

PRINCIPLES OF FINANCIAL AND MANAGERIAL ACCOUNTING II

Long-Term Liabilities

Objectives:

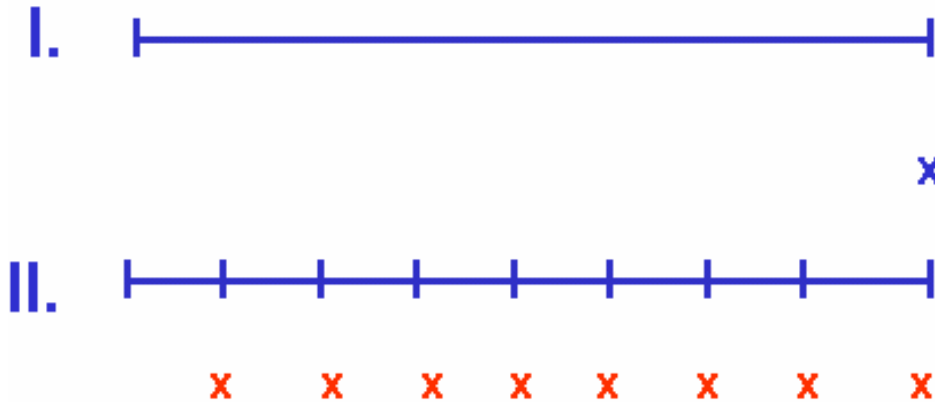
1. Determine and record the selling price of bonds payable.
2. Determine and record amortization of premium and discount on bonds payable using the straight-line method and the interest method.

Bonds Payable

Obligations incurred when issuing bonds:

- I. "I promise I will pay you _____ at maturity."
- II. "I promise that, between now and then, I will pay you periodic _____ at the _____ rate on the _____ amount."

These two obligations can be envisioned on "time lines" as follows:



The rate is sometimes called:

_____ (specified)

_____ (reflected in sales price of the bond)

When _____ is GREATER than _____, the bonds are *unattractive* and will sell at a _____.

When _____ is LESS than _____, the bonds are *attractive* and will sell at a _____.



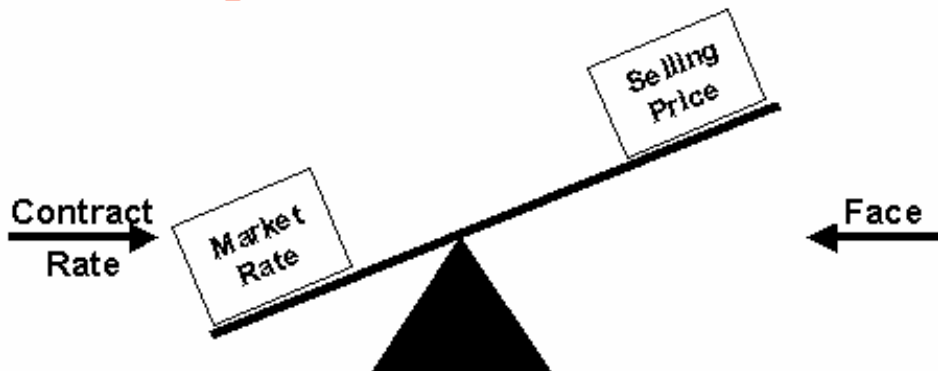
Issuing Bonds at Face



The journal entry necessary to record the sale of the bonds at face would be:

	face	
		face

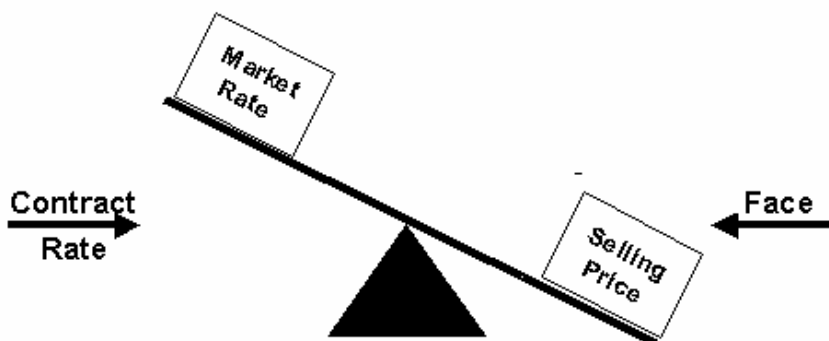
Issuing Bonds at More Than Face



The journal entry necessary to record the sale of the bonds for more than face would be:

Cash	received	
		difference
Bonds Payable		face

Issuing Bonds at Less Than Face



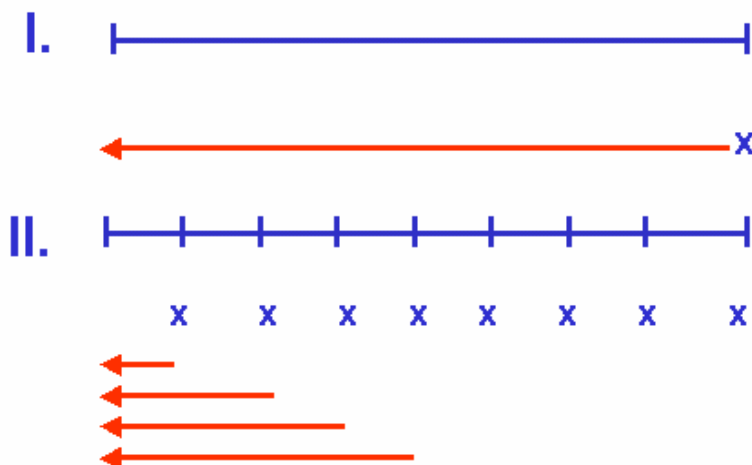
The journal entry necessary to record the sale of the bonds for less than face would be:

Cash	received	
	difference	
Bonds Payable		face

Referring to the advertisement from *The Wall Street Journal*, at 10 3/8% interest, the bonds must have been _____ because the 99.82% advertised price meant the bonds were selling at a _____. The market rate of interest must have been _____ than 10 3/8%.

Determining the Selling Price of Bonds

The selling price of the bonds is the sum of the “present values” of the two future “promises” made at the time the bonds are sold (refer to page 1):



- I. Present Value of Face (using factor from table)
- II. + Present Value of Interest Payments (using factor from annuity table)
- = Proceeds from Sale of Bonds

Exercise

Bound Corporation issued \$260,000, 9%, 10-year bonds on January 1, 2008, for \$243,799. This price resulted in an effective interest rate of 10% on the bonds. Interest is payable semiannually on July 1 and January 1. Bound uses the effective-interest method to amortize bond premium or discount. Interest is not accrued on June 30.

Instructions: Prepare the journal entries to record (to the nearest dollar) the following:
a) the issuance of the bonds, b) the payment of interest and the discount amortization on July 1, 2008, and c) the accrual of interest and the discount amortization on December 31, 2008.

(The amount of one interest payment is determined using the traditional "interest" formula, $P \times R \times T$: $\$260,000 \times \underline{\hspace{2cm}} \times 6/12$ is $\underline{\hspace{2cm}}$.)

The following present value tables are useful in the calculations: Table 15A-1 is on page 653, and Table 15A-2 is on page 654 in the Appendix 15A at the end of the chapter.

$$\begin{array}{rcl} \text{Present Value of } \$260,000 \text{ @ } 10\% \text{ semiannually is} & & \\ 260,000 \times \underline{\hspace{2cm}} & = & \underline{\hspace{2cm}} \\ + \text{ Present Value of Interest (one interest pmt x factor) is} & & \\ \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} & = & \underline{\hspace{2cm}} \\ = \text{ Proceeds from the Sale of Bonds} & & \underline{\hspace{2cm}} \\ \text{(Compare this result to the amount given in the exercise above.)} & & \end{array}$$

(Note: For Problem 15-6A, present calculations (similar to those demonstrated here) to support determination of the selling price of the bonds. Allow the amount given in the textbook to serve as a "check figure." Use lined notebook paper or pages from an unassigned problem in the Working Papers.)

a) The journal entry to record the sale (issuance) of the bonds would be:

This exercise will be completed later. If not in lecture, please take this handout to your first discussion group this week.

Amortization of PREMIUM or DISCOUNT on Bonds

Objectives:

1. to match the correct expense with the correct year (income statement benefit)
2. to (gradually, systematically) eliminate the related Premium or Discount account
OR
to change (raise or lower) the BCA to face by the time the bond matures
(two ways to state the same balance sheet benefit)

Related Definition:

Review:

Equipment
- Accumulated Depreciation
= Book Value

New:

Bonds Payable
+ (unamortized) Premium
- (unamortized) Discount
= Bond Carrying Amount

Journal Entries to Record Amortization

Amortization of Premium

	amount	
		amount

Amortization of Discount

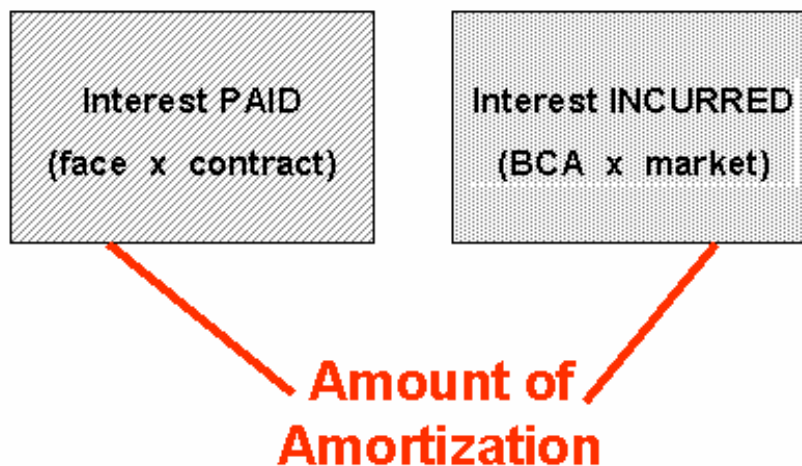
	amount	
		amount

Determining Amount of Amortization

Straight-Line Method (presented in chapter)

Premium or Discount = same amount each period
periods

(Effective) Interest Method (presented in Appendix at end of chapter)



Exercise

(continued from page 4)

(b) (1) Record the journal entry for the payment of the first semiannual interest on July 1 (amortization is to be recorded in a separate entry).

(b) (2) Record the journal entry for the amortization of the discount (using the effective interest method) at the time of the first semiannual interest payment on July 1.

	*	
		*

(c) (1) Record the journal entry for the accrual of interest at December 31.

(c) (2) Record the journal entry for the amortization of the discount (using the effective interest method) at the time of the accrual of interest on December 31.

	*	
		*

* Determine the amount of amortization (effective interest method) following the textbook examples on pages 658 and 659 and the chart below:

	<u>A</u> Interest Paid <small>(face x contract)</small>	<u>B</u> Interest Expense <small>(E x mkt)</small>	<u>C</u> Discount Amort. <small>(B - A)</small>	<u>D</u> Unamort. Discount <small>(D - C)</small>	<u>E</u> B.C.A. <small>(face - D) (E + C)</small>
Pmt				16,201	243,799
1			490		
2					
3	11,700	12,240	540	14,657	245,343
4	11,700	12,267	567	14,090	245,910
5	11,700	12,296	596	13,494	246,506