

Financial Accounting

Prepared by Dr. Mohamed Hamouda

Lecture 8



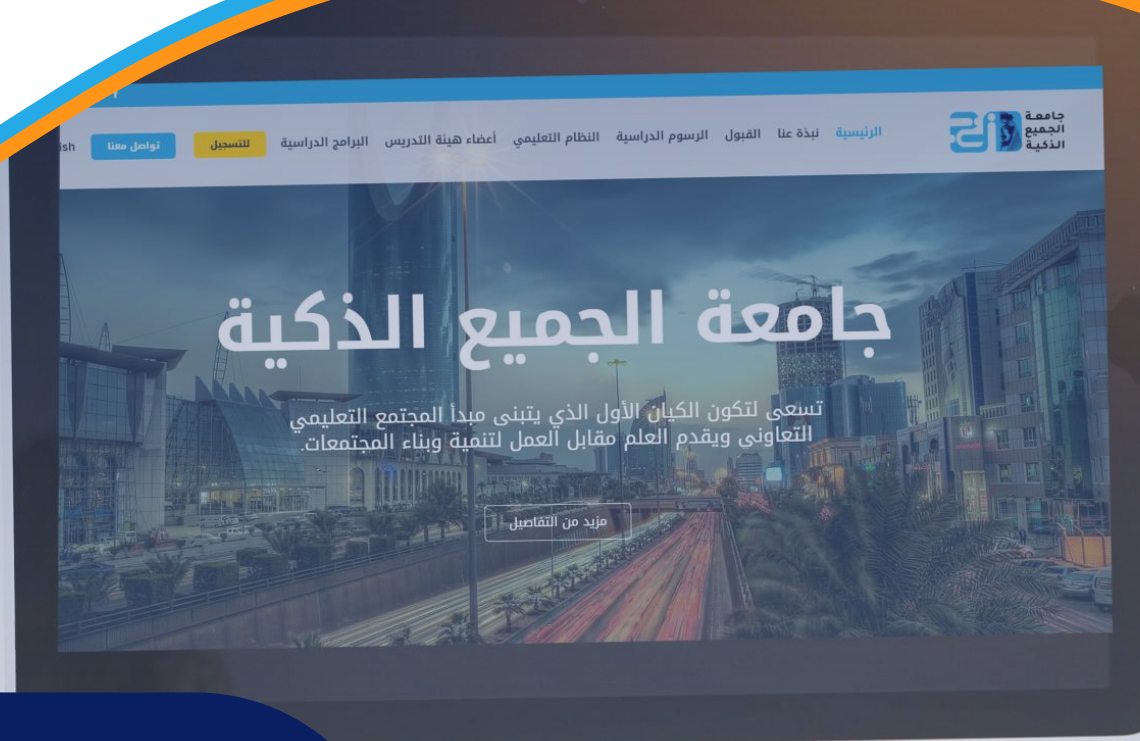
Capital Structure and Dividend Policy Decisions



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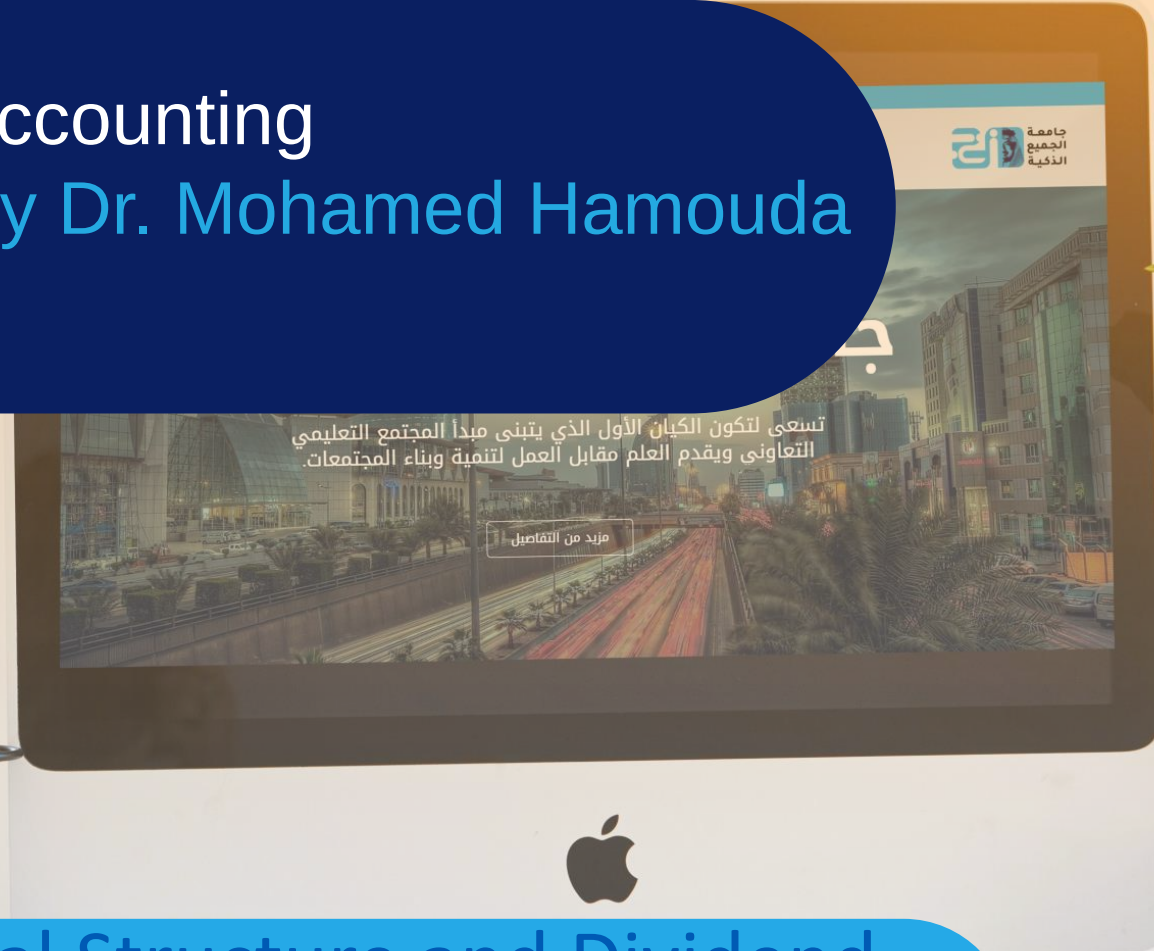
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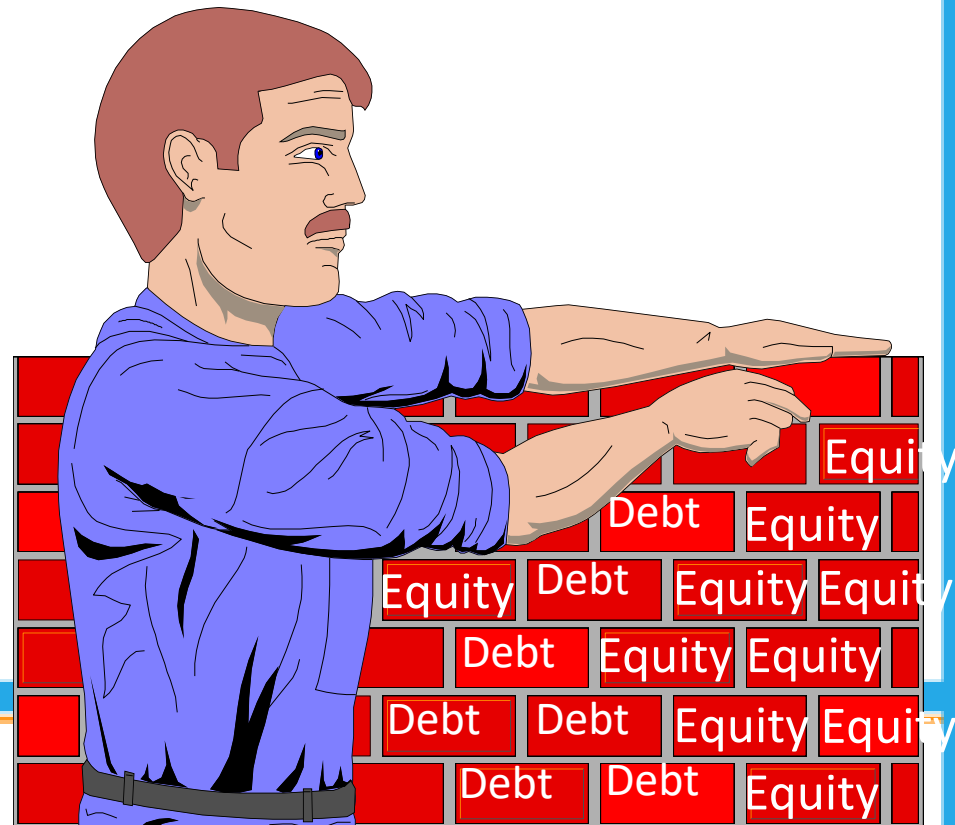


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Capital Structure and Dividend Policy Decisions

Capital Structure and Dividend Policy Decisions

- The combination of debt and equity used to finance a firm



- The optimal mix of debt, preferred stock, and common stock with which the firm plans to finance its investments
- May change over time
- Trade-off between risk and return to achieve the target price of the stock



- 1. Firm's business risk
- 2. Firm's tax position
- 3. Financial flexibility
- 4. Managerial attitude

- The risk associated with projections of a firm's future return on assets (ROA) or return on equity (ROE) if the firm uses no debt

- Depends on several factors
 - 1. Sales variability - volume and price
 - 2. Input price variability
 - 3. Ability to adjust output prices
 - 4. The extent to which costs are fixed (operating leverage)

- The portion of stockholder's risk, over and above basic business risk, resulting from the manner in which the firm is financed
- Financial risk results from using financial leverage

- The extent to which fixed-income securities (debt and preferred stock) are used in a firm's capital structure

- Maximize the price of the firm's stock
- Changes in use of debt will cause changes in earnings per share, and thus, in the stock price
- Cost of debt varies with capital structure
- Financial leverage increases risk

- EPS indifference analysis
 - the level of sales at which EPS will be the same whether the firm uses debt or common stock financing
 - at lower sales, EPS is higher with stock financing
 - at higher sales, EPS favors debt financing

- Maximizing EPS is not the same as maximizing stock price
- Stock risk (Beta) increases with debt

- Difficulties with analysis
 - 1. Impossible to determine exactly how either P/E ratios or equity capitalization rates (k_s values) are affected by different degrees of financial leverage

- Difficulties with analysis
 - 2. Managers may be more or less conservative than the average stockholder, so management may set a different target capital structure than the one that would maximize the stock price

- Difficulties with analysis
 - 3. Managers of large firms have a responsibility to provide continuous service and must refrain from using leverage to the point where the firm's long-run viability is endangered

- Financial strength indicators
 - Times-interest-earned (TIE) ratio
 - a ratio that measures the firm's ability to meet its annual interest obligations
 - calculated by dividing earnings before interest and taxes (EBIT) by interest charges

- 1. Tax benefit/bankruptcy cost trade-off theory
- 2. Signaling theory

- 1. Interest is tax-deductible expense, therefore less expensive than common or preferred stock

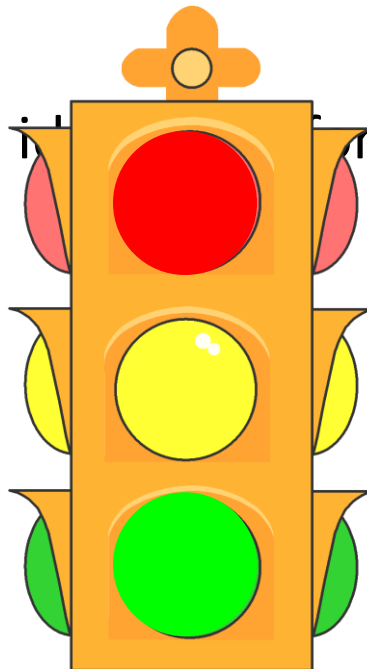
- 2. Interest rates rise as debt/assets ratio increases; tax rates fall at high debt levels; probability of bankruptcy increases as debt/assets ratio increases

- 3. Threshold debt level below which the effects in point (2) are immaterial, but beyond this point the higher interest rates reduce the tax benefits and even further the bankruptcy costs lower the value of the stock

- 4. Theory and empirical evidence support these ideas, but the points cannot be identified precisely

- 5. Many large, successful firms use much less debt than the theory suggests--leading to the development of signaling theory

- Symmetric information
 - investors and managers have identical information about the firm's prospects



- Asymmetric information
 - managers have better information about their firm's prospects than do outside investors



- Signal
 - an action taken by a firm's management that provides clues to investors about how management views the firm's prospects



- Reserve borrowing capacity
 - the ability to borrow money at a reasonable cost when good investment opportunities arise
 - firms often use less debt than “optimal” to ensure that they can obtain debt capital later if it is needed

- Wide variations in use of financial leverage among industries and firms within an industry
 - TIE measures how safe the debt is
 - percentage of debt
 - interest rate on debt
 - company's profitability

- Dividends
 - payments made to stockholders from the firm's earnings, whether those earnings were generated in the current period or in previous periods

- Dividends affect capital structure
 - retaining earnings increases common equity relative to debt
 - financing with retained earnings is cheaper than issuing new common equity

- Dividend irrelevance theory
 - theory that a firm's dividend policy has no effect on either its value or its cost of capital
 - investors value dividends and capital gains equally

- Optimal dividend policy
 - the dividend policy that strikes a balance between current dividends and future growth and maximizes the firm's stock price

- Dividend relevance theory
 - the value of a firm is affected by its dividend policy
 - the optimal dividend policy is the one that maximizes the firm's value

- Information content (Signaling)
 - Signaling hypothesis says that investors regard dividend changes as signals of management's earnings forecasts

- Types of dividend payments
 - Residual dividend policy
 - a policy in which the dividend paid is set equal to the earnings minus the amount of retained earnings necessary to finance the firm's optimal capital budget

- Types of dividend payments
 - Stable, predictable dividend policy
 - payment of a specific dollar dividend each year, or periodically increase the dividend at a constant rate
 - the annual dividend is fairly predictable by investors

- Types of dividend payments
 - Constant payout ratio
 - percentage of earnings, such as 50%
 - must watch out for reductions not to signal permanent decline in earnings

- 1. Constraints on dividend payments
 - debt contract restrictions
 - cannot exceed “retained earnings”
 - cash availability
 - IRS restrictions on improperly accumulated retained earnings

- 2. Investment opportunities
 - large capital budgeting projects affect dividend-payout ratios

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- 3. Alternative sources of capital
 - flotation costs
 - increasing capital costs
 - ownership dilution

Capital Structures and Dividend Policies Around the World

- Companies in Italy and Japan use more debt than companies in the United States or Canada, but companies in the United Kingdom use less than any of these
- Different accounting practices make comparisons difficult
- Gap has narrowed in recent years
- Dividend-payout ratios vary greatly also

- Logical analysis would indicate that:
 - 1. Tax codes generally favor use of debt in developed countries
 - 2. In countries where capital gains are not taxed, investors should show a preference for stocks compared with countries that have capital gains taxes
 - 3. Investor preferences should lead to relatively low equity capital costs in those countries that do not tax capital gains
- Reality does not match these conclusions

- What about risk, especially bankruptcy costs?
- Foreign banks are closely linked to corporations that borrow from them, and have substantial influence over the management of the debtor firms
- Equity monitoring costs are comparatively low in the United States
- These indicate that U.S. firms should have more equity and less debt than firms in countries such as Japan and Germany