REPORTING AND ANALYZING LIABILITIES

LO 1: Explain how to account for current liabilities.

- **Current Liability:** "a debt that a company expects to pay
  1. from existing current assets or through the creation of other current liabilities, and
  2. ***within one year or the operating cycle, whichever is longer***."

- Include ***notes payable***, ***accounts payable***, ***unearned revenues***, and ***accrued liabilities*** such as ***taxes***, ***salaries and wages***, and ***interest***. ***Current maturities of long-term debt*** are also a current liability.

TYPES OF CURRENT LIABILITIES

1. **Notes Payable:** a written promissory note that usually requires the borrower to pay interest.
   - Frequently issued to meet short-term financing needs and for varying time periods.
   - Those due for payment within one year of the balance sheet date are usually classified as current liabilities.

Summary of Notes Payable Journal Entries

		DEBIT	CREDIT
1. To record issuance of a note.	Cash	xxx	
	Notes Payable		xxx
2. To accrue interest for a month or certain time period.	Interest Expense	xxx	
	Interest Payable		xxx
3. To record payment of the note and accrued interest.	Notes Payable	xxx	
	Interest Payable	xxx	
	Cash		xxx

Ex: On April 1, Holton Company borrows $100,000 from West Bank by signing a 6-month, 6%, interest-bearing note.

Prepare the necessary entries below associated with the note payable on the books of Holton Company.
(a) Prepare the entry on April 1 when the note was issued.
(b) Prepare any adjusting entries necessary on June 30 in order to prepare the semiannual financial statements. Assume no other interest accrual entries have been made.

	Date	Debit	Credit
Cash	**Apr. 1**	100,000	
Notes Payable			100,000
Interest Expense	**Jun. 30**	1,500	
Interest Payable **($100,000 x 6% x (3/12))**			1,500

2. **Sales Taxes Payable:** sales taxes that have to be paid to the government.

- Sales taxes are expressed as a stated percentage of the sales price.
- The selling company collects the tax from the customer and then remits the collections to the state's department of revenue (usually monthly.)

Face Value of Note	×	Annual Interest Rate	×	Time in Terms of One Year	=	Interest

Summary of Sales Tax Payable Journal Entries

		DEBIT	CREDIT
1. To record daily sales and sales taxes.	Cash	xxx	
	Sales Revenue		xxx
	Sales Taxes Payable		xxx

Ex 1: On May 28 cash register readings for Holton Company shows sales of $20,000 and sales taxes of $2,000 (sales tax rate of 2% x $20,000). The journal entry is

	Date	Debit	Credit
Cash	**May 28**	22,000	
Sales Revenue			20,000
Sales Taxes Payable **($20,000 x 2%)**			2,000

Ex 2: On May 28 Holton Company rings up total receipts of $22,000. The amount received includes a tax on 10% of sales. The journal entry is

	Date	Debit	Credit
Cash	**May 28**	22,000	
Sales Revenue **($22,000 ÷ 1.10)**			20,000
Sales Taxes Payable **($22,000 - $20,000)**			2,000

3. **Unearned Revenue:** cash that is received BEFORE goods are delivered or services are performed.

- Current liability on the balance sheet.

Summary of Unearned Revenue Journal Entries

		DEBIT	CREDIT
1. To record receipt of cash before goods are delivered or work is performed.	Cash	xxx	
	Unearned Revenue		xxx
2. To record recognition of revenue earned from delivering goods or providing a service.	Unearned Revenue	xxx	
	Revenue		xxx

Ex: Intelligent University sells 20,000 season football tickets at $30 each for its 8-game home schedule on August 1. The entry for the sales of season tickets is:

	Date	Debit	Credit
Cash	**Aug. 1**	600,000	
Unearned Ticket Revenue **(20,000 x $30)**			600,000

On Aug. 28, the first home game for Intelligent University was completed. Intelligent University records the earning of revenue with the following journal entry.

	Date	Debit	Credit
Unearned Ticket Revenue	**Aug. 28**	75,000	
Ticket Revenue **($60,000 ÷ 8 games)**			75,000

4. **Payroll and Payroll Taxes Payable:**

Summary of Payroll Taxes Journal Entries			
		DEBIT	CREDIT
1. To record payroll and withholding taxes for the week or other time period.	Salaries and Wages Expense	xxx	
	FICA Taxes Payable		xxx
	Federal Income Taxes Payable		xxx
	State Income Taxes Payable		xxx
	Salaries and Wages Payable Payable		xxx
2. To record payment of the payroll.	Salaries and Wages Payable Payable	xxx	
	Cash		xxx
3. To record employer's payroll taxes.	Payroll Tax Expense	xxx	
	FICA Taxes Payable		xxx
	Federal Unemployment Taxes Payable		xxx
	State Unemployment Taxes Payable		xxx

- Payroll pertains to both:
  1. **Salaries** - managerial, administrative, and sales personnel **(monthly or yearly rate)**.
  2. **Wages** - store clerks, factory employees, and manual laborers **(rate per hour)**.

- Gross Pay – Payroll Deductions = **Net Pay (What the employee takes home)**
- Payroll deductions include:
  1. Insurance, pensions, and/or union dues
  2. FICA Taxes (Social Security and Medicare)
  3. Federal Income Tax
  4. State and City Income Taxes
  5. Charity

- In addition to withholding taxes from their employees to remit to the government, employers have to pay payroll taxes.
    - Payroll taxes include FICA Tax, Federal Unemployment Tax, and State Unemployment Tax.

Ex: During the month of March, Preston Company's employees earned wages of $90,000. Withholdings related to these wages were $6,885 for Social Security (FICA), $14,200 for federal income tax, and $6,200 for state income tax. The company incurred no cost related to these earnings for federal unemployment tax, but incurred $1,300 for state unemployment tax.

(a) Prepare the necessary March 31 journal entry to record wages expense and wages payable. Assume that wages earned during March will be paid during April.

	Date	Debit	Credit
Salaries and Wages Expense	**Mar. 31**	90,000	
FICA Taxes Payable			6,885
Federal Income Taxes Payable			14,200
State Income Taxes Payable			6,200
Salaries and Wages Payable			62,715

(b) Prepare the entry to record the company's payroll tax expense.

	Date	Debit	Credit
Payroll Expense	**Mar. 31**	8,185	
FICA Taxes Payable			6,885
State Unemployment Taxes Payable			1,300

LO 2: Describe the major characteristics of bonds.

- **Long-term Liabilities:** "Obligations that a company expects to pay MORE THAN ONE YEAR in the future."

BONDS

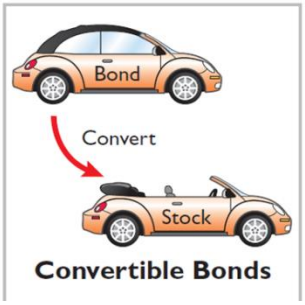
- "a form of interest-bearing notes payable issued by corporations, universities, and governmental agencies."
- Sold in small denominations (usually $1,000 or multiples of $1,000).
- When a corporation issues bonds, it is borrowing money. The person who buys the bonds (the bondholder) is investing in bonds.

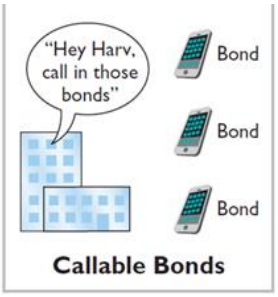
***** BOND ISSUANCE RESULTS IN CASH GOING UP BECAUSE THE COMPANY ISSUING THE BOND IS BORROWING MONEY.**

TYPES OF BONDS

1. **Secured bonds:** have specific assets of the issuer pledged as collateral for the bonds.

2. **Unsecured bonds:** are issued against the general credit of the borrower.
3. **Convertible bonds:** can be converted into common stock at the bondholder's option.
4. **Callable bonds:** can be redeemed (bought back), by the issuing company, at a stated dollar amount prior to maturity.





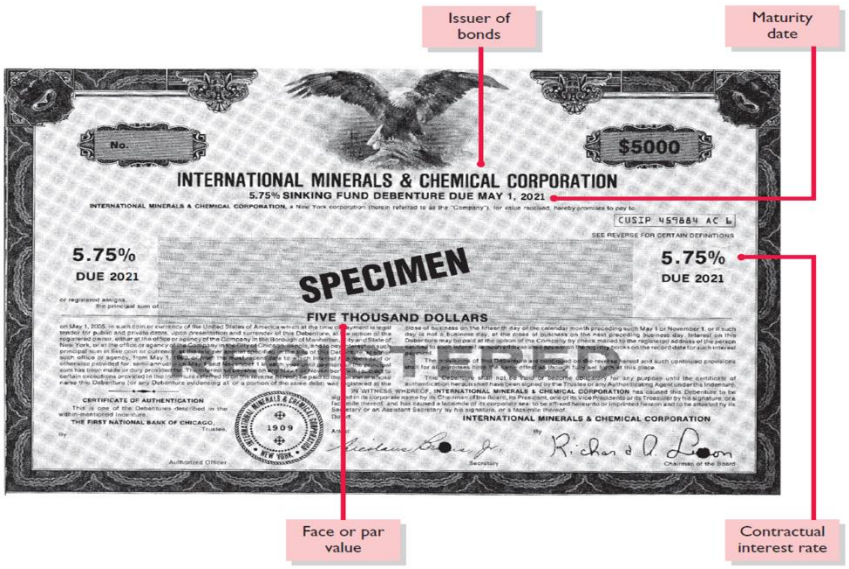
ISSUING BONDS

- **Bond Certificate:** issued to the investor and provides the name of the company issuing bonds, face value, maturity date, and contractual (stated) interest rate.

- **Face Value:** principal due at the maturity.

- **Maturity Date:** date final payment is due to the investor from the issuing company.

- **Contractual Interest Rate:** rate to determine cash interest paid. It is stated as an annual rate.

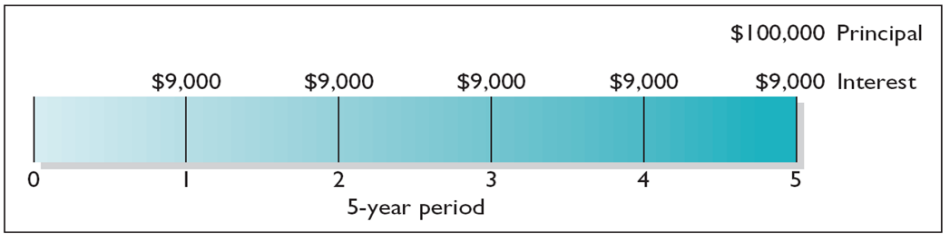


- The current market price (present value) of a bond is a function of three factors:
    1. The dollar amounts to be received.

2. The length of time until the amounts are received.
3. The **market rate of interest** (the rate investors demand for loaning funds.)

- **Time value of money**: a dollar received today is worth more than a dollar promised at some time in the future.
- The current market price of a bond is equal to the ***present value of all future cash payments promised by the bond***.

Ex: Assume that Meteor Company on January 1, 20X1, issues $100,000 of 9% bonds, due in five years, with interest payable annually at year-end.



- Meteor company has to pay $9,000 ($100,000 x 9%) at the END of each year for the next 5 years in addition to the $100,000 that it has to pay back at the end of 5 years.
- The market price of the bonds would factor in the 5 interest payments of $9,000 and the payment of the face amount in 5 years.

Present value of $100,000 received in 5 years	$ 64,993
Present value of $9,000 received annually for 5 years	35,007
Market price of bonds	**$100,000**

LO 3: Explain how to account for bond transactions.

- A corporation records bond transactions when it issues (sells) or redeems (buys back) bonds and when bondholders convert bonds into common stock.
- Bonds may be issued at…
  1. **Face Value**
  2. **Below Face Value (Discount)**
  3. **Above Face Value (Premium)**
- **Key Relationship between Contract Rate (SET BY BOND), Market Rate (SET BY MARKET), and Bond Price. The journal entries for the issuance of the bonds are recorded below.**
- **Contractual interest rate** = rate applied to the face value (par) to arrive at the interest paid for a year.
- **Market interest rate** = rate investors demand for loaning funds to the corporation.

1. Market Rate = Contract Rate → Bonds issued at Face Value.

	Date	Debit	Credit
Cash		XXX	
Bonds Payable			XXX

2. **Market Rate > (GREATER THAN) Contract Rate** **Discount (Bonds less than Face Value)**

	Date	Debit	Credit
Cash		XXX	
Discount on Bonds Payable		XXX	
Bonds Payable			XXX

3. **Market Rate (LESS THAN) < Contract Rate** → **Premium (Bonds more than Face Value)**

	Date	Debit	Credit
Cash		XXX	
Bonds Payable			XXX
Premium on Bonds Payable			XXX

- Bond prices are quoted as a percentage of face value.
    1. Bonds quoted **BELOW 100 are offered at a DISCOUNT**. If a $1,000 bond is offered at 96 (96% of face value), the selling price of the bond is **$960** ($1,000 × .96)
    2. Bonds quoted **ABOVE 100 are offered at a PREMIUM**. If a $1,000 bond is offered at 102 (102% of face vale), the selling price of the bond is **$1,020** ($1,000 × 1.02)
    3. Bonds quoted **AT 100 are offered at FACE VALUE**. If a $1,000 bond is offered at 100 (100% of face value), the selling price of the bond is **$1,000** ($1,000 × 1.00)

ISSUING BONDS AT *FACE*

- Occurs when **MARKET RATE = CONTRACT RATE** or bonds are quoted **at 100**.

Ex: (A) Denver Corporation issues 100, five-year, 10%, $1,000 bonds dated January 1, 20X1, at 100 (100% of face value). The entry to record the sale is:

	Date	Debit	Credit
Cash	**Jan. 1**	100,000	
Bonds Payable **(100 × $1,000)**	**20X1**		100,000

(B) Prepare the entry Denver would make to accrue interest on December 31.

	Date	Debit	Credit
Interest Expense	**Dec. 31**	10,000	
Interest Payable **($100,000 x 10% x 12/12)**	**20X1**		10,000

(C) Prepare the entry Denver would make to pay the interest on Jan. 1, 20X2.

	Date	Debit	Credit
Interest Expense	**Jan. 1**	10,000	
Interest Payable **($100,000 x 10% x 12/12)**	**20X2**		10,000

ISSUING BONDS AT A ***DISCOUNT***

- Occurs when **MARKET RATE > CONTRACT RATE** or bonds are quoted **BELOW 100**.
- **Ex:** Denver Corporation issues 100, five-year, 10%, $1,000 bonds dated January 1, 20X1, at 98(98% of face value) with interest payable January 1. The entry to record the sale is:

	Date	Debit	Credit
Cash **(100 × $1,000 × 0.98)**	**Jan. 1**	98,000	
Discount on Bonds Payable	**20X1**	2,000	
Bonds Payable **(100 × $1,000)**			100,000

- **Sale of bonds below face value** causes the total cost of borrowing to be more than the bond interest paid.
- The issuing corporation not only must **pay the contractual interest rate** over the term of the bonds but also must **pay the face value** (rather than the issuance price) at maturity.

Long-term liabilities		
Bonds payable	$100,000	
Less: Discount on bonds payable	2,000	$98,000

Bonds Issued at a Discount

Annual interest payments ($100,000 × 10% = $10,000; $10,000 × 5)	$50,000
Add: Bond discount ($100,000 − $98,000)	2,000
Total cost of borrowing	$52,000

Bonds Issued at a Discount

Principal at maturity	$100,000
Annual interest payments ($10,000 × 5)	50,000
Cash to be paid to bondholders	150,000
Less: Cash received from bondholders	98,000
Total cost of borrowing	$ 52,000

- **Discount on Bonds Payable** is a contra account that is deducted from bonds payable on the balance sheet.

ISSUING BONDS AT A ***PREMIUM***

- Occurs when **MARKET RATE < CONTRACT RATE** or bonds are quoted **ABOVE 100**.
- **Ex:** Denver Corporation issues 100, five-year, 10%, $1,000 bonds dated January 1, 20X1, at 102(102% of face value) with interest payable January 1. The entry to record the sale is:

	Date	Debit	Credit
Cash **(100 × $1,000 × 1.02)**	**Jan. 1**	102,000	
Bonds Payable **(100 × $1,000)**	**20X1**		100,000
Premium on Bonds Payable			2,000

- **Sale of bonds above face value** causes the total cost of borrowing to be **less** than the bond interest paid.

- The borrower is not required to pay the bond premium at the maturity date of the bonds. Thus, the bond premium is considered to be a reduction in the cost of borrowing.

Bonds Issued at a Premium	
Annual interest payments ($100,000 × 10% = $10,000; $10,000 × 5)	$ 50,000
Less: Bond premium ($102,000 − $100,000)	2,000
Total cost of borrowing	**$48,000**

Bonds Issued at a Premium	
Principal at maturity	$100,000
Annual interest payments ($10,000 × 5)	50,000
Cash to be paid to bondholders	150,000
Less: Cash received from bondholders	102,000
Total cost of borrowing	**$ 48,000**

- **Premium on Bonds Payable** is added to bonds payable on the balance sheet.

Long-term liabilities		
Bonds payable	$100,000	
Add: Premium on bonds payable	**2,000**	$102,000

BOND REDEMPTION AT MATURITY

Bond Redemption = Pay back the face value of the bond owed.

- The book value of the bonds at maturity will equal their face value.
- Does NOT matter if there was a bond discount or premium.

	Date	Debit	Credit
Bonds Payable		XXX	
Cash			XXX

Ex: The journal entry to record the redemption of 100, five-year, 10%, $1,000 bonds at the end of the 5th year assuming the company records the redemption of bonds at maturity is

	Date	Debit	Credit
Bonds Payable	**Dec. 31**	100,000	
Cash	**20X5**		100,000

BOND REDEMPTION BEFORE MATURITY

- When a company retires bonds before maturity, it is necessary to:
  1. Eliminate the carrying value of the bonds at the redemption date.
  2. Record the cash paid.
  3. Recognize the gain or loss on redemption.

If bond's carrying value > the cash paid to retire bond = GAIN ON RETIREMENT OF BONDS FOR ISSUER.

Carrying Value of Bond = Face Value of Bond – Unamortized Bond Discount
OR **Carrying Value of Bond** = Face Value of Bond + Unamortized Bond Premium

Summary of Bond Redemption Before Maturity Journal Entries			
		DEBIT	CREDIT
1. To record redemption of bonds issued at a discount for a loss.	Bonds Payable	xxx	
	Loss on Bond Redemption	xxx	
	Discount on Bonds Payable		xxx
	Cash		xxx
2. To record redemption of bonds issued at a discount for a gain.	Bonds Payable	xxx	
	Discount on Bonds Payable		xxx
	Gain on Bond Redemption		xxx
	Cash		xxx
3. To record redemption of bonds issued at a premium for a loss.	Bonds Payable	xxx	
	Premium on Bonds Payable	xxx	
	Loss on Bond Redemption	xxx	
	Cash		xxx
4. To record redemption of bonds issued at a premium for a gain.	Bonds Payable	xxx	
	Premium on Bonds Payable	xxx	
	Gain on Bond Redemption		xxx
	Cash		xxx

Ex: Company B issued $200,000 callable bonds. The bonds were for 10 years, but Company B decided to retire the bonds (pay them back) at the end of the 8th year. The $200,000 bonds are retired at 104 after paying the annual interest. Assume the carrying value of the bonds at the redemption date is $207,000 (principal and $7,000 premium). Company B would record the bond redemption at the end of the 8th year as:

	Date	Debit	Credit
Bonds Payable	**Dec. 31**	200,000	
Premium on Bonds Payable	**20X8**	7,000	
Loss on Bonds Payable		1,000	
Cash **($200,000 x 1.04)**			208,000

Carrying Value of Bond = $207,000
Cash Paid to Retire Bond = $208,000

Loss = $208,000 - $207,000 = **$1,000** because cash paid to retire bond was GREATER than the carrying value of the bond.

LO4: Explain how to account for long-term notes payable.

Long-term notes payable are similar to short-term interest-bearing notes payable except that the term of the notes *exceeds* one year.

Mortgage Notes Payable

A long-term note may be secured by a **mortgage** that pledges title to specific assets as security for a loan. Individuals widely use **mortgage notes payable** to purchase homes, and many small and some large companies use them to acquire plant assets.

Each payment consists of (1) interest on the unpaid balance of the loan **and** (2) a reduction of loan principal. While the total amount of the payment remains constant, the interest decreases each period, and the portion applied to the loan principal increases.

Companies initially record mortgage notes payable at face value. They subsequently make entries for each installment payment.

To illustrate, assume that Porter Technology Inc. issues a $500,000, 8%, 20-year mortgage note on December 31, 2022, to obtain needed financing for a new research laboratory. The terms provide for annual installment payments of $50,926 (not including real estate taxes and insurance0 Below is an example to show the installment payment schedule for the first four years.

Mortgage installment payment schedule

Issue date				$500,000
1	$50,926	$40,000	$10,926	489,074
2	50,926	39,126	11,800	477,274
3	50,926	38,182	12,744	464,530
4	50,926	37,162	13,764	450,766

Porter records the initial mortgage loan on December 31, 2022, as follows.

Dec. 31	Cash	500,000	
	Mortgage Payable		500,000
	(To record mortgage loan)		

On December 31, 2023, Porter records the first installment payment as follows.

Dec. 31	Interest Expense	40,000	
	Mortgage Payable	10,926	
	Cash		50,926
	(To record annual payment on mortgage)		

Balance Sheet Presentation - the company reports the reduction in principal for the next year as a current liability, and it classifies the remaining unpaid principal balance as a long-term liability. At December 31, 2023, the total liability is $489,074. Of that amount, $11,800 is current and $477,274 ($489,074 − $11,800) is long-term.

Lease Liabilities

Definition: A **lease** is a contractual agreement between a lessor (owner of a property) and a lessee (renter of the property). This arrangement gives the lessee the right to use specific property, which is owned by the **lessor**, for a specified period of time. In return for the use of the property, the **lessee** makes rental payments over the lease term to the lessor.

Accounting: For all leases **greater** than one year, the lessee records a right-of-use asset and a lease liability. The lease liability is computed as the present value of the lease payments. The right-of-use asset is equal to the lease liability.

To illustrate, assume that Gonzalez Company decides to lease new equipment. The lease term is 4 years; the economic life of the equipment is estimated to be 5 years. The present value of the lease payments is $190,000.

Gonzalez records the lease arrangement as follows.

Right-of-Use Asset	190,000	
Lease Liability		190,000
(To record leased asset and lease liability)		

Balance Sheet Presentation: Gonzalez reports its leased asset on the balance sheet in the long-term assets section. It reports the lease liability on the balance sheet as a liability. The portion of the lease liability expected to be paid in the next year is a current liability. The remainder is classified as a long-term liability.

Income Statement Presentation: The income statement presentation of leases by lessees depends on whether the lease is considered a finance or operating lease. The lease is a finance lease if it meets one of five criteria (discussed in more advanced accounting courses). Leases that do not meet any of these five criteria are considered operating leases.

Under finance lease treatment, the right-of-use asset is amortized (depreciated) in a fashion similar to other fixed assets, and the interest expense is determined in a fashion similar to other long-term liabilities. Under operating lease treatment, a single expense amount is determined. The calculation of this expense amount is complex and is addressed in advanced accounting courses.

LO 5: Discuss how liabilities are reported and analyzed.

MARAIS COMPANY
Balance Sheet (partial)

Liabilities		
Current liabilities		
Notes payable	$ 250,000	
Accounts payable	125,000	
Current maturities of long-term debt	300,000	
Accrued liabilities	75,000	
Total current liabilities		$ 750,000
Long-term liabilities		
Bonds payable	1,000,000	
Less: Discount on bonds payable	80,000	920,000
Notes payable, secured by plant assets		540,000
Lease liability		500,000
Total long-term liabilities		1,960,000
Total liabilities		$2,710,000

Current Liabilities: those DUE WITHIN ONE YEAR or company's operating cycle (whatever is LONGER) (Accounts payable, wages payable, short-term notes payable, interest payable, unearned revenue, sales taxes payable, etc.)
***Current maturities of long-term debt should be reported as a current liability.

Long-Term Liabilities: NOT EXPECTED TO BE PAID WITHIN THE LONGER OF ONE YEAR or the company's operating cycle. (Long-term notes payable, bonds payable, and lease liabilities.)

ANALYSIS

Liquidity Ratios: measure the short-term ability of a company to pay its maturing obligations and to meet unexpected needs for cash.

Ex:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

- Usually, a current ratio above 1 is a good sign for a company because they have a greater ability to pay current liabilities from current assets.
- A current ratio of 3.5 means a company has $3.50 of current assets for every $1 of current liabilities.

Solvency Ratios: measure the ability of a company to survive over a long period of time.

$$\text{Debt to Assets Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

- The higher the ratio, the more the company relies on debt to finance their assets.
- A debt to assets ratio of 80% indicates that a company finances $1 of assets with $0.80 of debt.

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

- Provides an indication of a company's ability to meet interest payments as they come due.
- A company that has a number of times interest charges are earned of 30 times is better than a company that has 10 times. Creditors would be more likely to give a loan to the company with 30 times interest charges are earned because they have a better ability to pay their interest payments even if earnings decrease.

Debt and Equity Financing

To obtain large amounts of long-term capital, corporate management has to decide whether to issue additional common stock (equity financing), bonds or notes (debt financing), or a combination of the two. Debt financing offers advantages over common stock,

As demonstrated below, one reason to issue bonds is that they do **not** affect stockholder control. Because bondholders do not have voting rights, owners can raise capital with bonds and still maintain corporate control.

In addition, bonds are attractive to corporations because the cost of bond interest is tax-deductible. As a result of this tax treatment, which stock dividends do not offer, bonds may result in a lower cost of financing than equity financing.

	Plan A Issue Stock	Plan B Issue Bonds
Income before interest and taxes	$1,500,000	$1,500,000
Interest (8% × $5,000,000)	—	400,000
Income before income taxes	1,500,000	1,100,000
Income tax expense (30%)	450,000	330,000
Net income	$1,050,000	$ 770,000
Outstanding shares	300,000	100,000
Earnings per share	**$3.50**	**$7.70**

Note that net income is $280,000 less ($1,050,000 – $770,000) with long-term debt financing (bonds). However, earnings per share is higher because there are 200,000 fewer shares of common stock outstanding.

One **disadvantage** in using bonds is that the company must **pay interest** on a periodic basis. In addition, the company must also **repay the principal** at the due date. A company with fluctuating earnings and a relatively weak cash position may have great difficulty making interest payments when earnings are low.