration 14-23 (\$7,201,336). Given this information, Resorts Development makes the following entry to record the modification.

Note Payable (Old)	10,500,000	
Gain on Extinguishment of Debt		3,298,664
Note Payable (New)		7,201,336

Illustration 14-8 shows the amortization schedule for the new note, following the modification.

Date	Cash Paid	Interest Expense	Amortization	Carrying Value
12/31/2010				\$7,201,336
12/31/2011	\$720,000 ^a	\$1,080,200 ^b	\$360,200 ^c	7,561,536 ^d
12/31/2012	720,000	1,134,230	414,230	7,975,767
12/31/2013	720,000	1,196,365	476,365	8,452,132
12/31/2014	720,000	1,267,820	547,868	9,000,000

^a\$9,000,000 × 8%

^b\$7,201,336 × 15%

^c\$1,080,200 – \$720,000

^d\$7,201,336 + \$360,200

ILLUSTRATION 14-8
Schedule of Interest and Amortization after Debt Modification

Resorts Development recognizes interest expense on this note using the effective rate of 15 percent. Thus, on December 31, 2011 (date of first interest payment after restructure), Resorts Development makes the following entry.

December 31, 2011		
Interest Expense	1,080,200	
Note Payable		360,200
Cash		720,000

Resorts Development makes a similar entry (except for different amounts for credits to Note Payable and debits to Interest Expense) each year until maturity. At maturity, Resorts Development makes the following entry.

December 31, 2014		
Note Payable	9,000,000	
Cash		9,000,000

In summary, following the modification, Resorts Development has extinguished the old note with an effective rate of 12 percent and now has a new loan with a much higher effective rate of 15 percent.

AUTHORITATIVE LITERATURE

Authoritative Literature References

- [1] International Accounting Standard 39, *Financial Instruments: Recognition and Measurement* (London, U.K.: International Accounting Standards Committee Foundation, 2003), par. 47.
- [2] International Accounting Standard 39, *Financial Instruments: Recognition and Measurement* (London, U.K.: International Accounting Standards Committee Foundation, 2003), par. 43.
- [3] International Accounting Standard 39, *Financial Instruments: Recognition and Measurement* (London, U.K.: International Accounting Standards Committee Foundation, 2003), par. AG62.

QUESTIONS

1. What is the required method of amortizing discount and premium on bonds payable? Explain the procedures.
2. **Vodafone** (GBR) recently issued debt. How should the costs of issuing these bonds be accounted for?
3. What are the general rules for measuring and recognizing gain or loss by a debt extinguishment with modification?

BRIEF EXERCISES

BE14-1 On January 1, 2011, JWS Corporation issued \$600,000 of 7% bonds, due in 10 years. The bonds were issued for \$559,224, and pay interest each July 1 and January 1. Prepare the company's journal entries for (a) the January 1 issuance, (b) the July 1 interest payment, and (c) the December 31 adjusting entry. Assume an effective-interest rate of 8%.

BE14-2 Assume the bonds in BE14-1 were issued for \$644,636 and the effective-interest rate is 6%. Prepare the company's journal entries for (a) the January 1 issuance, (b) the July 1 interest payment, and (c) the December 31 adjusting entry.

EXERCISES



E14-1 (Entries for Bond Transactions) Foreman Company issued \$800,000 of 10%, 20-year bonds on January 1, 2011, at 119.792 to yield 8%. Interest is payable semiannually on July 1 and January 1.

Instructions

Prepare the journal entries to record the following.

- (a) The issuance of the bonds.
- (b) The payment of interest and the related amortization on July 1, 2011.
- (c) The accrual of interest and the related amortization on December 31, 2011.



E14-2 (Entries for Bond Transactions) Assume the same information as in E14-1, except that the bonds were issued at 84.95 to yield 12%.

Instructions

Prepare the journal entries to record the following. (Round to the nearest dollar.)

- (a) The issuance of the bonds.
- (b) The payment of interest and related amortization on July 1, 2011.
- (c) The accrual of interest and the related amortization on December 31, 2011.

E14-3 (Settlement of Debt) Strickland Company owes \$200,000 plus \$18,000 of accrued interest to Moran State Bank. The debt is a 10-year, 10% note. During 2010, Strickland's business deteriorated due to a faltering regional economy. On December 31, 2010, Moran State Bank agrees to accept an old machine and cancel the entire debt. The machine has a cost of \$390,000, accumulated depreciation of \$221,000, and a fair value of \$180,000.

Instructions

- (a) Prepare journal entries for Strickland Company to record this debt settlement.
- (b) How should Strickland report the gain or loss on the disposition of machine and on restructuring of debt in its 2010 income statement?
- (c) Assume that, instead of transferring the machine, Strickland decides to grant 15,000 of its ordinary shares (\$10 par), which have a fair value of \$180,000 in full settlement of the loan obligation. Prepare the entries to record the transaction.

E14-4 (Loan Modification) On December 31, 2010, Sterling Bank enters into a debt restructuring agreement with Barkley Company, which is now experiencing financial trouble. The bank agrees to restructure a 12%, issued at par, £3,000,000 note receivable by the following modifications:

1. Reducing the principal obligation from £3,000,000 to £2,400,000.
2. Extending the maturity date from December 31, 2010, to January 1, 2014.
3. Reducing the interest rate from 12% to 10%. Barkley's market rate of interest is 15%.

Barkley pays interest at the end of each year. On January 1, 2014, Barkley Company pays £2,400,000 in cash to Sterling Bank.

Instructions

- (a) Can Barkley Company record a gain under the term modification mentioned above? Explain.
- (b) Prepare the amortization schedule of the note for Barkley Company after the debt modification.
- (c) Prepare the interest payment entry for Barkley Company on December 31, 2012.
- (d) What entry should Barkley make on January 1, 2014?

E14-5 (Loan Modification) Use the same information as in E14-4 above except that Sterling Bank reduced the principal to £1,900,000 rather than £2,400,000. On January 1, 2014, Barkley pays £1,900,000 in cash to Sterling Bank for the principal.

Instructions

- (a) Prepare the journal entries to record the loan modification for Barkley.
- (b) Prepare the amortization schedule of the note for Barkley Company after the debt modification.
- (c) Prepare the interest payment entries for Barkley Company on December 31 of 2011, 2012, and 2013.
- (d) What entry should Barkley make on January 1, 2014?

USING YOUR JUDGMENT

Financial Reporting Problem

Marks and Spencer plc (M&S)

The financial statements of **M&S** can be accessed at the book's companion website, www.wiley.com/college/kiesoifrs.

Instructions

Refer to M&S's financial statements and the accompanying notes to answer the following questions.

- (a) What cash outflow obligations related to the repayment of long-term debt does M&S have over the next 5 years?
- (b) M&S indicates that it believes that it has the ability to meet business requirements in the foreseeable future. Prepare an assessment of its liquidity, solvency, and financial flexibility using ratio analysis.



IFRS BRIDGE TO THE PROFESSION

Professional Research

Wie Company has been operating for just 2 years, producing specialty golf equipment for women golfers. To date, the company has been able to finance its successful operations with investments from its principal owner, Michelle Wie, and cash flows from operations. However, current expansion plans will require some borrowing to expand the company's production line.

As part of the expansion plan, Wie is contemplating a borrowing on a note payable or issuance of bonds. In the past, the company has had little need for external borrowing so the management team has a number of questions concerning the accounting for these new non-current liabilities. They have asked you to conduct some research on this topic.

Instructions

Access the IFRS authoritative literature at the IASB website (<http://eifrs.iasb.org/>). When you have accessed the documents, you can use the search tool in your Internet browser to respond to the following questions. (Provide paragraph citations.)

- (a) With respect to a decision of issuing notes or bonds, management is aware of certain costs (e.g., printing, marketing, selling) associated with a bond issue. How will these costs affect Wie's reported earnings in the year of issue and while the bonds are outstanding?
- (b) If all goes well with the plant expansion, the financial performance of Wie Company could dramatically improve. As a result, Wie's market rate of interest (which is currently around 12%) could decline. This raises the possibility of retiring or exchanging the debt, in order to get a lower borrowing rate. How would such a debt extinguishment be accounted for?