Economics 201 Week 5: Finance

Overview

Capital

- Capital
  - Physical capital
  - Financial Capital
  - Human capital

Purchasing Capital

- How do firms raise money to purchase capital?
- Equity Finance
  - Firm pays for capital out of its own funds.
- Debt Finance.
  - Firm borrows money to pay for capital.

Equity Finance

- Equity means having an ownership right.
- Example:
  - An individual starts a small business and uses his/her own money (savings).
- Example:
  - A large business decides to purchase new capital from the profits (retained earnings).
  - Retained earnings are profits that are <u>not</u> distributed to shareholders as dividends.

Debt Finance

- Borrowing funds to purchase capital.
- Example :
  - An individual gets a loan from a bank to start a business or purchase capital.
  - Individual signs bank “note” and provides collateral.
  - Collateral: If individual fails to repay loan to bank, the bank gets the business (or new capital equipment).

Markets for Financial Assets

- Financial asset
  - Promise to pay future income in some form
    - Future profits or future interest payments
    - Stocks and bonds
- Firms
  - Get the funds to purchase capital
  - By issuing and selling financial assets.

Financial Markets

- Firms raise money for capital in financial markets.
- Financial Market:
  - Commodity being sold: a financial asset.
  - 2 types of financial markets;
    - Equity markets (Stock Market)
    - Debt markets (Bond Market)

The Stock Market

- Share of stock
  - A share of ownership in a corporation
- Dividends
  - The part of a firm's current profit that is distributed to shareholders
- Capital gain
  - Return from selling an asset for more than was paid for it.

The Stock Market

- Stock prices
  - Very volatile – driven by expectations about the future.
    - Perceptions of <u>expected</u> future profits earned by firm.
    - Perceptions of <u>expected</u> future gains or losses in share prices.
    - Perceptions of <u>expected</u> risk.
    - Perceptions of <u>expected</u> changes in other asset prices.

The Bond Market

Corporate Bond

$1000

10%

2050

- **Bond**
  - Promise to pay back borrowed funds issued by a corporation or government.
- **Principal** (face value)
  - Amount of money a bond promises to pay when it matures
- **Coupon**
  - Series of periodic payments that a bond promises before maturity, i.e. The bond at left will pay 10% of $1000 = $100 per year until maturity.
- **Maturity date**
  - Date at which a bond's principal amount will be paid to the bond's owner.

Bond Prices and Interest Rates

Corporate Bond

$1000

10%

2050

- Coupon is $100 per year.
- What if interest rates fall to 5%?
  - This bond would be worth *more* than $1000.
  - **Price increases until current yield = current market rates.**
- Yield
  - Annual rate of return a bond earns for its current owner.

The Bond Market

Corporate Bond

$1000

10%

2050

- Current market yield = 5%
- Yield = Coupon/$Price_b$
  - 5% = \$100/$Price_b$
  - $Price_b$ = \$2,000
- The current owner would offer the bond for sale at a price of **$2000**.

The Bond Market

Corporate Bond

$1000

10%

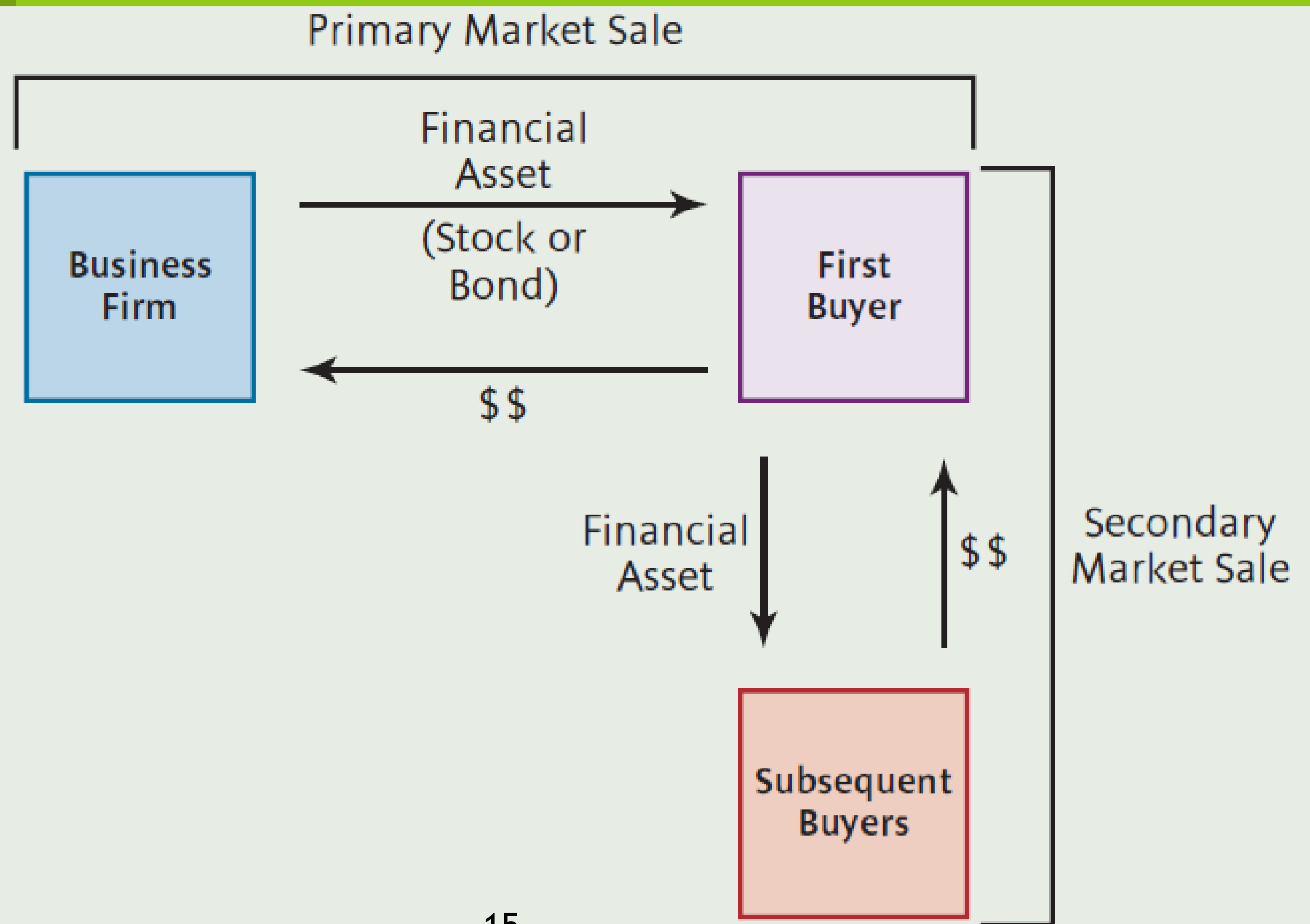
2050

- Current market yields = 5%
  - $5\% = \$100/\text{Price}_b$
  - $\text{Price}_b = \$2{,}000$
- Current market yields = 20%
  - $20\% = \$100/\text{Price}_b$
  - $\text{Price}_b = \$500$
- Inverse relationship between bond prices and interest rates.
- When interest rates fall, bond prices rise.
- When interest rates rise, bond prices fall.

Markets for Financial Assets

- Primary market
  - Newly issued financial assets are sold for the first time
- Secondary market.
  - Previously issued financial assets are sold.

Primary and secondary asset markets



The Bond Market

- Why do bond yields differ?
  - Default risk
    - Default = company will not be able to buy back the bond at maturity. i.e. the bond becomes worthless.
    - The greater the risk of default
      - The lower the bond's price
      - The greater its yield. i.e. bonds have to offer a better yield in order to compensate buyers for risk.