

# Chapter 12: Production and Growth

# GDP per capita and the Level of Industrialization

- The GDP per capita of a country tends to depend on that country's level of industrialization.
- i.e. Is the country composed of people who farm for themselves, make textiles, make TV's, or make software and invent new products
- China in the 1990's looked similar to US during our industrial revolution.
- China's pollution per capita levels are way under our pollution per capita levels for that level of industrialization.

# Savings and Investment

- Investing usually brings more production in the future due to more capital/investment goods.
- Increases in investment are often associated with decreases in consumption and production now.
- Society is saving more income and not spending as much.

# Investment from Abroad

- Foreign direct investment (FDI).
- A multinational firm owning or buying partial ownership of a firm in a different market.
- Two main types: vertical, horizontal.
- Brings tech transfer and employment.

# Education

- Builds human capital, knowledge base, and technological progress.
- Brain drain effect-when high ability workers leave a country in search of better jobs.

# Health and Nutrition

- Better health brings higher levels of growth.
- Why?

# Free Trade, Population Growth, R&D

- More free trade in a nation equates to more happiness.
- More population increases production and consumption.
- More technology brings a higher standard of living. This increases the "A" measure of our production function.

# Property Rights

- **Property Rights**-being able to own something.
- Property rights tend to be necessary for civilization to occur.
- A stronger government institution allows for political stability.



# Property Rights

- Plato-collective ownership necessary for promoting common pursuit of common interests.
- Aristotle-private ownership promoted virtues.
- Hobbes/Hume-There is no natural "mine." Property must be understood as creation of the sovereign state.

# Property Rights-Locke

- Property is natural.
- Gave defense of unilateral appropriation.
- God granted property as a natural right.
- Property is good. Its allows us to build on land in ways that we just can't do with common property.

# Property Rights

- Kant-Affront to human personality to not have a system to permit useful objects to be used. Property rights must be an arrangement which respects everyone's interest in the matter.
- Hegel-Property helps develop the self. Property gives an external reality to our internal concept of individual freedom.

# Property Rights in Economics Today

- There is still a debate on intellectual property rights (IPR) today.
- Developing countries may benefit from IPR-protection laws, because multinational companies would feel more comfortable investing.
- Stronger IPR-protection laws also prevent "knock-offs," which hurts both domestic firms and consumers.

# Chapter 13: Saving, Investment, and the Financial System

# Financial System

- Financial System- A group of institutions in the economy that help to match one person's savings with another's investment.
- Within a financial system, there are a number of financial markets.
- Financial Markets-Financial institutions through which savers can directly provide funds to borrowers.

# Financial Markets

- Two main types of financial markets: bond markets, stock markets.
- Within a financial system, there are a number of financial markets.
- Bonds-certificate of indebtedness.
- Stock-a claim to partial ownership in a firm.

# Bonds

- A bond is an IOU. You buy now and sell the bond back at a specific date (maturity).
- You can sell the bond before it reaches maturity to an other person.
- Usually, the government is the one in an economy issuing bonds.
- Principle-amount bond is bought at.
- Interest-amount extra earned on the bond.



# Bonds

- Term-how long it takes to mature.
- Credit risk-probability that borrower will default. Ratings go from AAA to D.
- Tax treatment-how tax laws treat interest earned on the bond.
- Most bonds have taxable interest.
- Municipal bonds have interest that is not taxed by the federal government.
- Debt finance-selling bonds to raise cash.

# Stocks

- Buying a stock means that you become a part owner of a firm.
- You are then allowed to take some profits.
- Equity finance-selling stock to raise cash.
- Stocks are traded on stock exchanges (i.e. New York Stock Exchange)
- Prices are determined by supply and demand forces.

# Financial Intermediaries

- Institutions through which savers can indirectly provide funds to borrowers.
- Two main types: banks, mutual funds.
- Banks take deposits from people (savers) and loans it out.
- Mutual funds sell shares to the public to use the money to buy a selection, or portfolio, of various types of stocks and bonds.
- Mutual funds tend to be diverse investments.

# Mutual Funds

- Mutual funds tend to be out performed by index funds.
- index funds-collection of all stocks in a given stock index.
- Usually, mutual funds are structured in a way to match certain people's objectives.