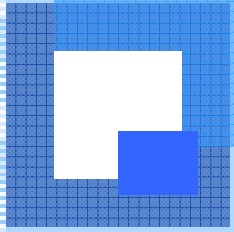


Chapter 2

The Firm and Its Goals

Managerial Economics: Economic Tools for Today's Decision Makers, 4/e
By Paul Keat and Philip Young



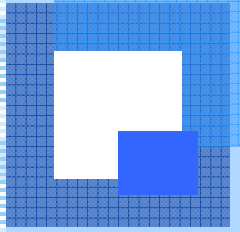
The Firm and Its Goals

- The Firm
- The Goal of the Firm
- Do Companies Maximize Profits?
- Maximizing the Wealth of Stockholders
- Economic Profits



The Firm

- Definition
 - A **firm** is a collection of resources that is transformed into products demanded by consumers.

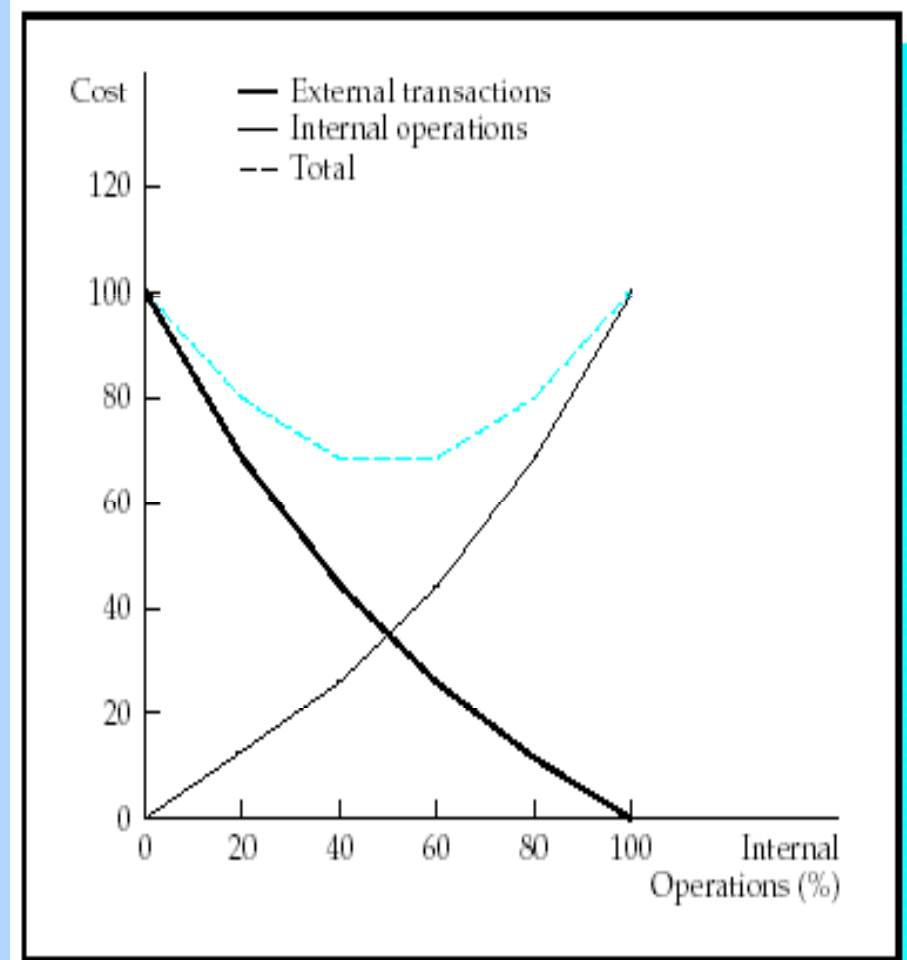


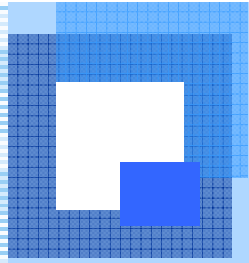
The Firm

- Why does a firm exist?
 - transactions costs
 - contracting and enforcement costs
 - uncertainty
 - frequency of transaction
 - asset-specificity
 - opportunistic behavior

The Firm

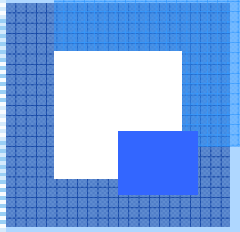
- Limits to Firm Size
 - tradeoff between external transactions and the cost of internal operations





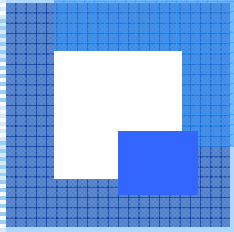
The Goal of the Firm

- Throughout the text we will assume that the goal of the firm is to maximize profits.
 - **profit-maximization hypothesis**
- What is profit?
 - revenue minus cost



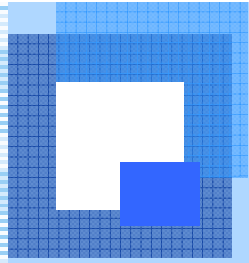
The Goal of the Firm

- Other goals that the firm might pursue:
 - Economic Objectives
 - market share
 - profit margin
 - return on investment
 - technological advancement
 - customer satisfaction
 - shareholder value



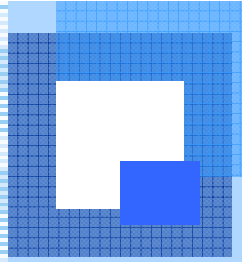
The Goal of the Firm

- Other goals that the firm might pursue:
 - Noneconomic Objectives
 - workplace environment
 - product quality
 - service to community



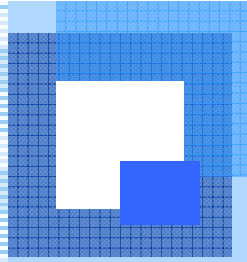
The Goal of the Firm

- Knowing the firm's goals allows the manager to make effective decisions
- How might different goals lead to different decisions by the firm?



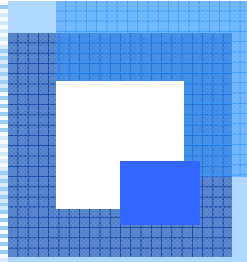
Do Companies Maximize Profit?

- Criticism: Companies do not maximize profits but instead their aim is to “satisfice.”
 - Two components to criticism:
 - Position and power of stockholders
 - Position and power of professional management



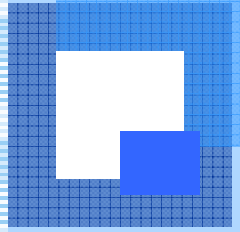
Do Companies Maximize Profit?

- Position and power of stockholders
 - Medium-sized or large corporations are owned by thousands of shareholders who may own only minute interests in the firm, and, in addition, own interests in an entire portfolio of firms.
 - Shareholders are concerned with performance of entire portfolio and not individual stocks.



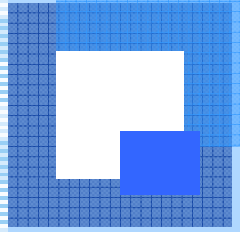
Do Companies Maximize Profit?

- Position and power of stockholders
 - Most stockholders are not well informed on how well a corporation *can* do and thus are not capable of determining the effectiveness of management.
 - Not likely to take any action as long as they are earning a “satisfactory” return on their investment.



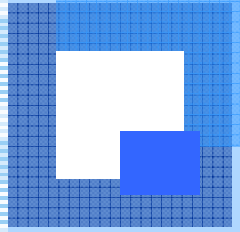
Do Companies Maximize Profit?

- Position and power of professional management
 - High-level managers who are responsible for major decision making may own very little of the company's stock.



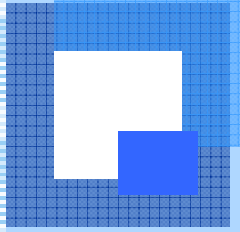
Do Companies Maximize Profit?

- Managers follow their own objectives rather than those of the stockholders.
 - Concern over job security may lead them to be too conservative and instead pursue a steady performance.
 - Management compensation may be based on some measure other than profits.



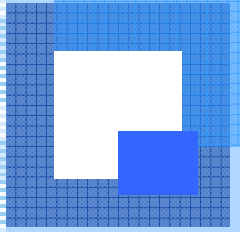
Do Companies Maximize Profit?

- Counter-arguments which support the profit maximization hypothesis.
 - Stock prices are a reflection of a company's profitability. If managers do not seek to maximize profits, stock prices fall and firms are subject to takeover bids and proxy fights.
 - The compensation of many executives is tied to stock price.



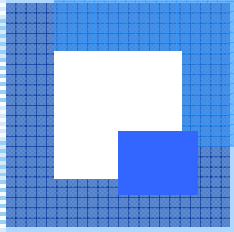
Maximizing the Wealth of Stockholders

- Views the firm from the perspective of a stream of earnings over time, i.e., a cash flow.
- Must include the concept of the “time value of money.”
 - Dollars earned in the future are worth less than dollars earned today.



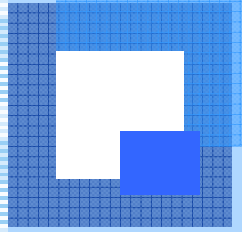
Maximizing the Wealth of Stockholders

- Future cash flows must be “discounted” to the present.
- The discount rate is affected by risk.
- Two major types of risk:
 - Business Risk
 - Financial Risk



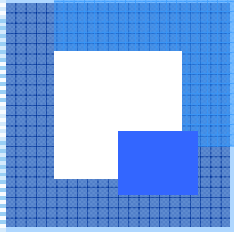
Maximizing the Wealth of Stockholders

- **Business risk** involves variation in returns due to the ups and downs of the economy, the industry, and the firm.
- All firms face business risk to varying degrees



Maximizing the Wealth of Stockholders

- **Financial Risk** concerns the variation in returns that is induced by leverage.
- **Leverage** is the proportion of a company financed by debt.
- The higher the leverage, the greater the potential fluctuations in stockholder earnings.
- Financial risk is directly related to the degree of leverage.



Maximizing the Wealth of Stockholders

- The present price of a firm's stock should reflect the discounted value of the expected future cash flows.

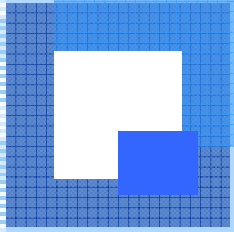
$$P = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \frac{D_3}{(1+k)^3} + \dots + \frac{D_n}{(1+k)^n}$$

where $P =$ present price of stock

$D =$ dividends received per year

$k =$ discount rate

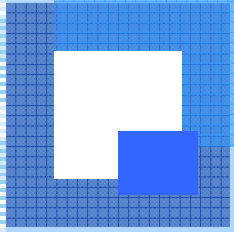
$n =$ life of firm in years



Maximizing the Wealth of Stockholders

- If the firm is assumed to have an infinitely long life, the price of a share of stock which earns a dividend D per year is determined by the equation

$$P = D/k$$

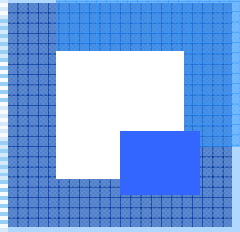


Maximizing the Wealth of Stockholders

- Given an infinitely lived firm whose dividends grow at a constant rate (g) each year, the equation for the stock price becomes

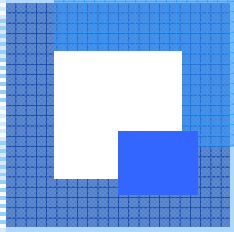
$$P = D_1 / (k - g)$$

where D_1 is the dividend to be paid during the coming year.



Maximizing the Wealth of Stockholders

- Under this framework, maximizing the wealth of the shareholder means that a company tries to manage its business in such a way that the dividends over time paid from its earnings and the risk incurred to bring about the stream of dividends always create the highest price for the company's stock.

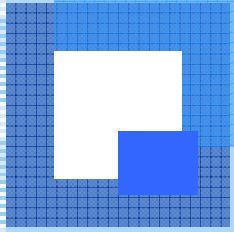


Maximizing the Wealth of Stockholders

- The equation for a company's stock price shows us how the price is affected by changes in the parameters.

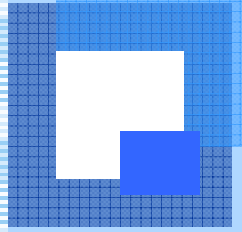
$$P = D_1 / (k - g)$$

- How is the stock price affected by:
 - changes in the size of the dividend?
 - changes in the growth of dividends?
 - changes in the risk faced by the firm?



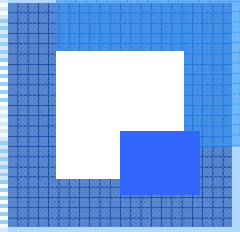
Maximizing the Wealth of Stockholders

- The total value of the company's common equity is determined by multiplying the firm's stock price by the number of shares outstanding.



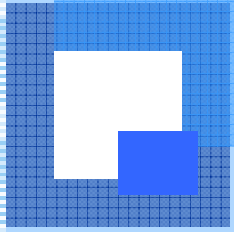
Maximizing the Wealth of Stockholders

- Another measure of the wealth of stockholders is called **Market Value Added (MVA)[®]**
- MVA represents the difference between the market value of the company and the capital that the investors have paid into the company.



Maximizing the Wealth of Stockholders

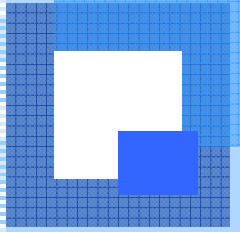
- MVA includes adjustments for accumulated R&D and goodwill.
- While the market value of the company will always be positive, MVA may be positive or negative.



Maximizing the Wealth of Stockholders

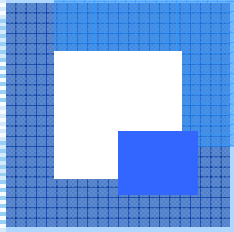
- Another measure of the wealth of stockholders is called **Economic Value Added (EVA)[®]**
- EVA is calculated as
$$\text{EVA} = (\text{Return on Total Capital} - \text{Cost of Capital}) \cdot \text{Total Capital}$$

If EVA is positive then shareholder wealth is increasing.
If EVA is negative, then shareholder wealth is being destroyed.



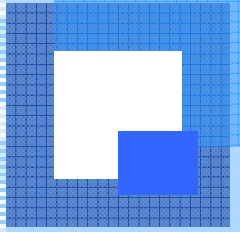
Maximizing the Wealth of Stockholders

- Another measure used to rank companies is Future Growth Value (FGV).
- FGV measures how much of the company's value is due to expected growth.



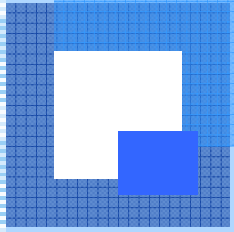
Economic Profits

- Economic profits equal revenue minus economic cost.
- Economic costs and accounting costs differ.



Economic Profits

- Accounting costs are based on historical costs.
- Economic costs are based on replacement costs and also include opportunity costs.



Economic Profits

- **Normal Profit** is the amount of profit that is equal to the profit that could be earned in the firm's next best alternative activity.
- It is the minimum profit necessary to keep resources engaged in a particular activity.