Module 2

Demand, Supply and Consumer Choice

This module introduces you to:

- **Demand.**
- **Supply.**
- **Market Equilibrium.**
- **Shifting Supply and Demand.**

Supply and demand are the forces that make market economies work.

- ## What is Demand?

  - **If you demand something, then you**

    1. Want it,

    2. Can afford it, and

    3. Have made a definite plan to buy it.

  - **SO**
  - **Demand is the different quantities of goods that consumers are willing and able to buy at different prices.**
  - **What is the Law of Demand?**
  - **The law of demand states There is an INVERSE relationship between price and quantity demanded.**
  - **Other things remaining the same, the higher the price of a good, the smaller is the quantity demanded; and …the lower the price of a good, the larger is the quantity demanded.**

- **Why does the Law of Demand occur?**

The law of demand is the result of three separate behavior patterns that overlap:

1. **The Substitution effect**
2. **The Income effect**
3. **The Law of Diminishing Marginal Utility**

- ## The Demand Curve

The term demand refers to the entire relationship between the price of the good and quantity demanded of the good.

A demand curve is downward sloping showing the inverse relationship between price (on the y-axis) and quantity demanded (on the x-axis)

when all other influences on consumers' planned purchases remain the same. All outside factors, such as income, are held constant. (This is called ceteris paribus.

So demand curve shows:

- **How much buyers of the product want to buy at each possible price**
- **Holding fixed all other factors that affect demand**

- **Shifts in Demand (CHANGES IN DEMAND)**

- ***Ceteris paribus*-"all other things held constant."**
- **When the *ceteris paribus* assumption is dropped, movement no longer occurs along the demand curve. Rather, the entire demand curve shifts.**
- **A shift means that at the same prices, more people are willing and able to purchase that good.**

This is a change in demand, not a change in quantity demand.

Changes in price DON'T shift the curve!

Change in price of the product causes a movement along the demand curve (A change in the quantity demanded)

Change in another factor causes the entire demand curve to shift (A change in demand)

- ## <u>What Causes a Shift in Demand?</u>

  - **The prices of related goods**
  - **Expected future prices**
  - **Income**
  - **Expected future income and credit**
  - **Population**
  - **Preferences**

<u>Changes in PRICE don't shift the curve. It only causes movement along the curve.</u>

<u>The prices of related goods</u>

The demand curve for one good can be affected by a change in the price of ANOTHER related good.

1. **Substitutes are goods used in place of one another.**

If the price of one increases, the demand for the other will increase (or vice versa)

Ex: If price of Pepsi falls, demand for coke will…

2. **Complements A substitute is a good that can be used in place of another good.**

If the price of one increase, the demand for the other will fall. (or vice versa)

Ex: If price of skis falls, demand for ski boots will...

3. **Expected Future Prices**

If the price of a good is expected to rise in the future, current demand for the good increases and the demand curve shifts rightward.

4. **Population**

The larger the population, the greater is the demand for all goods.

5. **Preferences**

People with the same income have different demands if they have different preferences.

6. **Expected Future Income and Credit**

When income is expected to increase in the future or when credit is easy to obtain, the demand might increase now.

The incomes of consumer change the demand, but how depends on the type of good.

1. **Normal Goods**
    - **As income increases, demand increases**
    - **As income falls, demand falls**

Ex: Luxury cars, Sea Food, jewelry, homes

2. . **Inferior Goods**
    - **As income increases, demand falls**
    - **As income falls, demand increases**

Ex: Top Romen, used cars, used cloths

- ## What is supply?

Supply is the different quantities of a good that sellers are willing and able to sell (produce) at different prices. If a firm supplies a good or service, then the firm

1. Has the resources and the technology to produce it,

2. Can profit from producing it, and

3. Has made a definite plan to produce and sell it.

Resources **and** ***technology*** **determine what it is possible to produce. Supply reflects a decision about which technologically feasible items to produce.**

- ## What is the Law of Supply?

There is a DIRECT (or positive) relationship between price and quantity supplied.

- **As price increases, the quantity producers make increases**
- **As price falls, the quantity producers make falls.**

Why? Because, at higher prices profit seeking firms have an incentive to produce more.

- ## The Supply Curve

- **How much sellers of the product want to sell at each possible price**
- **Holding fixed all other factors that affect supply**
- **A Movement Along the Supply Curve**
  When the price of the good changes and other influences on sellers' plans remain the same, the quantity supplied changes and there is a movement along the supply curve.
- **Change in price of the product causes a** ***movement along*** **the supply curve**

(A change in the quantity supplied)

- **Change in another factor causes the entire supply curve to** ***shift*** **(A change in supply)**

- ## What Causes a Shift in Supply?

- **The prices of factors of production**
- **The prices of related goods produced**
- **Expected future prices**

- **The number of suppliers**
- **Technology**
- **State of nature**

1. **Prices of Factors of Production**

If the price of a factor of production used to produce a good rises, the minimum price that a supplier is willing to accept for producing each quantity of that good rises.

So a rise in the price of a factor of production decreases supply and shifts the supply curve leftward.

2. **Prices of Related Goods Produced**

A substitute in production for a good is another good that can be produced using the same resources. The supply of a good increases if the price of a substitute in production falls.

Goods are complements in production if they must be produced together. The supply of a good increases if the price of a complement in production rises.

3. **Expected Future Prices**

If the price of a good is expected to rise in the future, supply of the good today decreases and the supply curve shifts leftward.

4. **The Number of Suppliers**

The larger the number of suppliers of a good, the greater is the supply of the good. An increase in the number of suppliers shifts the supply curve right.

5. **Technology**

Advances in technology create new products and lower the cost of producing existing products.

So advances in technology increase supply and shift the supply curve rightward.

6. **The State of Nature**

The state of nature includes all the natural forces that influence production—for example, the weather.

A natural disaster decreases supply and shifts the supply curve leftward toward.

- ## Market Equilibrium

  - **Equilibrium is a situation in which opposing forces balance each other.**

  Equilibrium refers to a situation in which the price has reached the level where quantity supplied equals quantity demanded. (it occurs when the price balances the plans of buyers and sellers.)

  - **The equilibrium price is the price at which the quantity demanded equals the quantity supplied.**
  - **The equilibrium quantity is the quantity bought and sold at the equilibrium price.**
  - **Price regulates buying and selling plans.**
  - **Price adjusts when plans don't match.**

- ## Price Adjustments

  - **At prices above the equilibrium price, a surplus forces the price down.**
  - **At prices below the equilibrium price, a shortage forces the price up.**
  - **At the equilibrium price, buyers' plans and sellers' plans agree and the price doesn't change until some event changes either demand or supply.**

Shifting Supply and Demand

Changes in Market Equilibrium

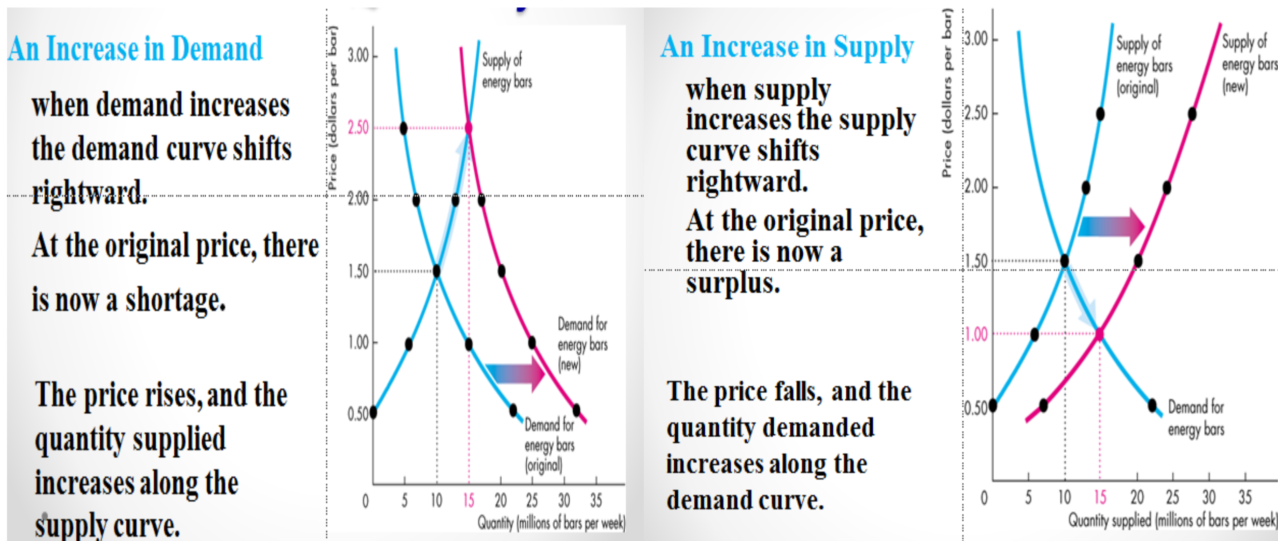
- **Four possible ways either supply or demand curve can shift:**
  - **Demand can increase or decrease**
  - **Supply can increase or decrease**
- **Effect on market equilibrium:**

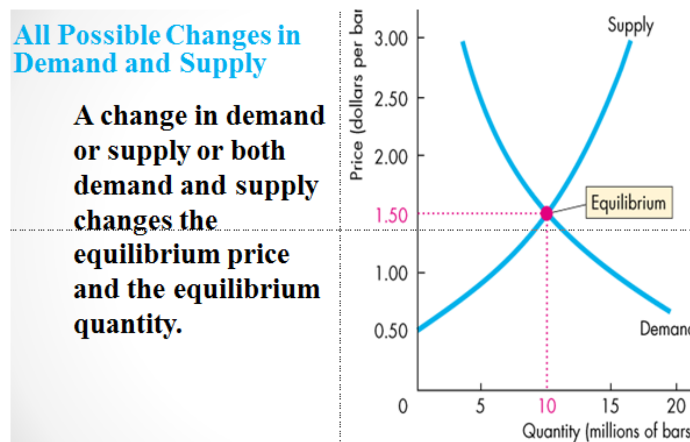
- If demand curve shifts, price and quantity change in the same direction as the curve
- If supply curve shifts, quantity changes in the same direction as the curve but price changes in the opposite direction

Three Steps to Analyzing Changes in Equilibrium

- **Decide whether the event shifts the supply or demand curve (or both).**
- **Decide whether the curve(s) shift(s) to the left or to the right.**
- **Use the supply-and-demand diagram to see how the shift affects equilibrium price and quantity.**

Predicting Changes in Price and Quantity





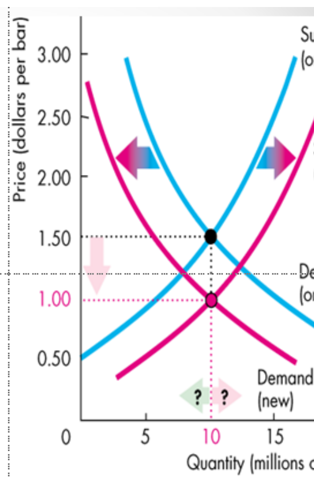
Changes in Market Equilibrium

- **Sometimes supply and demand will both shift**
- **Ultimate effect on equilibrium is combination of the separate effects of changes in demand and supply**
- **Will be able to determine the necessary direction of price or quantity movement, but not both**

Decrease in Demand and Increase in Supply

A decrease in demand and an increase in supply lowers the equilibrium price.

The change in equilibrium quantity is uncertain because the decrease in demand decreases the equilibrium quantity and the increase in supply increases it.

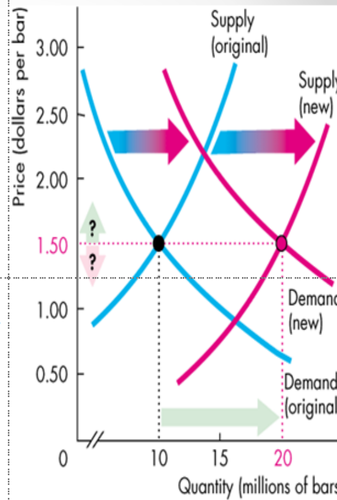


(f) Decrease in demand and increase in supply

Increase in Both Demand and Supply

An increase in demand and an increase in supply increase the equilibrium quantity.

The change in equilibrium price is uncertain because the increase in demand raises the equilibrium price and the increase in supply lowers it.

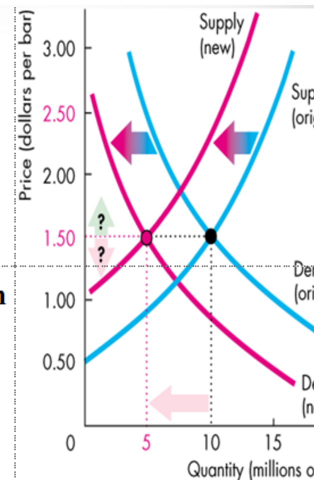


(e) Increase in both demand and supply

Decrease in Both Demand and Supply

A decrease in both demand and supply decreases the equilibrium quantity.

The change in equilibrium price is uncertain because the decrease in demand lowers the equilibrium price and the decrease in supply raises it.



(i) Decrease in both demand and supply

<u>Tips:</u>

- **The demand curve shows how the quantity of a good depends upon the price.**
- **According to the law of demand, as the price of a good falls, the quantity demanded rises. Therefore, the demand curve slopes downward.**
- **In addition to price, other determinants of how much consumers want to buy include income, the prices of complements and substitutes, tastes, expectations, and the number of buyers.**
- **If one of these factors changes, the demand curve shifts.**
- **The supply curve shows how the quantity of a good supplied depends upon the price.**
- **According to the law of supply, as the price of a good rises, the quantity supplied rises. Therefore, the supply curve slopes upward.**
- **In addition to price, other determinants of how much producers want to sell include input prices, technology, expectations, and the number of sellers.**
- **If one of these factors changes, the supply curve shifts.**
- **Market equilibrium is determined by the intersection of the supply and demand curves.**
- **At the equilibrium price, the quantity demanded equals the quantity supplied.**
- **The behavior of buyers and sellers naturally drives markets toward their equilibrium.**
- **To analyze how any event influences a market, we use the supply-and-demand diagram to examine how the even affects the equilibrium price and quantity.**
- **In market economies, prices are the signals that guide economic decisions and thereby allocate resources.**