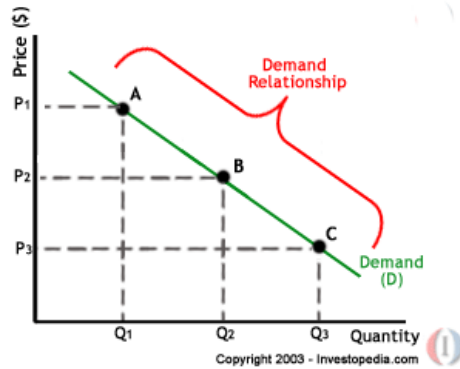


## LAW OF DEMAND

If Price increases, then Quantity Demanded decreases.

If Price decreases, then Quantity Demanded increases.



## LAW OF SUPPLY

If Price increases, then Quantity Supplied increases.

If Price decreases, then Quantity Supplied decreases.

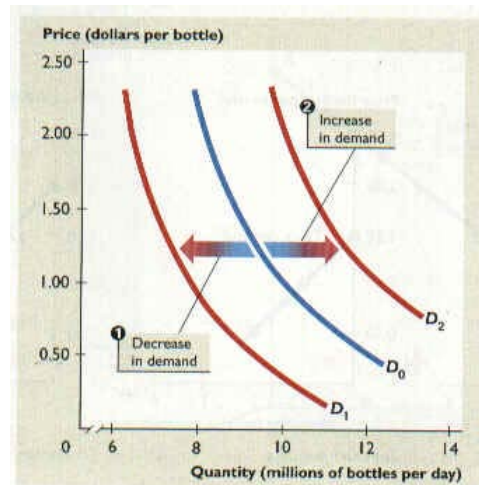


## DETERMINANTS OF DEMAND

- Consumer Income
- Consumer Tastes and Preference
- Price of Substitute Good
- Price of Complementary Good
- Number of Buyers
- Consumer Future Expectations

Changes in demand determinants will shift the Demand Curve.

EXAMPLE: If Consumer Income increases (people have more money), then Demand will increase (people have more money and willing to spend more/buy more products).

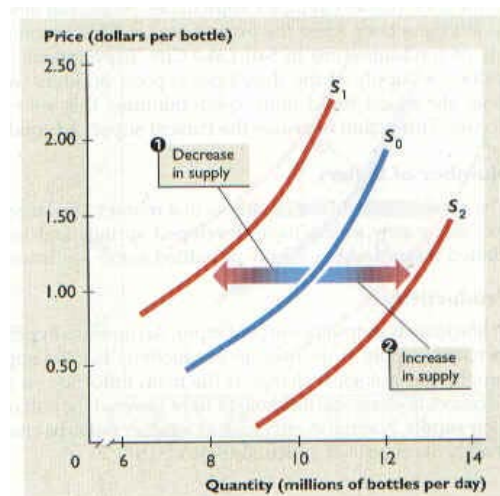


## DETERMINANTS OF SUPPLY

- Input Costs
- Technology and Productivity
- Taxes and Subsidies
- Producer Future Expectations
- Number of Suppliers

Changes in supply determinants will shift the Supply Curve.

EXAMPLE: If Input Costs increase (it costs more to make a product), then Supply will decrease (producers have to spend more to make a product and have to cut back on production).



## **CHANGES IN DEMAND EXPLAINED**

*Consumer Income* is the money earned through employment, investment, or inheritance. A consumer's income could be affected by a change in wages, like getting a raise.

*Consumer Tastes and Preferences* can include style trends or news relating to products. Consumers may not buy chicken because of a news story on how salmonella has been found in chicken products all over the United States. Consumers may buy more red jeans because a famous celebrity wore them on a televised awards ceremony.

The *Price of a Substitute Good* means the consumer cost for a substitute good can affect the demand for the desired product. Coffee drinkers discovered tea is less expensive and contains the same amount of caffeine as coffee therefore the demand for coffee decreases.

The *Price of a Complementary Good* means the consumer cost for a good that is made with or is used with the desired product. Cereal lovers will cut back on buying cereal when the price of milk dramatically increases.

The *Number of Buyers* can usually be determined by the population. If an earthquake devastates an entire country and thousands are killed, then there are less consumers and decreased demand.

*Future Consumer Expectations* means buyers predict the price of a desired product will fluctuate. If buyers believe the price of jackets will increase by winter months they will increase the demand for jackets in order to purchase the jackets cheaper.

## **CHANGES IN SUPPLY EXPLAINED**

*Input Costs* are the costs producers (businesses, corporations, manufacturers) incur in the development of a product. Employee wages and the costs of raw materials are main examples. If a company gives raises to all of its workers, then it will cut back on making a product to offset the increased costs. A cereal company may increase supply of cereal if the price of grain decreases.

*Technology and Productivity* includes new developments in the production of a good or service through more efficient means. A company can print more books with a printing press rather than hiring numerous workers to write copies of a book.

*Taxes* are government-imposed costs for producers and *Subsidies* are government-based funds provided to producers. A coal processing plant is required to pay extra taxes for environmental regulations. A coal producer may receive subsidies if the producer agrees to implement environment-friendly techniques.

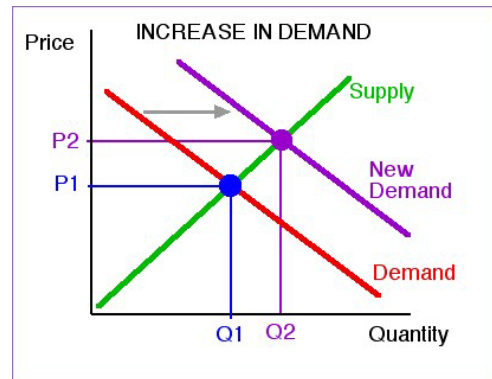
*Producer Future Expectations* means producers predict the costs of products. A jacket company believes their jackets will be valued more during winter therefore they withhold production of jackets until winter, decreasing the supply of jackets during summer.

*Price of Other Outputs* means producers may use the same resources to make a different product. If a company finds making soda rather than juice is less expensive, then they will produce more soda thereby decreasing the supply of juice.

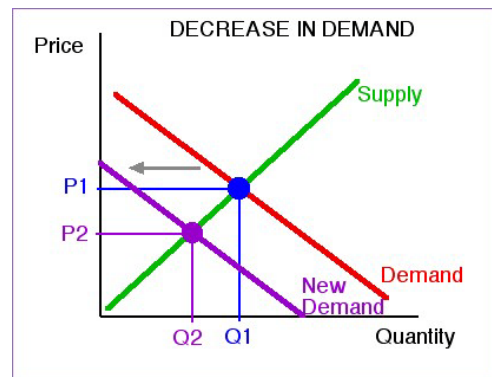
*Number of Suppliers* means the more/less suppliers, the more/less products. Pizza Hut and Dominoes made only so many pizzas, but with Papa Johns and Little Caesars more pizzas are available.

## GRAPHICAL EXAMPLES OF CHANGES IN DEMAND AND SUPPLY

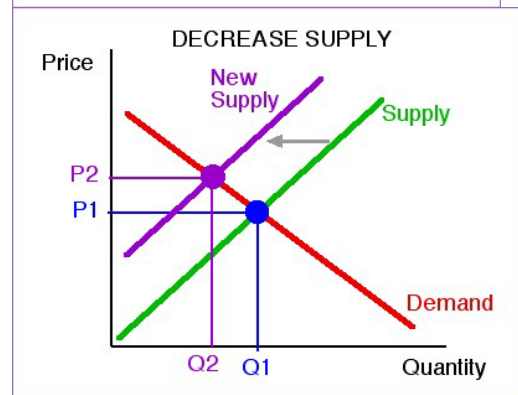
The average income of the United States increased by 20%.



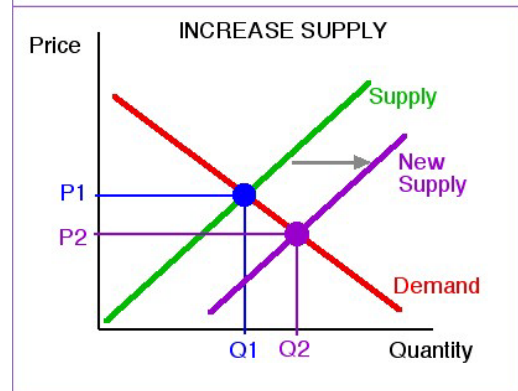
Mad cow disease has been discovered in all red meat produced in Iowa and Nebraska.



The government has imposed a 5% tax increase on computer companies.



A new shoe company has joined the market with NIKE, Reebok, Adidas, and New Balance.



## FORMULAS AND IDEAS TO KNOW

Price changes Quantity Demanded, NOT Demand. Price changes Quantity Supplied, NOT Supply.

If Demand increases, Price increases and Quantity increases.

$D \uparrow \rightarrow P \uparrow$  and  $Q \uparrow$

If Demand decreases, Price decreases and Quantity decreases.

$D \downarrow \rightarrow P \downarrow$  and  $Q \downarrow$

If Supply increases, Price decreases and Quantity increases.

$S \uparrow \rightarrow P \downarrow$  and  $Q \uparrow$

If Supply decreases, Price increases and Quantity decreases.

$S \downarrow \rightarrow P \uparrow$  and  $Q \downarrow$

If Demand increases and Supply increases, Price is indeterminate and Quantity increases.

$D \uparrow$  and  $S \uparrow \rightarrow P ?$  and  $Q \uparrow$

If Demand increases and Supply decreases, Price increases and Quantity is indeterminate.

$D \uparrow$  and  $S \downarrow \rightarrow P \uparrow$  and  $Q ?$

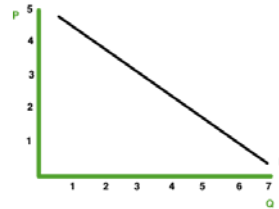
If Demand decreases and Supply increases, Price decreases and Quantity is indeterminate.

$D \downarrow$  and  $S \uparrow \rightarrow P \downarrow$  and  $Q ?$

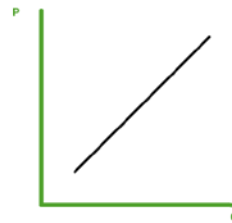
If Demand decreases and Supply decreases, Price is indeterminate and Quantity decreases.

$D \downarrow$  and  $S \downarrow \rightarrow P ?$  and  $Q \downarrow$

The Demand Curve on a graph is always down sloping.



The Supply Curve on a graph is always up sloping.



An increase in Demand will shift the Demand Curve to the right.

A decrease in Demand will shift the Demand Curve to the left.

An increase in Supply will shift the Supply Curve to the right.

A decrease in Supply will shift the Supply Curve to the left.