

Supply and Demand

ECO 120: Global Macroeconomics

Goals

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- Specific Goals
 - 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.
- Learning Objectives
 - LO 2: Use the supply and demand model to predict price and quantity outcomes for markets for products and services.

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Relevant Reading

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- Demand: Module 4
- Supply and Equilibrium: Module 5
- Changes in Equilibrium: Module 6

Demand

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- 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.

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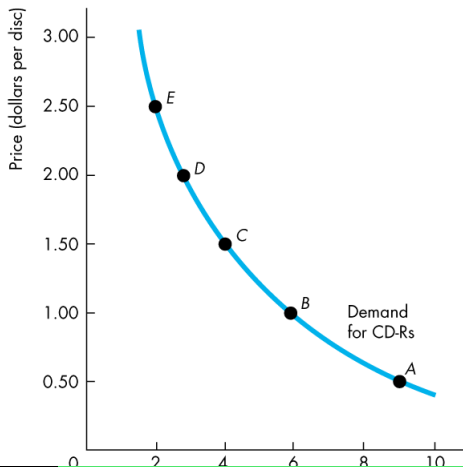
Demand

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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

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- 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.

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Supply

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- 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.

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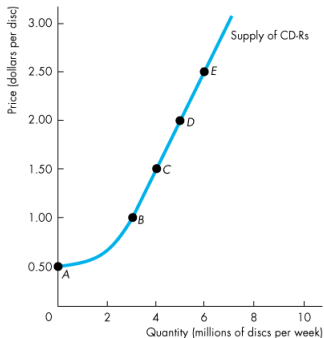
Supply

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Supply Schedule

Point	Price	Q_D
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B	1.0	3
C	1.5	4
D	2.0	5
E	2.5	6

Supply Curve



Equilibrium

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- 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.

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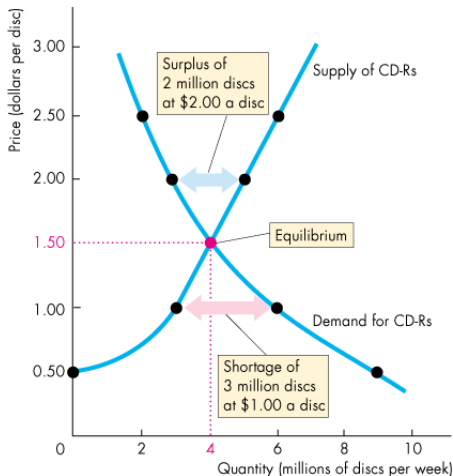
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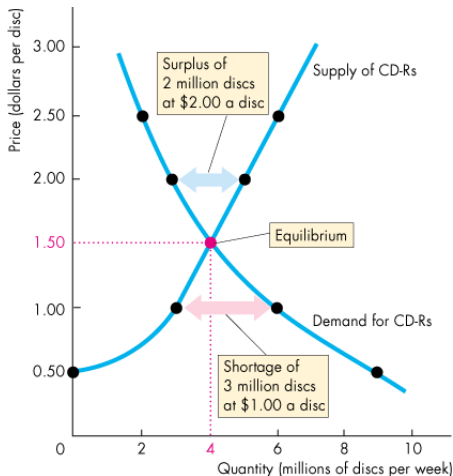
Equilibrium

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



Equilibrium

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



Determinants of demand

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- 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.

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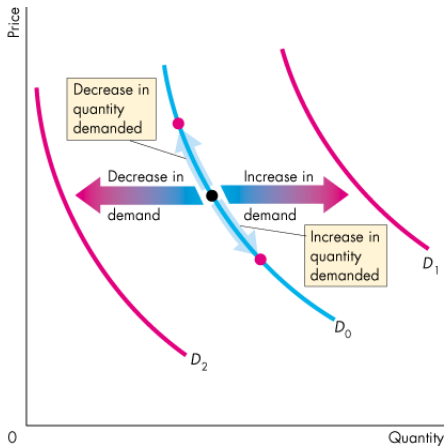
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Shifts in demand

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Changes in price of related goods

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- **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.

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Changes in income

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- **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?

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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.

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Determinants of supply

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- Something that increases (decreases) demand shifts the supply curve to the right (left).
- Determinants of supply:
 - Changes in the prices of factors of production.
 - If the price of a factor increases, the supply curve shifts to the left.
 - If the price of a factor decreases, the supply curve shifts to the right.
 - Changes in the price of related goods.
 - Expected future prices.
 - If the price is expected to be higher in the future, the supply curve shifts to the left.
 - If the price is expected to be lower in the future, the supply curve shifts to the right.
 - Number of suppliers.
 - Changes in technology.

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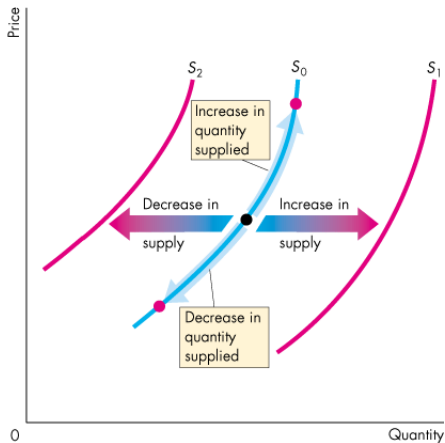
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Shifts in supply

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Next Time...

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- Supply and demand in class exercises.
- Apply our knowledge of supply and demand to look at behavior of exchange rates, currencies, imports, and exports (Module 42).