

THE BASIC ECONOMIC PROBLEM

- ◆ Because **wants are unlimited** and **resources are scarce**, people must make choices, which result in trade-offs
- ◆ To decide which wants to satisfy with scarce resources, individuals ultimately try to maximize **utility**, or satisfaction
- ◆ The **accounting cost** of an economic decision is the monetary cost incurred
- ◆ The **opportunity cost** of an economic decision is the value of the next-best alternative to a given course of action
- ◆ Accounting costs and opportunity costs are also known as explicit and implicit costs, respectively
- ◆ The total **economic cost** is the sum of accounting and opportunity costs

WATCHING A MOVIE (COSTS IN ACTION)

- ◆ The accounting cost is the cost of the movie ticket
- ◆ The opportunity cost is the benefit of studying economics (assuming that studying is the next best alternative)
- ◆ The economic cost is the total of these two costs

THE THEORY OF COMPARATIVE ADVANTAGE

- ◆ First presented by **David Ricardo**
- ◆ An economic agent has an **absolute advantage** in a good when it can produce more of that good with fewer or the same amount of inputs than other economic agents
- ◆ An economic agent has a **comparative advantage** in a good when it can produce that good at a lower opportunity cost than other economic agents
- ◆ Even if an agent possesses no absolute advantage in any good, it must possess a comparative advantage in *some* good (but not in *all* goods)
- ◆ The theory of comparative advantage states that an economic agent should specialize in the good in which it has a comparative advantage and trade for the other goods
- ◆ Absolute advantage has **NO** bearing on whether or not two agents should trade

THE PRODUCTION POSSIBILITIES FRONTIER FOR A NATION

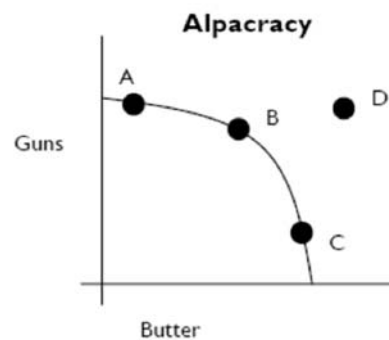
- ◆ Economic growth is represented by an outward shift of a nation's PPF
- ◆ A nation's PPF shifts outward if more resources become available or if new technology increases productivity
- ◆ A nation's PPF shifts inward if an event, such as a war or a natural disaster, reduces a nation's productive capacity
- ◆ An economy that produces at a point inside its PPF is in recession; productive resources are not being utilized to their full extent

FACTORS OF PRODUCTION

- ◆ Land
- ◆ Labor
- ◆ Capital
- ◆ Entrepreneurship

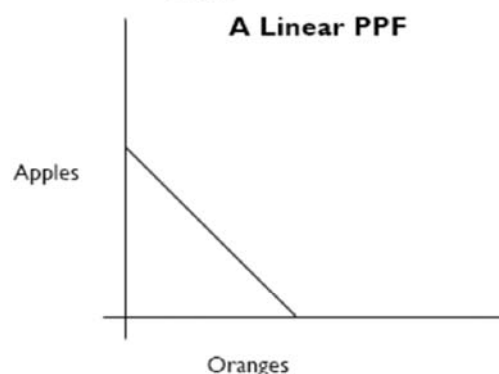
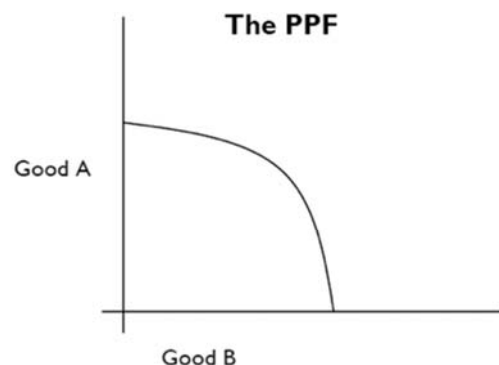
CHARACTERISTICS OF THE PPF

- ◆ The production possibilities frontier illustrates **opportunity costs**
- ◆ To produce more of one good, an economic agent must decrease the quantity produced of another good
- ◆ The PPF is usually **bowed outward** due to the **law of increasing opportunity costs**, since some resources are more suited to producing one good than another
- ◆ The PPF is linear if the two goods use identical resources in production



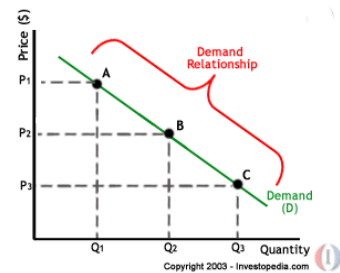
- ◆ Producing at a point on the PPF indicates 100% efficiency (points A, B, or C)
- ◆ Producing at a point inside the PPF indicates inefficiency
- ◆ Producing outside the PPF is impossible (point D)
- ◆ An economic agent is able to obtain a combination of goods outside its PPF through specialization and trade

EXAMPLES OF A PRODUCTION POSSIBILITY FRONTIER



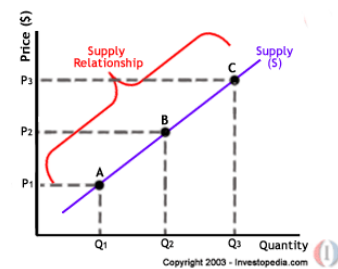
Demand

- *Law of Demand* = all else being equal, as the price of a product increases or decreases, quantity demanded falls or rises (respectively)
- Inverse/negative relationship between price and quantity demanded (negative slope)
- Δ Quantity of Demand \neq Δ Demand
- Determinants of Changes in Demand
 - Consumer income
 - Price of substitute good
 - Price of complementary good
 - Consumer expectations about future prices
 - Number of consumers in the market
- Increase in Demand (rightward shift)
 - At all prices, consumer is willing to buy more quantity of the good
 - At all quantities, consumer is willing to pay higher prices for the good



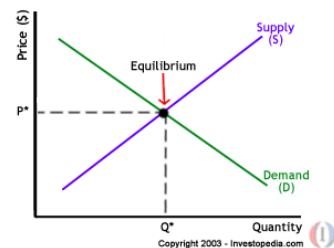
Supply

- *Law of Supply* = all else being equal, as the price of a product increases or decreases, the quantity supplied rises or falls (respectively)
- Direct/positive relationship between price and quantity supplied (positive slope)
- Δ Quantity of Supply \neq Δ Supply
- Determinants of Changes in Supply
 - Cost of an input
 - Technology and productivity
 - Taxes or subsidies
 - Producer expectations about future prices
 - Price of alternate goods that could be produced
 - Number of producers in the market
- Increase in Supply (rightward shift)
 - At all prices, producer is willing to supply more quantity of the good
 - At all quantities, producer is willing to accept lower prices for the good due to lower *marginal costs*



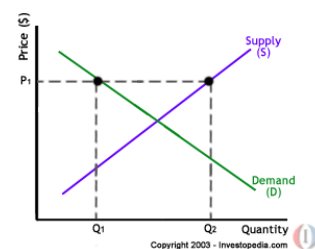
Demand and Supply

- *Equilibrium* = the quantity supplied equals the quantity demanded at a given price (price expected by consumers = price required by suppliers)
- Graphically represented by the intersection point of the demand and supply curve
- Increase in Demand
 - Equilibrium price increases
 - Equilibrium quantity increases
- Increase in Supply
 - Equilibrium price decreases
 - Equilibrium quantity increases
- See below for various kinds of *disequilibrium*



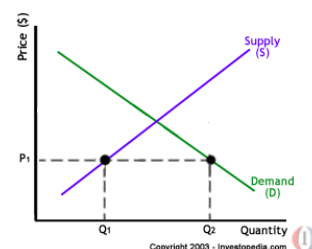
Price Floor

- Defined as “a legal minimum price below which the product cannot be sold” (i.e. minimum wage in labor market)
- Price above equilibrium price = permanent surplus (quantity supplied > quantity demanded)
- Downsides to installation of price floors
 - Inefficient allocation of sales among sellers (those who would be willing to sell the good at the lowest price are not always those who manage to sell it)
 - Over-allocation of resources to the production of good (inefficiently high quality)
 - Encourages illegal economic activities, i.e. black labor



Price Ceiling

- Defined as “a legal maximum price above which the product cannot be sold” (i.e. rental apartments in housing market)
- Price below equilibrium price = permanent shortage (quantity demanded > quantity supplied)
- Downsides to installation of price floors
 - Inefficient allocation of sales among buyers (those who would be willing to buy the good at the highest price are not always those who manage to buy it)
 - Under-allocation of resources to the production of good (inefficiently low quality)
 - Encourages illegal economic activities, i.e. off-the-books rent pay



Elasticity

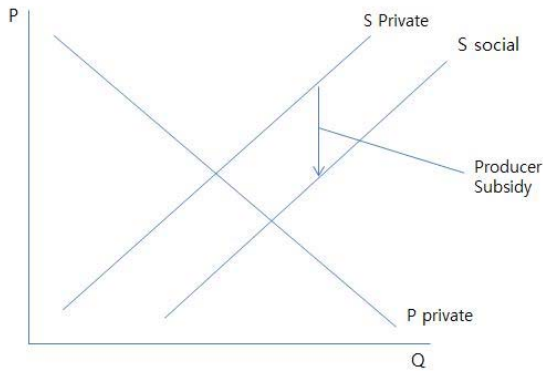
- Elasticity: measures the sensitivity of a choice to a change in an external factor
- Price Elasticity of Demand: $E_d = (\% \text{ change in quantity demanded of good X}) / (\% \text{ change in the price of good X})$
- The greater the ratio, the more sensitive consumers are to a change in the price of good X
 - A) $E_d > 1$ (price elastic)
 - B) $E_d < 1$ (price inelastic)
 - C) $E_d = 1$ (unit elastic)
- In general, the more vertical a good's demand curve, the more inelastic the demand for that good
- Determinants of Elasticity
 - A) Number of good substitutes
 - B) Proportion of income
 - C) Time
- Income Elasticity of Demand: $E_I = (\% \text{ change in } Q_d \text{ good X}) / (\% \text{ change in Income})$
- If $E_I > 1$, the good is normal and income elastic (a luxury)
- If $1 > E_I > 0$, the good is normal but income inelastic (a necessity)
- If $E_I < 0$, the good is inferior
- Cross-Price Elasticity of Demand
 - A) $E_{x,y} = (\% \text{ Change in } Q_d \text{ good X}) / (\% \text{ change in Price good Y})$
 - B) A Cross-price elasticity of demand less than zero identifies complementary goods
 - C) A Cross-price elasticity of demand greater than zero identifies substitute goods
- Price Elasticity of Supply: measures the sensitivity of quantity supplied for good X when the price of good X changes
 - A) Price elasticity of supply formula: $E_s = (\% \text{ change in } Q_s) / (\% \text{ change in Price})$
 - B) The Law of Supply insures that E_s is positive

Public Goods

- Market Failure: failure of a market to provide a good/service or to allocate goods/services in a socially optimal manner
- Public goods: goods that are both nonrival and nonexcludable

A) One person's consumption doesn't prevent another from consuming the good

- Positive Externality: Exists when the production of a good creates utility (the spillover benefits) for third parties not directly involved in the consumption or production of the good



- Negative externality: exists when the production of a good imposes disutility (the spillover costs) up on third parties not directly involved in the consumption or production of the good

