## **Saving and Investment**

How is investment financed by saving?

- **No Financial Assets** Simple economy, saver and investor are the same person.
- **Financial Assets** Saver and investor are different people, need financial assets.
- **Financial Intermediation** More complex economy. Financial intermediary (bank) between saver and investor.

#### **Gains from Financial Assets**

- Financing of investment.
- Flexible consumption-saving choice.
- Efficient risk sharing.

Oddly, how saving finances investment is not a focus of a financial economics course. Instead, this matter is treated in a macroeconomics course.

This course studies financial assets: their characteristics, marketing, and pricing.

#### **Financial Assets**

Equity Ownership. Example: stock.

**Debt** Promise to pay. Example: bond.

**Derivative** Value is derived from the value of another asset.

Example: stock option.

### **Security Markets**

**Primary Market** New issues. Raises funds for the issuer. Investment bankers market the new issues.

**Secondary Market** Trading of previously issued securities. Raises no funds for the issuer.

For stocks, the secondary market is larger.

A share of stock can be issued only once, but may then be traded many times.

#### **Broker Versus Dealer**

Broker Agent for buyer or seller. Receives a commission.

**Dealer** Principal, trades for his own account. Makes market in an asset by offering to buy at the *bid* and offering to sell at the *ask*. The profit of the dealer comes from the ask being higher than the bid.

# **Economic Efficiency?**

How does a broker/dealer system affect economic efficiency? Overall, the purpose is to *raise* the asset price. As the cost of capital is inversely related to the asset price, a high asset price reduces the cost of capital and increases investment demand.

## **Long-Term Versus Short-Term Assets**

Capital Market Long-term assets: stocks and long-term bonds.

Money Market Short-term, low-risk debt.

# Leverage

Leverage is borrowing to increase the stake of one's investment.

For example, if one has \$1,000 to invest and borrows another \$1,000, one can invest twice as much. Any gains and losses are doubled, as the investment has doubled.

### **Financial Engineering**

Investment bankers do *financial engineering*: the cash flow from financial assets is repackaged into the cash flow of new financial assets.

For example, the creation of zero-coupon bonds is financial engineering. The holder of a zero-coupon bond receives a single payment at the maturity date. A block of Treasury bonds pays a stream of interest and principal, and these payments can be repackaged as zero-coupon bonds of different maturities. For example, the interest payments at year nine are repackaged as nine-year, zero-coupon bonds.

#### **Corporate Structure**

A *corporation* has legal rights somewhat like a person. A corporation can own property and borrow and can be sued in court.

**Stockholders** Own company, shares show fraction of company owned, one vote per share. Receive dividends.

**Directors** Board of directors sets company policy, meets perhaps monthly. Sets dividend, chooses executives. Directors are elected by the stockholders.

Executives Run the company on a day-to-day basis.

Financial Economics

Basic Terminology

Chief Executive Officer (CEO):

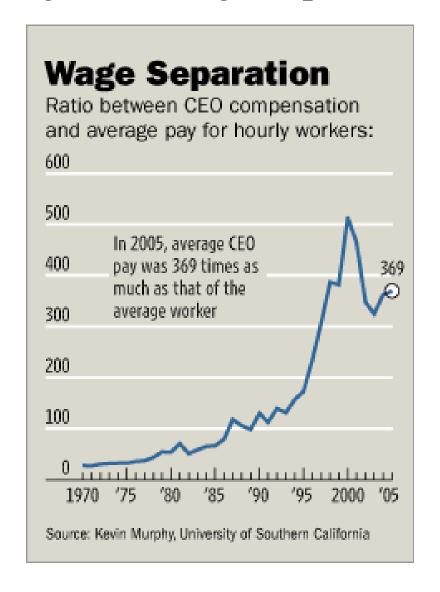
Chairman of the Board versus President.

## Separation of Ownership and Control

Berle and Means, *The Modern Corporation and Private Property*, 1932 [1].

In a large corporation, typically the ownership is spread among many. Although legally the stockholders control the company, in practice typically the executives control the company. They determine their own pay and select their successors. Berle and Means worried that the executives would exploit their position to enrich themselves. Until recently, most economists had seen this worry as unfounded. However, during the past twenty-five years, the ratio of CEO pay to rank-and-file pay has risen by a factor of perhaps 40 (figure 1, from [2]).

Figure 1: Wage Separation



# Securities and Exchange Commission

Primary regulator of securities markets.

*Transparency*: Making public detailed information about the company.

#### **Dodd-Frank**

The Dodd-Frank Wall Street Reform and Consumer Protection Act 2010 is a response to the 2008 financial crisis. This complicated legislation requires various regulatory bodies to institute new regulations, and one cannot know what these might be until these bodies act.

#### References

- [1] Adoph A. Berle, Jr. and Gardiner C. Means. *The Modern Corporation and Private Property*. McMillan, New York, 1932. KF1416. 11
- [2] Joann S. Lublin and Scott Thurm. Behind soaring executive pay, decades of failed restraints. *Wall Street Journal*, October 12, 2006. 11