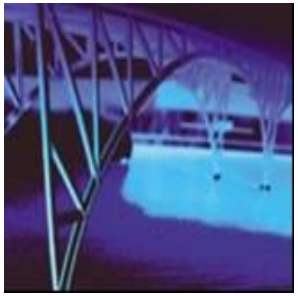
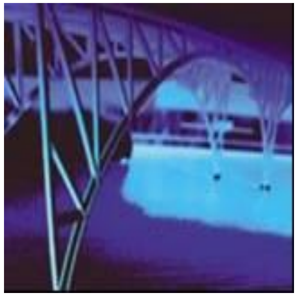
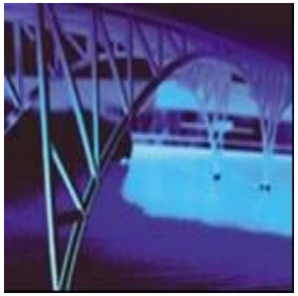


Financial Management for Engineers



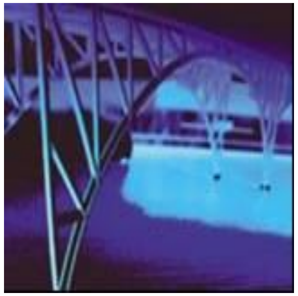
FINANCIAL MANAGEMENT FOR ENGINEERS

1. Why financial management today is so important.
2. Describe "financial management" in terms of the three major decision areas that confront the financial manager.
3. Identify the goal of the firm and understand why shareholders' wealth maximization is preferred over other goals.
4. Understand the potential problems arising when management of the corporation and ownership are separated (i.e., agency problems).
5. Demonstrate an understanding of corporate governance.
6. Discuss the issues underlying social responsibility of the firm.
7. Understand the responsibilities of financial managers and differentiate it from the responsibilities of Engineer



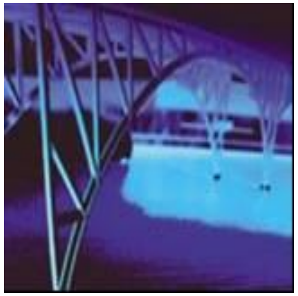
The Role of Financial Management

- **What is Financial Management?**
- **The Goal of the Firm**
- **Corporate Governance**
- **Organization of the Financial Management Function**



What is Financial Management?

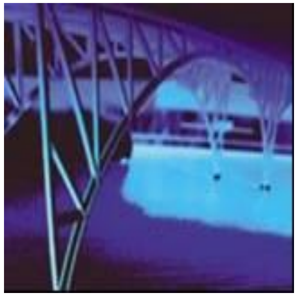
Concerns the acquisition, financing, and management of assets with some <u>overall goal</u> in mind.



Investment Decisions

Most important of the three decisions.

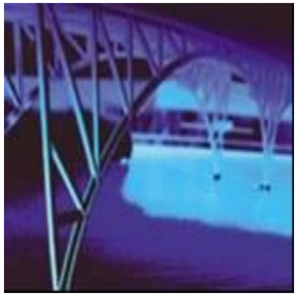
- **What is the optimal firm size?**
- **What specific assets should be acquired?**
- **What assets (if any) should be reduced or eliminated?**



Financing Decisions

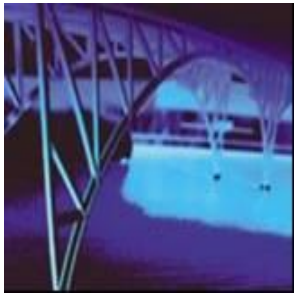
Determine how the assets (LHS of balance sheet) will be financed (RHS of balance sheet).

- **What is the best type of financing?**
- **What is the best financing mix?**
- **What is the best dividend policy (e.g., dividend-payout ratio)?**
- **How will the funds be physically acquired?**



Asset Management Decisions

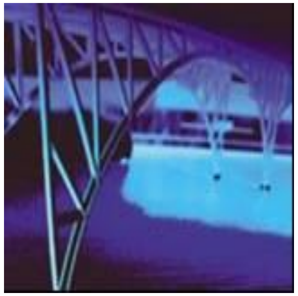
- **How do we manage existing assets *efficiently*?**
- **Financial Manager has varying degrees of operating responsibility over assets.**
- **Greater emphasis on current asset management than fixed asset management.**



What is the Goal of the Firm?

Maximization of Shareholder Wealth!

Value creation occurs when we maximize the share price for current shareholders.

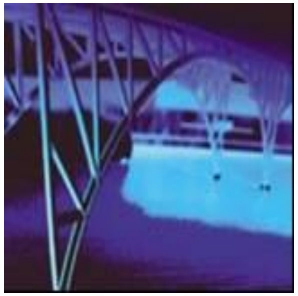


The Modern Corporation

Modern Corporation

Shareholders | **Management**

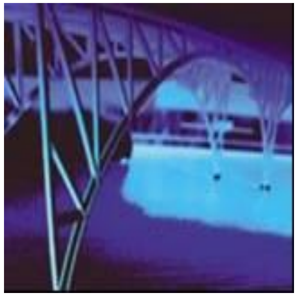
There exists a SEPARATION between owners and managers.



Role of Management

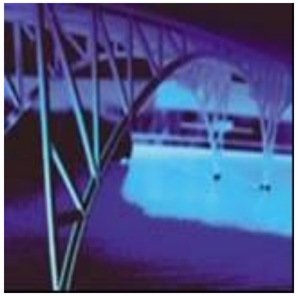
Management acts as an *agent* for the owners (shareholders) of the firm.

- **An *agent* is an individual authorized by another person, called the principal, to act in the latter's behalf.**



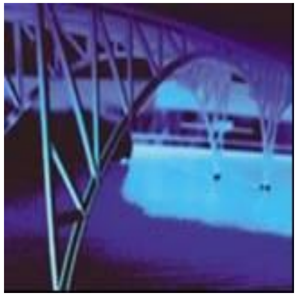
Agency Theory

- **Jensen and Meckling developed a theory of the firm based on *agency theory*.**
- ***Agency Theory*** **is a branch of economics relating to the behavior of principals and their agents.**



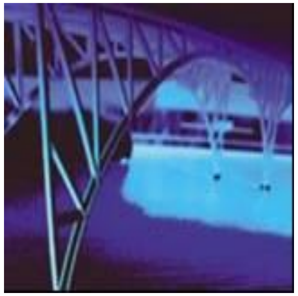
Agency Theory

- Principals must provide ***incentives*** so that management acts in the principals’ best interests and then ***monitor*** results.
- Incentives include, **stock options**, **perquisites**, and **bonuses**.



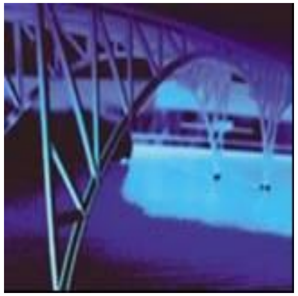
Social Responsibility

- Wealth maximization does *not* preclude the firm from being **socially responsible.**
- Assume we view the firm as producing *both* private and social goods.
- Then shareholder wealth maximization remains the appropriate goal in governing the firm.



Corporate Governance

- ***Corporate governance*: represents the system by which corporations are managed and controlled.**
  - **Includes shareholders, board of directors, and senior management.**
- **Then shareholder wealth maximization remains the appropriate goal in governing the firm.**



Board of Directors

- **Typical responsibilities:**
  - **Set company-wide policy;**
  - **Advise the CEO and other senior executives;**
  - **Hire, fire, and set the compensation of the CEO;**
  - **Review and approve strategy, significant investments, and acquisitions; and**
  - **Oversee operating plans, capital budgets, and financial reports to common shareholders.**
- **CEO/Chairman roles commonly same person in US, but separate in Britain.**