

Chapter 4

October-29-11
4:21 PM

THE INVISIBLE HAND

- **Invisible Hand** - a phrase used by Adam Smith to describe how, by pursuing their own self-interests, people in a market system are "led by an invisible hand" to promote the well-being of the community
- Government interference in markets can have counterproductive consequences - especially if markets are competitive to begin with

DEMAND AND QUANTITY DEMANDED

- People commonly think of consumer demands as fixed amounts
- The quantity demanded of any product normally depends on its price - also depends on a number of other determinants including population size, consumer incomes, tastes, and prices of other products
- **Quantity demanded** - the number of units of a good that consumers are willing and can afford to buy over a specified period of time
- Prices play central role in market economy - how quantity demanded depends on price
 - If price of milk is very high, its "market potential" may be very small. People will find ways to get along with less milk, maybe by switching to juice or soda
 - If price of milk declines, people will tend to drink more milk
- There is no one demand figure of milk or for computers or for engineers - rather there is a different quantity demanded at each possible price, all other influences being held constant

The Demand Schedule

- **Demand schedule** - a table showing how the quantity demanded of some product during a specified period of time changes as the price of that product changes, holding constant all other determinants of quantity demanded
- 'Law' of demand - quantity demanded will decline as price rises and vice versa

The Demand Curve

- **Demand curve** - a graphical depiction of a demand schedule. It shows how the quantity demanded of some product will change as the price of that product changes during a specified period of time, holding constant all other determinants of quantity demanded
- Because quantity demanded declines as price increases, demand curve has a negative slope

Shifts of the Demand Curve

- **Shift in a demand curve** - occurs when any relevant variable other than price changes. If consumers want to buy more at any and all give prices than they wanted previously, the demand curve shifts to the right (outward). If they desire less, the demand curve shifts to the left (inward)
- A change in the price of a good produces movement **along** a fixed demand curve. By contrast, a change in any other variable that influences quantity demanded produces a shift of the **entire** demand curve
- Consumer incomes
 - Increases in income shift demand curves outward to the right
- Population
 - Larger population, wants more - shifts to right
- Consumer preferences
 - If consumer preferences shift in favour of a particular item, shift to the right
- Prices and availability of related goods
 - Increases in the prices of goods that are substitutes for the good in question move the demand curve to the right
 - Increases in the prices of goods that are normally used together with good in question shift demand curve to the left

SUPPLY AND QUANTITY SUPPLIED

- **Quantity supplied** - the number of units that sellers want to sell over a specified period of time
- As the price of any commodity rises, the quantity supplied rises. As price falls, quantity supplied falls - positive relationship b/w price and quantity supplied

The Supply Schedule and the Supply Curve

- **Supply schedule** - a table showing how the quantity supplied of some product changes as the price of that product changes over a specified period of time
- **Supply curve** - a graphical depiction of a supply schedule. It shows how the quantity supplied of some product will change as the price of that product changes - positive slope

Shifts of the Supply Curve

- A change in the price of a good causes movement **along** a fixed supply curve
- Price is not the only influence on quantity supplied however.
- If any of these other influences change, the entire supply curve shifts
 - Size of the industry
 - If more farmers enter milk industry, quantity supplied at any given price will increase
 - Quantity of milk supplied will be greater at any given price - supply curve will move farther to the right
 - Technological progress
 - Technological progress that reduces costs will shift supply curve outward to the right
 - Prices of inputs
 - Increases in the prices of inputs that supplies must buy will shift supply curve inward to the left
 - Prices of related outputs
 - A change in the price of one good produced by a multiproduct industry may be expected to shift the supply curves of other goods produced by that industry

SUPPLY AND DEMAND EQUILIBRIUM

- To analyze how unfettered market determines price, we must compare desires of consumers (demand) with desires of producers (supply) to see if they're consistent
- **Supply-demand diagrams** - graphs the supply and demand curves together - also determines equilibrium price and quantity
 - Demand curve has negative slope
 - Supply curve has positive slope
- **Shortage** - an excess quantity demanded over quantity supplied. When there is a shortage, buyers can't purchase quantities they desire at the current price

- Price will be driven up by unsatisfied demand
- **Surplus** - an excess of quantity supplied over quantity demanded. Sellers can't sell the quantities they desire to supply at the current price
- **Equilibrium** - a situation in which there are no inherent forces that produce change
- A price below equilibrium price can't persist in a free market because a shortage sets in motion forces that push price upward
- A price above equilibrium can't persist indefinitely
- NOTE:
 - Below equilibrium price - shortage
 - Above equilibrium price - surplus

The Law of Supply and Demand

- States that in free market, the forces of supply and demand generally push the price toward the level at which quantity supplied and quantity demanded are equal

EFFECTS OF DEMAND SHIFTS ON SUPPLY-DEMAND EQUILIBRIUM

- A rise in income will shift demand curve to the right - at any given price, consumers will buy more of the good than before
- This will move equilibrium point, changing both market price and quantity sold
- Any influence that makes demand curve shift outward to right, and doesn't affect supply curve, will raise equilibrium price and quantity

SUPPLY SHIFTS AND SUPPLY-DEMAND EQUILIBRIUM

- Shift in supply curve
 - Equilibrium price and quantity move in opposite directions (i.e. supply curve moves right - equilibrium price decrease, quantity increase)

Application: Who Really Pays That Tax?

- Explanation from demand side of supply-demand mechanism
 - Negative slope of demand curve means that when prices rise, at least some consumers will reduce the quantity of gas they demand by reducing car usage
 - Others will replace old cars with ones that provide reduced fuel consumption
 - That will force sellers to give up part of the price increase
 - In other words, firms must absorb the part of the tax that consumers are unwilling to pay
 - NOTE: equilibrium quantity has fallen - so both consumers and suppliers lose out in some sense
- Supply-demand mechanism ensures that tax will be shared by both parties

BATTLING THE INVISIBLE HAND: THE MARKET FIGHTS BACK

- Penalties were imposed on anyone offering commodities at prices above or below those established by authorities
- **Price ceiling** - a maximum that the price charged for a commodity cannot legally exceed
- Consequences of price ceilings
 - A persistent shortage develops because quantity demanded exceeds quantity supplied
 - An illegal market arises to supply the commodity
 - The price charged on illegal markets are higher than those that would prevail in free markets
 - A substantial portion of the price falls into the hand of the illegal supplier instead of going to those who produced the good or performed the service
 - Investment in the industry dries up

Case Study: Rent Controls in New York City

- 80% of economists agreed that a ceiling on rents reduces the quantity and quality of housing available
- Rent control reduces quantity supplied from 3 million to 2.5 million apartments
- Property owners discouraged by low rent convert apartment building to offices and such
- Some apartments are inadequately maintained
- Some landlords have abandoned buildings
- Virtually every price ceiling or floor creates a class of people that benefits from the regulations - use political influence to protect their gains by preserving status quo

Restraining the Market Mechanism: Price Floor

- **Price floor** - a legal minimum below which the price charged for a commodity isn't permitted to fall
- Consequences of price floors
 - A surplus develops as sellers can't find enough buyers
 - Where goods, rather than services, are involved the surplus creates a problem of disposal
 - To get around the regulations, sellers may offer discounts in disguised - and often unwanted - forms
 - Regulations that keep prices artificially high encourage overinvestment in the industry

Case Study: Farm Price Supports

- One consequence of price supports has been creation of unsellable surpluses - more output of crops such as grains than consumers were willing to buy at inflated prices yielded by supports
- If price supports are to be effective in keeping prices above equilibrium level, then someone must be prepared to purchase the surpluses
- Buyer is usually government, which makes its purchases at expense of taxpayers who are forced to pay twice
- Possibility is to impose quotas
- **Quotas** - maximum amount that a producer is allowed to produce or a farmer is allowed to farm

