Lesson 9
Debt and Equity Financing

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Balance Sheet

Assets:

Current Assets:	
Cash	$ xxx
Accounts receivable	xxx
Less: Allowance for Uncollectible A/R	(xxx)
	xxx
Inventories	xxx
Prepaid Expenses	xxx
	xxx
Long-Term Assets:	
Property and Equipment	xxx
Less: Accum. Dep'n.	(xxx)
Intangibles	xxx
	xxx
Total Assets:	$ xxx

Liabilities and Stockholders' Equity:

Current Liabilities:	
Accounts Payable	$ xxx
Wages Payable	xxx
Payroll Taxes Payable	xxx
	xxx
Long-Term Liabilities:	
?	
Stockholders' Equity:	
?	

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Long-Term Liabilities

Long-Term Notes Payable

Mortgage Notes Payable

Bonds Payable

Lease Liabilities

Deferred Income Taxes Payable

Pension Liabilities

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Long-Term Liabilities

Long-Term Note Payable:

Example: **$100,000** is borrowed from the bank on **9/1/X5**. The note bears **8%** annual interest payable every six months and matures in three years.

Entry at 9/1/X5:

Cash	100,000	
Note Payable		100,000

Adjusting entry at 12/31/X5: (Interest: 100,000 x .08 x 4/12 = 2,666.66)

Interest Expense	2,667	
Interest Payable		2,667

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Entry at 3/1/X6: (Interest: 100,000 x .08 x 6/12 = 4,000.00)
(Interest: 100,000 x .08 x 2/12 = 1,333.33)

Interest Payable	2,667	
Interest Expense	1,333	
Cash		4,000

Entry at 9/1/X6: (Interest: 100,000 x .08 x 6/12 = 4,000.00)

Interest Expense	4,000	
Cash		4,000

Adjusting entry at 12/31/X6: (Interest: 100,000 x .08 x 4/12 = 2,666.66)

Interest Expense	2,667	
Interest Payable		2,667

Interest recorded for the entire year 'X6:

3/1/X6:	$ 1,333
9/1/X6:	4,000
12/31/X6:	2,667
	$ 8,000 (100,000 x .08 x 1 = $8,000)

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Entry at maturity 9/1/X8:

Interest Expense	4,000	
Cash		4,000

Note Payable	100,000	
Cash		100,000

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Problem #35

On 5/1/X4, $15,000 cash is borrowed from a local bank under a note bearing interest at 12% payable annually on 5/1/X5 and 5/1/X6. The principal amount is due at maturity, 5/1/X6.

a. Prepare all the journal entries required throughout the life of the note assuming all principal and interest payments are made on a timely basis. (Do not forget the adjusting entries required for interest expense at 12/31/X4 and 12/31/X5 in order to properly prepare financial statements on those dates.)

b. Determine the amount of interest expense recognized under the note in each year 20X4, 'X5, and 'X6 along with the total interest expense recognized over the entire term of the note.

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Problem #35 - Answer

A. 5/1/X4:

Cash	**15,000**	
Note Payable		**15,000**

12/31/X4 Adjusting Entry: (May 1st - Dec. 31st)

Interest Expense	**1,200**	
Interest Payable		**1,200**

($15,000 x .12 x 8/12 = $1,200)

5/1/X5: (Date first interest payment due)

Interest Payable	**1,200**	
Interest Expense	**600**	
Cash		**1,800**

($15,000 x .12 x 12/12 = $1,800)
($15,000 x .12 x 4/12 = $600)

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Problem #35 - Answer

12/31/X5 Adjusting Entry:

Interest Expense	**1,200**	
Interest Payable		**1,200**

($15,000 x .12 x 8/12 = 1,200)

5/1/X6: (Maturity)

Interest Payable	**1,200**	
Interest Expense	**600**	
Cash		**1,800**

($15,000 x .12 x 12/12 = 1,800)

Note Payable	**15,000**	
Cash		**15,000**

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Problem #35 - Answer

B. Interest Expense:

Year		Interest Expense
20X4	(8 mos. 5/1 - 12/31)	$1,200
20X5	(12 mos. 1/1 - 12/31)	1,800
20X6	(4 mos. 1/1 - 5/1)	600
		$3,600

($15,000 x .12 x 24/12 = $3,600)

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Mortgage Note Payable:

A mortgage note payable is a loan or note payable for which real estate (land and/or building) has been pledged as collateral or security through a legal document referred to as a trust deed. A trust deed authorizes a third party to sell the property, in the event of default on the note payable, and disburse the proceeds from the sale to the lender.

Mortgage Notes Payable are usually created in conjunction with the purchase of real estate.

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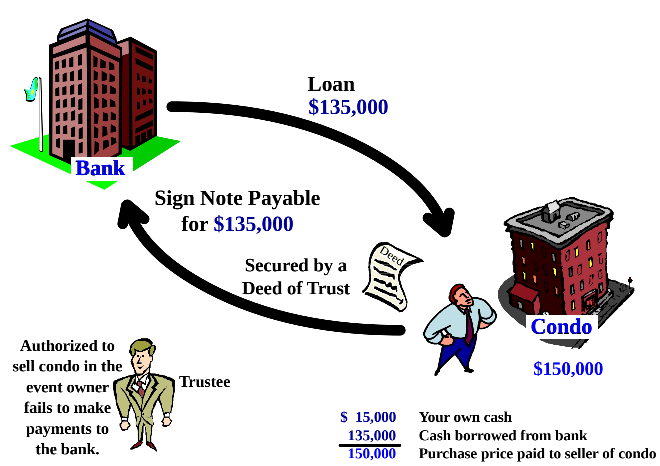

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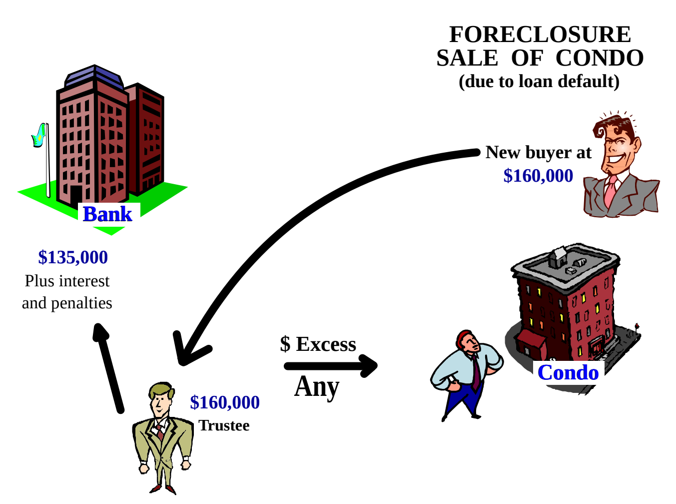

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Common Characteristics of Mortgage Notes Payable:

1. Typically long-term (15, 25 or 30 years)
2. Typically bears a fixed or adjustable rate of interest.
3. Typically requires a monthly payment (fixed in amount or adjustable) which includes not only the monthly interest due, but a portion of the principal such that by maturity, the entire amount of principal will have been repaid in full (fully amortizing note).
4. Most mortgage notes provide that monthly payments be applied first to any interest due at the time of payment with any excess paid to be applied to principal.

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Example: On **4/1/X7**, real estate is purchased for **$300,000** (land and building valued at **$50,000** and **$250,000**, respectively) with the price paid in cash (**$30,000**) and the execution of a mortgage note payable (**$270,000**). Record the transaction:

4/1/X7:

Land	50,000	
Building	250,000	
Cash		30,000
Mortgage Note Payable		270,000

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Assume that the **$270,000** mortgage note payable is a fully amortizing mortgage over 30 years and bears **9%** annual interest compounded monthly, with monthly payments of **$2,172.48** payable on the 1st of each month beginning **5/1/X7** for the next 30 years.

Entry for 1st payment at 5/1/X7:
(Interest: 270,000 x .09 x 1/12 = 2025.00)

Interest Expense	2,025.00	
Mortgage Note Payable	147.48	
Cash		2,172.48

Mortgage Note Payable

	270,000
147.48	
	269,852.52

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Entry for second payment on 6/1/X7:
(Interest: 269,852.52 x .09 x 1/12 = 2,023.89)

Interest Expense	2,023.89	
Mortgage Note Payable	148.59	
Cash		2,172.48

Mortgage Note Payable

	270,000
147.48	
148.59	
	269,703.93

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Mortgage Amortization Schedule

Month	Monthly Payment	Beginning Principal Balance	Interest Portion	Principal Portion
1	2,172.48	270,000.00	2,025.00	147.48
2	2,172.48	269,852.52	2,023.89	148.59
3	2,172.48	269,703.93	2,022.78	149.70
4	2,172.48	269,554.23	2,021.66	150.82
5	2,172.48	269,403.41	2,020.53	151.95
6	2,172.48	269,251.46	2,019.39	153.09
7	2,172.48	269,098.37	2,018.24	154.24
8	2,172.48	268,944.13	2,017.08	155.40
↓	↓	↓	↓	↓
358	2,172.48	6,420.86	48.16	2,124.32
359	2,172.48	4,296.54	32.22	2,140.13
360	2,172.48	2,156.28	16.17	2,156.28
		Totals	512,093	270,000

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How do you build equity in real estate?

(In this context, equity means the amount of cash left to the owner in the event of sale of property.)

Purchase of property:	
Cash down (equity)	**$ 30,000**
Mortgage note payable	**270,000**
Total purchase price	**$ 300,000**
Cash proceeds upon sale after two months (assume no selling costs):	
Sales price	**$ 300,000**
Payoff of mortgage note payable	**(269,704)**
Net cash upon sale	**$ 30,296**
Build up in equity over two months:	
Cash proceeds upon sale	**$ 30,296**
Cash invested upon purchase	**(30,000)**
Build up in equity (cash)	**$ 296**

$ 296 = Principal portion of monthly mortgage payments for two months.

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Most build up in equity on real estate comes from appreciation in property value over time.

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Assume the property is sold after one year.

Sales price	**$ 330,000**
Less: Selling costs (7%)	**(23,100)**
Net sales price	**306,900**
Payoff of note payable	**(268,155)**
Net cash upon sale	**$ 38,745**

Build up in Equity for the year:

Cash received upon sale	**$ 38,745**
Cash invested at purchase	**(30,000)**
Build up in equity	**$ 8,745**

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What caused this $8,745 build up in equity?

Appreciation in value:	
Net sales price	**$ 306,900**
Less: Original cost	**300,000**
Net appreciation	**$ 6,900**
Plus: Payments of principal on the note during the year:	
(270,000 - 268,155)	**$ 1,845**
Build up in equity	**$ 8,745**

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Problem #36

A building, including the land upon which it sits, is purchased on **7/1/X2** for **$400,000** with **10%** of the price paid for in cash and the remainder through the execution of a Mortgage Note Payable. The mortgage note bears an **8%** fixed interest rate compounding monthly for **30** years and is fully amortizing with monthly payments of **$2,641.55** due on the 1st of each month beginning on **8/1/X2**.

A. Prepare the journal entry to record the purchase of the land and building on **7/1/X2**. (Assume that the land is valued at **20%** of the total price.)

B. Why would allocation of the purchase price between land and building be important for financial reporting and income tax purposes?

C. Prepare the **8/1/X2** and **9/1/X2** entries to record the monthly mortgage payments on those dates.

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Problem #36

D. Determine the balance of the Mortgage Note Payable on **9/1/X2** following the monthly payment on that date.

E. What would be the effect if monthly payments in excess of **$2,641.55** were periodically made?

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Problem #36 - Answer

A building, including the land upon which it sits, is purchased on 7/1/X2 for $400,000 with 10% of the price paid for in cash and the remainder through the execution of a Mortgage Note Payable. The mortgage note bears an 8% fixed interest rate compounding monthly for 30 years and is fully amortizing with monthly payments of $2,641.55 due on the 1st of each month beginning on 8/1/X2.

A. Prepare the journal entry to record the purchase of the land and building on 7/1/X2. (Assume that the land is valued at 20% of the total price.)

Land	80,000	
Building	320,000	
Mortgage Note Payable		360,000
Cash		40,000

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Problem #36 - Answer

B. Why would allocation of the purchase price between land and building be important for financial reporting and income tax purposes?

Land is not depreciable. The greater the allocation to the building, which is depreciable, the higher the depreciation expense and lower resulting net income for financial reporting purposes. This would also result in lower income taxes.

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Problem #36 - Answer

C. Prepare the 8/1/X2 and 9/1/X2 entries to record the monthly mortgage payments on those dates.

8/1/X2:

Interest Expense	2,400.00	
Mortgage Note Payable	241.55	
Cash		2,641.55

9/1/X2:

Interest Expense	2,398.39	
Mortgage Note Payable	243.16	
Cash		2,641.55

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Problem #36 - Answer

D. Determine the balance of the Mortgage Note Payable on 9/1/X2 following the monthly payment on that date.

Mortgage Note Payable

		360,000 7/1/X2
8/1/X2	241.55	
9/1/X2	243.16	
		359,515.29

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Problem #36 - Answer

E. What would be the effect if monthly payments in excess of $2,641.55 were periodically made?

The term of the note would be shortened. The note would be paid off in less than 30 years.

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Bonds

Bonds are Notes Payable arising from the borrowing of cash from the public.

Example: On **11/1/X3**, XYZ Corporation issued **$1,000,000** of cash through bonds issued at face value, bearing interest at an annual rate of 7% payable semi-annually on **5/1** and **11/1** of each year through maturity at **11/1/X6**.

Entry at 11/1/X3:

Cash	1,000,000	
Bonds Payable		1,000,000

Adjusting Entry at 12/31/X3:

(Interest: 1,000,000 x .07 x 2/12 = 11,667)

Interest Expense	11,667	
Interest Payable		11,667

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Entry at 5/1/X4: (Interest: 1,000,000 x .07 x 6/12 = 35,000)
(Interest: 1,000,000 x .07 x 4/12 = 23,333)

Interest Payable	11,667	
Interest Expense	23,333	
Cash		35,000

Entry at 11/1/X4:

Interest Expense	35,000	
Cash		35,000

Entry at Maturity, 11/1/X6:

Bonds Payable	1,000,000	
Cash		1,000,000
Interest Expense	35,000	
Cash		35,000

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Common Terms Associated with Bonds

Bond Indenture: The written contract that spells out the legal terms and conditions of the obligations of the bond issuer and the rights of the bondholders.

Debentures: Unsecured bonds.

Secured or Mortgage-Backed Bonds: Bonds for which property or real estate are specified as collateral.

Junk Bonds: Unsecured bonds issued by companies with low credit ratings.

Senior or Subordinated Bonds: Typically unsecured bonds that are designated as having priority or subordinated rights to other unsecured creditors.

Term Bonds: Bonds that require principal repayment in full at maturity.

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Serial Bonds: Bonds that require principal repayment periodically throughout the term of the bond.

Convertible Bonds: Bonds which may be converted to other securities, such as stock, after a specified period of time, at the option of the bondholder.

Callable Bonds: Bonds which can be paid off prior to maturity at the option of the company issuing the bonds.

Bonds issued at a premium or a discount: Bonds which are issued for cash in an amount greater or less than the face amount or principal of the note.

Bond Exchange: A market where bondholders may sell their bonds to other investors.

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Problem #37

On **8/1/X3**, a company borrows **$10,000,000** cash from the public through the issuance of bonds that mature in three years and bear interest at a rate of **9%**. The interest is payable quarterly.

a. Prepare the journal or adjusting entries required to record:

8/1/X3: The issuance of the bonds at their face value of **$10,000,000**

11/1/X3: The quarterly interest payment

12/31/X3: The adjusting entry for interest expense

2/1/X4: The quarterly interest payment

8/1/X6: The final quarterly interest payment and payoff of the principle amount of the bonds

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Problem #37

b. What entry would the company make on their books if a bondholder owning **$10,000** of the bond sold that bond to an investor through the New York Bond Exchange at a price of **$10,500**?

c. - What is a debenture?
- What is a mortgage bond?
- What is a junk bond?
- What is a serial as opposed to a term bond?
- What is a convertible bond?
- What is a callable bond?

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Problem #37 - Answer

a. 8/1/X3: The issuance of the bonds at their face value of $10,000,000

Cash	10,000,000	
Bonds Payable		10,000,000

11/1/X3: The quarterly interest payment

Interest Expense	225,000	
Cash		225,000

(Interest: 10,000,000 x .09 x 3/12 = **225,000**)

12/31/X3: The adjusting entry for interest expense

Interest Expense	150,000	
Interest Payable		150,000

(Interest: 10,000,000 x .09 x 2/12 = **150,000**)

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Problem #37 - Answer

a. (continued)

2/1/X4: The quarterly interest payment

Interest Payable	**150,000**	
Interest Expense	**75,000**	
Cash		**225,000**

(Interest: 10,000,000 x .09 x 1/12 = **75,000**)

8/1/X6: The final quarterly interest payment and payoff of the principle amount of the bonds

Interest Expense	**225,000**	
Bond Payable	**10,000,000**	
Cash		**10,225,000**

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Problem #37 - Answer

b. No entry on the company's books.

c. What is a debenture? Unsecured bond.

What is a mortgage bond? Bond for which property or real estate is specified as collateral.

What is a junk bond? Unsecured bond issued by a company with a low credit rating.

What is a serial as opposed to a term bond?

Serial: Bond that requires principal repayment periodically throughout the term of the bond.

Term: Bond that requires principal repayment in full at maturity.

What is a convertible bond? Bonds which may be converted to other securities, such as stock, after a specified period of time, at the option of the bondholder.

What is a callable bond? Bond which can be paid off prior to maturity at the option of the company issuing the bond.

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Financing of a Business

(Obtaining resources necessary to operate a business)

1. **Debt Financing (Borrowing):**
   - Accounts Payable
   - Notes Payable
   - Bonds Payable
   - Other Payables

2. **Equity Financing (Investor/Owners):**
   - Capital Contributions (Capital Stock)
   - Retained Earnings

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Two Basic Forms of Corporate Ownership or Capital Stock

Common Stock: The basic form of ownership for all corporations. Common stockholders have the right to vote in corporate matters (ie. election of a board of directors), the right to share equally per share in corporate profits paid out as dividends and any distributions to owners in the event of business termination. All companies issue common stock and are controlled or owned by the common stockholders or owners.

Preferred Stock: A supplemental form of ownership which provides certain preferential but limited rights to those of common shareholders. Preferred shareholder's typically have no voting rights but have a limited priority right over common shareholders to dividends and distributions in the event of termination. Many companies do not issue preferred stock, but it is an option available in the financing of a business.

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Common Stock

Example: A company issues **10,000** shares of **$ .01** par value common stock for **$50** per share.

Cash	**500,000**	
Common Stock, **at par ($ .01) per share**		**100**
Paid in Capital in Excess of Par, Common Stock		**499,900**

Balance Sheet

Stockholders' Equity:

Contributed Capital:	
Common Stock, **$.01** Par Value	**$100**
Paid in Capital in Excess of Par, Common Stock	**499,900**
	$500,000
Retained Earnings	**250,000**
Total Stockholders' Equity	**$750,000**

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Example: A company issues **10,000** shares of **$ .01** stated value common stock for **$50** per share.

Cash	**500,000**	
Common Stock, **at Stated Value ($ .01) per share**		**100**
Paid in Capital in Excess of Stated Value, Common Stock		**499,900**

Balance Sheet

Stockholders' Equity:

Contributed Capital:	
Common Stock, **$.01** Stated Value	**$100**
Paid in Capital in Excess of Stated Value, Common Stock	**499,900**
	$500,000
Retained Earnings	**250,000**
Total Stockholders' Equity	**$750,000**

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Example: A company issues **10,000** shares of no par value common stock for **$50** each in cash.

Cash	**500,000**	
Common Stock (no Par Value)		**500,000**

Balance Sheet

Stockholders' Equity:

Contributed Capital:	
Common Stock	**$500,000**
Retained Earnings	**250,000**
Total Stockholders' Equity	**$750,000**

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Disadvantages in raising capital through the issuance of common stock:

1. Others are given a vote and say in the business.
2. Others are given rights to participate in the monetary benefits of ownership (dividends, increased stock values, and proceeds in the event of liquidation).

Disadvantages of raising capital through debt:

1. Capital borrowed (principal) must be paid back plus interest at scheduled times regardless of operating performance and ability to pay.
2. Potential forced liquidation of assets in the event of default.

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Preferred Stock

Preferred Stock is a form of equity ownership that is designed to avoid the disadvantages of common stock without becoming debt that has to be repaid in the future.

Preferred Stock is:

1. typically non-voting,
2. limited in the sharing of dividend distributions,
3. reflected as "owners equity" on the balance sheet because the company is not required to repay the amount of capital contributed by preferred shareholders except in the event of business termination.

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Why would anyone ever make capital contributions to a company in exchange for preferred stock?

1. Preferred shareholders have dividend limitations but they also have dividend preferences over common shareholders.
2. Preferred shareholders have preferences in the distribution of assets in the event of business termination.
3. Some tax benefits to corporate investors.

How is the dividend preference determined?

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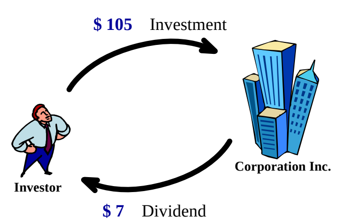
Example: In addition to **10,000** shares of no par value common stock issued at **$50** per share, the company issues **5,000** shares of **7%**, **$100** par value preferred stock for **$105** per share.

Cash	525,000	
Preferred Stock		525,000

.07 x **$100** = **$7** per share, per year



$\frac{\$7}{\$105}$ = **6.67%** Annual return on investment

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How does a preferred shareholder ever get their money (investment) back?

1. Wait until the business terminates.
2. Sell to other investors.

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Problem #38

The Asay Co. wishes to raise $100,000 of cash from investors (equity financing). Prepare the journal entry that would be appropriate for each of the following independent scenarios:

a. Issue **10,000** shares of **$.01** par value common stock for **$100,000** cash.

b. Issue **10,000** shares of **$.01** stated value common stock for **$100,000** cash.

c. Issue **10,000** shares of no par common stock for **$100,000** cash.

d. Issue **5,000** shares of **6% $15** par value preferred stock for **$100,000** cash.

Calculate the annual dividend preference for the 5,000 shares of preferred stock under D above.

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Problem #38 - Answer

a.	Cash	**100,000**	
	Common Stock, Par Value		**100**
	Paid-In Capital in Excess of Par, Common Stock		**99,900**
b.	Cash	**100,000**	
	Common Stock Stated Value		**100**
	Paid-In Capital in Excess of Stated Values, Common Stock		**99,900**
c.	Cash	**100,000**	
	Common Stock		**100,000**
d.	Cash	**100,000**	
	Preferred Stock, Par Value		**75,000**
	Paid-In Capital in Excess of Par, Preferred Stock		**25,000**

Dividend preference for Preferred Stock: **75,000 x .06 = $4,500** annually

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The Process of Dividend Declaration and Payment

Example: On **11/1/X5** the company's Board of Directors meet and declare a total dividend of **$100,000** to be paid to shareholders of record as of **12/1/X5** with actual payment to be made on **1/1/X6**.

Entry at 11/1/X5 (Date of Declaration):

Dividends, Preferred Stock	**35,000**	
Dividends, Common Stock	**65,000**	
Dividends Payable		**100,000**

Note: Preferred shareholders will receive **$7** for every share of stock held and the common shareholders will receive **$6.50** (**$65,000** ÷ **10,000** shares) for every share held.

Entry at 12/1/X5 (Date of Record):

No Entry

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Entry at 11/1/X5 (Date of Declaration):

Dividends, Preferred Stock	**35,000**	
Dividends, Common Stock	**65,000**	
Dividends Payable		**100,000**

Entry at 12/1/X5 (Date of Record):

No Entry

Closing Entry at 12/31/X5:

Retained Earnings	**100,000**	
Dividends, Preferred Stock		**35,000**
Dividends, Common Stock		**65,000**

Entry at 11/1/X6 (Date of Payment):

Dividends Payable	**100,000**	
Cash		**100,000**

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Assume only **$20,000** of dividends had been declared on **11/1/X5**

Entry at 11/1/X5 (Date of Declaration):

Dividends, Preferred Stock	**20,000**	
Dividends Payable		**20,000**

Dividend Preference: **7%** x **$100** x **5,000** shares = **$35,000**

Do the preferred shareholders have any ongoing future rights to the **$15,000** deficiency in current year dividends?

- If preferred stock is designated as "cumulative," shareholders have an ongoing carryover preference for any prior year dividend shortfalls referred to as "dividends in arrears."
- "Non-cumulative" preferred stock has no carryover rights on dividend shortages in any year.

How are the rights of preferred shareholders to dividends in arrears disclosed in the financial statements?

- Are they a liability? **NO!**
- Dividends in arrears are disclosed in the footnotes to the financial statements.

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Example: If dividends in arrears on the cumulative preferred stock in the prior example amount to **$15,000** in **20X5**, and declared dividends for **20X6** amount to **$75,000**, how much would go to the preferred versus common shareholders?

Preferred Dividend:

20X5 arrears of	**$ 15,000**
20X6 preference	**35,000**
Total Dividend	**$ 50,000**

Common Dividend: **$ 25,000**

How much goes to the Preferred vs. Common Shareholders if a **$10,000,000** dividend was declared?

Preferred - $50,000 Common - $9,950,000

What kind of stock (Preferred vs. Common) would an aggressive investor looking to maximize profits prefer to own?

- Common Stock

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Problem #39

Prepare the journal entries for Smith Co. for the following events:

A. **11/1/X7** - The board of directors declares a **$100,000** cash dividend payable to common shareholders with a date of record of **12/1/X7** and date of payment scheduled for **1/1/X8**.

B. **12/1/X7** - Date of record noted.

C. **12/31/X7** - Closing entry made.

D. **1/1/X8** - payment of **$100,000** cash dividend made prorata to all common shareholders.

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Problem #39 - Answer

	Account	Debit	Credit
a.	Dividends, Common Stock	**100,000**	
	Dividends Payable		**100,000**
b.	No entry.		
c.	Retained Earnings	**100,000**	
	Dividends, Common Stock		**100,000**
d.	Dividends, Payable	**100,000**	
	Cash		**100,000**

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Problem #40

Given the following information at year-end, prepare the Stockholders' Equity section of a balance sheet:

Accounts Receivable	**$ 150,000**
Dividends, Common Stock	**350,000**
Common Stock, **$.01** par value, **20,000** shares	**200**
Retained Earnings (Beginning of year)	**625,000**
Paid in Capital in Excess of Par, Preferred Stock	**30,000**
Bonds Payable	**3,000,000**
Dividends, Preferred Stock	**50,000**
Preferred Stock, **$50** par value, **10,000** shares	**500,000**
Paid in Capital in Excess of Par, Common Stock	**900,000**
Net Income	**550,000**

Questions:

A. At what average price per share has the company's Common Stock been issued? Preferred Stock?

B. Assuming that no dividends are in appears at the beginning of the year, determine the rate of the dividend preference for preferred stock.

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Problem #40 - Answer

Balance Sheet

Stockholders' Equity:

Contributed Capital -	
Preferred Stock, **$50** par value, **10,000** shares	**$500,000**
Common Stock, **$.01** par value, **20,000** shares	**200**
Paid in Capital in Excess of Par, Preferred Stock	**30,000**
Paid in Capital in Excess of Par, Common Stock	**900,000**
	1,430,200
Retained Earnings	**775,000**
Total Stockholders' Equity	**$2,205,200**

Retained Earnings, beginning	**$625,000**
Add: Net Income	**550,000**
Less: Dividends	**(400,000)**
Retained Earnings, ending	**$775,000**

Questions:

A. Common Stock = $\frac{\$200 + \$900{,}000}{20{,}000 \text{ shares}}$ **$45.01 per share**

Preferred Stock = $\frac{\$500{,}000 + \$30{,}000}{10{,}000 \text{ shares}}$ **$53.00 per share**

B. Dividend preference rate $\frac{\$50{,}000}{\$500{,}000}$ = **10%**

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Problem #41

Given the following capital structure for the years **20X3**, **20X4**, and **20X5**:

Preferred Stock, **7% $20** par value, **50,000** shares	**$1,000,000**
Common Stock, **$.50** par value, **100,000** shares	**50,000**
Paid in Capital in Excess of Par, Preferred Stock	**100,000**
Paid in Capital in Excess of Par, Common Stock	**2,000,000**

Calculate the total amount of dividends to be distributed to the preferred vs. common stockholders in each year if the total dividend amounts to **$100,000** in **20X3**, **$50,000** in **20X4** and **$500,000** in **20X5** under the following two assumptions:

A. The preferred stock is non-cumulative.

B. The preferred stock is cumulative and dividends in arrears at **12/31/X2** amount to **$100,000**.

Question: Should preferred dividends in arrears at the end of an accounting period be reflected as a liability on the balance sheet? Why?

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Problem #41 - Answer

Calculate the total amount of dividends to be distributed to the preferred vs. common stockholders in each year if the total dividend amounts to **$100,000** in **20X3**, **$50,000** in **20X4** and **$500,000** in **20X5** under the following two assumptions:

A. The preferred stock is non-cumulative.

	20X3	**20X4**	**20X5**
Preferred stock:	**$70,000**	**$50,000**	**$70,000**
Common stock:	**$30,000**	**0**	**$430,000**

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Problem #41 - Answer

Calculate the total amount of dividends to be distributed to the preferred vs. common stockholders in each year if the total dividend amounts to **$100,000** in **20X3**, **$50,000** in **20X4** and **$500,000** in **20X5** under the following two assumptions:

B. The preferred stock is cumulative and dividends in arrears at **12/31/X2** amount to **$100,000**.

		20X3	20X4	20X5
Preferred Stock:	Arrears	**$ 100,000**	**$ 50,000**	**$ 90,000**
	Current Preference	**$ 0**	**$ 0**	**$ 70,000**
Common Stock		**$ 0**	**$ 0**	**$ 340,000**
Preferred Dividends in Arrears @ Year End		**$ 70,000**	**$ 90,000**	**$ 0**

Answer: Preferred dividends in arrears are not to be reflected as a liability on the balance sheet because a company has no legal obligation to ever pay dividends unless the board of directors officially declares a dividend distribution. The amount of dividends in arrears is typically disclosed in the footnotes to the financial statements.

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