

Supply and Demand

Economics 102: Introductory Microeconomics

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1.1 Goals of today's class

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- Learn what demand is and what influences demand.
- Learn what supply is and what influences supply.
- Learn how prices and quantities are determined by supply and demand.
- Use these skills to make predictions about changes in price and quantity.

2 Determination of Price and Quantity

2.1 Demand

Demand

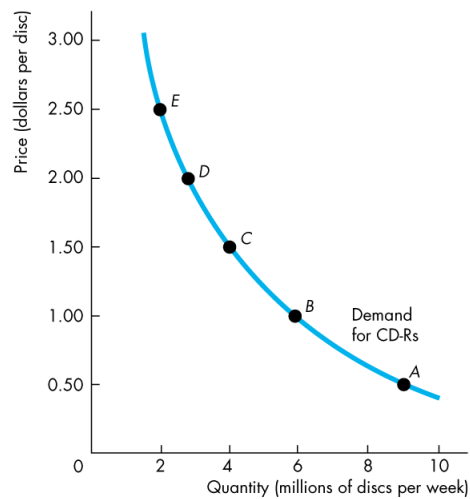
- The **quantity demanded** of a good or service is the amount consumers are willing and able to buy in a given time period at a particular price.
- **Law of demand:** All other things remaining equal, the higher (lower) the price of the good, the smaller (higher) is the quantity demanded.
- **Demand schedule/curve:** a table or graph of different quantities demanded for different prices.
- According to the law of demand, the demand curve should be ----- sloping.
- **Change in quantity demanded:** when there is a change in price causing a movement from one point on the demand curve to another point.

Demand

Demand Schedule

Point	Price	Q_D
A	0.5	9
B	1.0	6
C	1.5	4
D	2.0	3
E	2.5	2

Demand Curve



Income and Substitution effects

- The demand curve is downward sloping because of the income and substitution effect.
- **Substitution effect:** when the price of a good rises, people may buy substitute goods instead.
- **Income effect:** When the price of a good rises, the real purchasing power of your income decreases. When the real value of your income decreases, you buy less of everything.
- Close to correct. More on the income effect later.

2.2 Supply

Supply

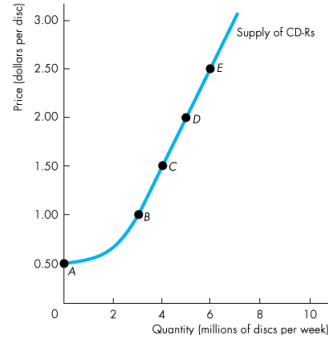
- The **quantity supplied** of a good or service is the amount producers are willing and able to produce and sell in a given time period at a given price.

- **Law of supply:** All other things remaining the same, the higher (lower) is the price of a good, the higher (lower) is the quantity supplied.
- **Supply schedule or curve:** a table or graph of different quantities supplied for different prices.
- According to the law of supply, the demand curve should be _____ sloping.
- **Change in quantity supplied:** when there is a change in price causing a movement from one point on the supply curve to another point.

Supply

	Point	Price	Q_D
Supply Schedule	A	0.5	0
	B	1.0	3
	C	1.5	4
	D	2.0	5
	E	2.5	6

Supply Curve



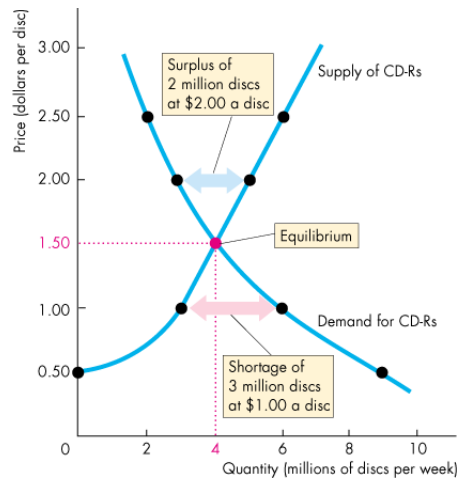
2.3 Equilibrium

Equilibrium

- The **equilibrium price** is the price where the quantity supplied is equal to the quantity demanded.
- The **equilibrium quantity** is the corresponding quantity.
- This is the price and quantity that will prevail in an unregulated market.

Equilibrium

- **Surplus:** away from equilibrium, when $Q_S > Q_D$
- **Shortage:** away from equilibrium, when $Q_D > Q_S$.

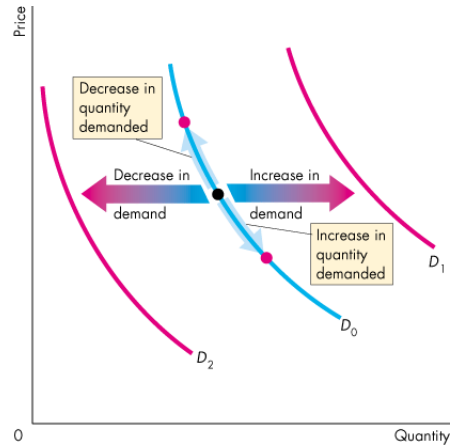


3 Determinants of supply and demand

Determinants of demand

- When something *besides the price of the good* effects demand, we say there is a *change or shift in demand*.
- Something that increases (decreases) demand shifts the demand curve to the right (left).
- Determinants of demand:
 - Changes in prices of related goods.
 - Changes in income.
 - Changes in expected future income.
 - Expectations of future price.
 - Changes in population.
 - Changes in tastes and preferences.

Shifts in demand



3.1 Substitutes and complements

Changes in price of related goods

- **Substitutes:** a substitute good is a good that can be consumed instead of another good.
 - Examples: beef and pork, wine and beer, hamburgers and hot dogs.
- If the price of a substitute for beer increases, this will the demand for beer.
- **Complements:** a complement good is a good that is often consumed together with another good.
 - Examples: Peanut butter and jelly, hamburgers and buns.
- If the price of a complement for buns increases, this will the demand for buns.

3.2 Normal and inferior goods

Changes in income

- **Normal good:** a good whose demand increases when consumers' incomes increase.
- **Inferior good:** a good whose demand decreases when consumers' incomes increase.
- Can you think of examples of an inferior good?

3.3 Expectations

Expectations

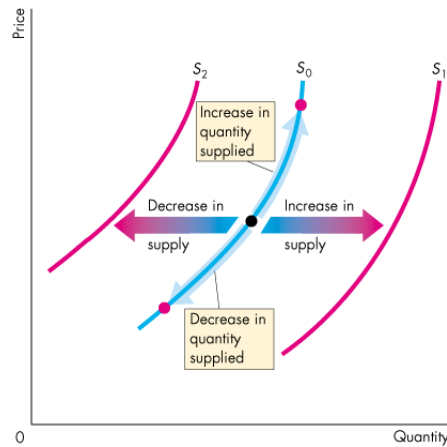
- If people expect the price of the good to increase, this will _____ today's demand for the good.
- If a good is a normal good and people expect to have higher incomes in the future, this will _____ the demand for the good.
- If a good is an inferior good and people expect to have higher incomes in the future, this will _____ the demand for the good.

3.4 Determinants of supply

Determinants of supply

- When something *besides the price of the good* effects supply, we say there is a *change or shift in supply*.
- Something that increases (decreases) demand shifts the supply curve to the right (left).
- Determinants of supply:
 - Changes in the prices of factors of production.
 - * When costs increase this _____ supply.
 - Changes in the price of related goods.
 - Expected future prices.
 - * If the price is expected to be higher in the future, producers will _____ supply today.
 - Number of suppliers.
 - Changes in technology.

Shifts in supply



Substitutes and complements in production

- Substitute in production: something that can be produced instead of another good.
 - Example: memory cards and computer processors.
- Complement in production: something that is often produced along with another good.
 - Example: Pork chops and bratwurst.

4 Predicting changes in equilibrium

Predicting changes in equilibrium

- Suppose the price of CD burners decreases.
- How will this effect the demand and/or the price of CD-Rs.

Predicting changes in equilibrium

- Price of a complement decreases → shift demand to the right.
- Equilibrium price ----- and equilibrium quantity -----
- Is this what really happened to the price and quantity of CD-Rs in real life?

