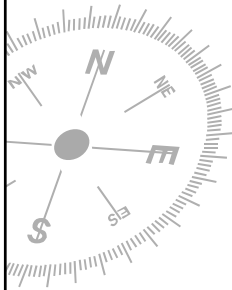


# Econ 101 – Section 5

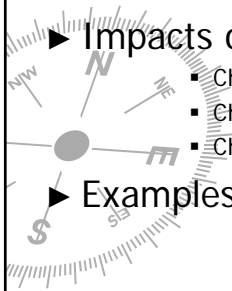
Lecture 5  
Equilibrium

January 27, 2004



## Lecture Outline

- ▶ Equilibrium
- ▶ Excess Demand
- ▶ Excess Supply
- ▶ How to find the equilibrium
- ▶ Impacts on equilibrium prices and quantities of
  - Change in Demand
  - Change in Supply
  - Change in supply and demand simultaneously
- ▶ Examples

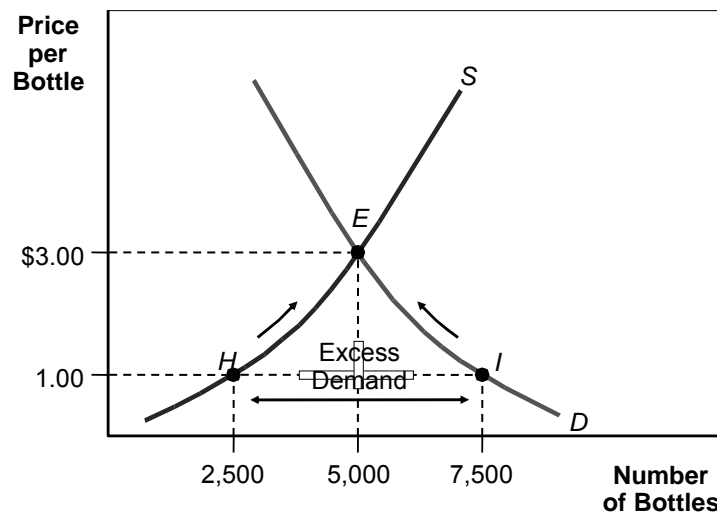


# Putting Supply and Demand Together

## *Equilibrium*

state of rest - a situation that, once achieved, will not change unless there is a change in something we have been assuming constant

# Putting Supply and Demand Together



## Putting Supply and Demand Together

### *Excess Demand*

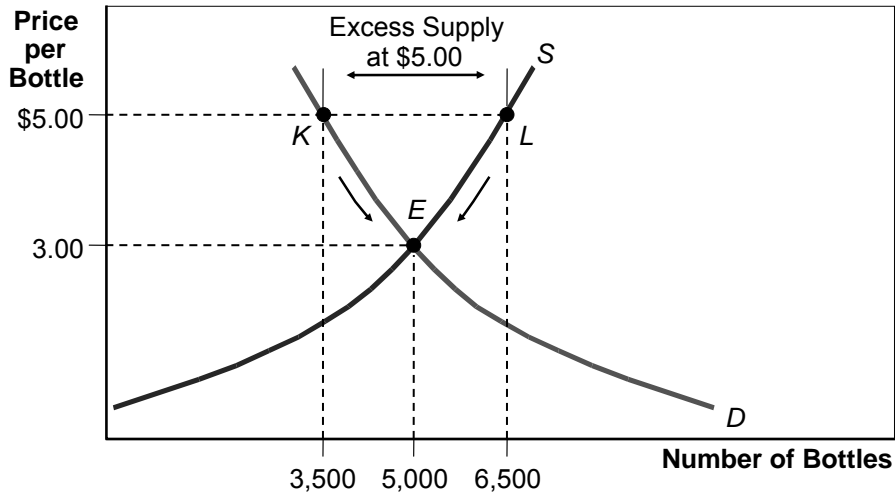
At a given price, the excess of quantity demanded over quantity supplied

## Putting Supply and Demand Together

### *Excess Supply*

At a given price, the excess of quantity supplied over quantity demanded

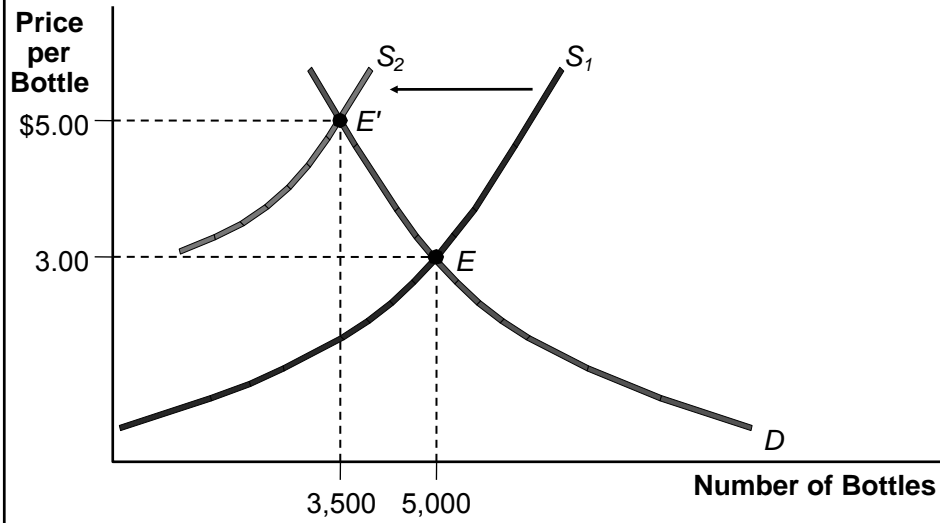
## Excess Supply and Price Adjustment



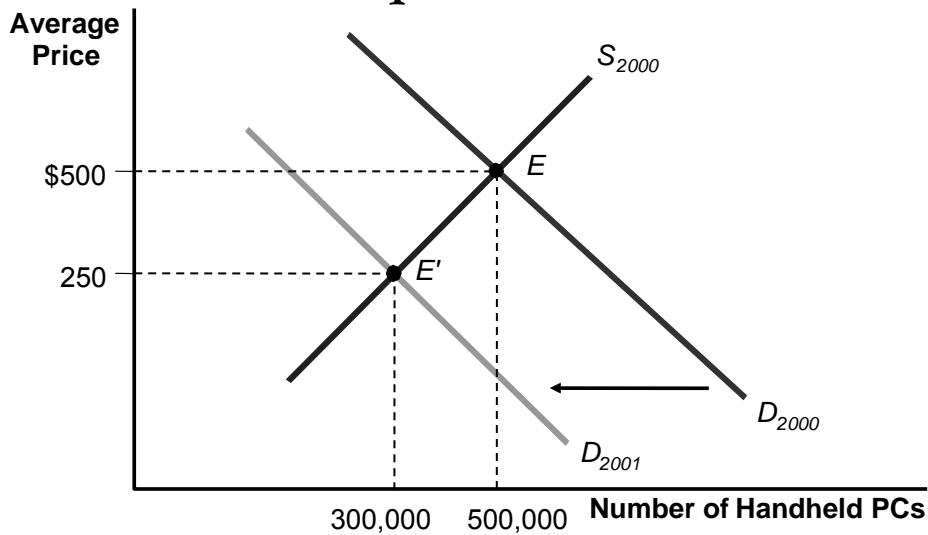
## Putting Supply and Demand Together

To find the equilibrium price and quantity in a competitive market, draw the supply and demand curves. The equilibrium is the point where the two curves intersect.

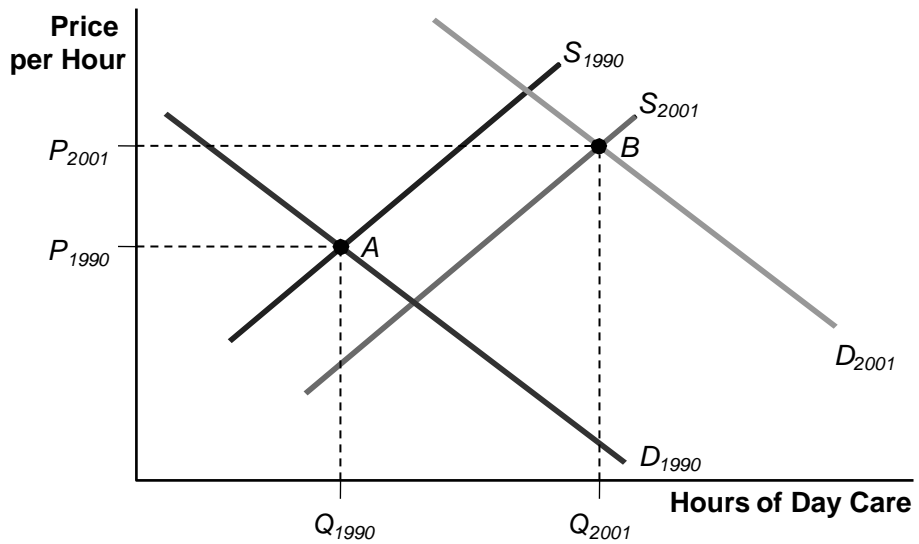
## A Shift of Supply and a New Equilibrium



## A Shift of Demand and a New Equilibrium



## Simultaneous Shifts of Supply and Demand



## Effect of Supply and Demand Shifts on Equilibrium Price and Quantity

	Increase in Demand (Rightward Shift)	No Change in Demand	Decrease in Demand (Leftward Shift)
Increase in Supply (Rightward Shift)	$P?Q\uparrow$	$P\downarrow Q\uparrow$	$P\downarrow Q?$
No Change in Supply	$P\uparrow Q\uparrow$	No change in $P$ or $Q$	$P\downarrow Q\downarrow$
Decrease in Supply (Leftward Shift)	$P\uparrow Q?$	$P\uparrow Q\downarrow$	$P?Q\downarrow$

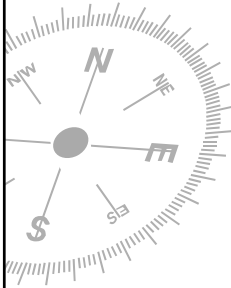
## Finding the Equilibrium mathematically

- ▶ Interested in finding the equilibrium price and quantity for Nalgene® bottles
- ▶ Supply curve is:
  - $Q_s = 2 + 1/2 * P$
- ▶ Demand curve is:
  - $Q_d = 12 - 1.5 * P$
- ▶ Now find the equilibrium price and quantity

## Steps to analyzing economic problems

- ▶ ***Key Step 1*** - Characterize the Market
- ▶ ***Key Step 2*** - Identify the Goals and Constraints
- ▶ ***Key Step 3*** - Find the Equilibrium
- ▶ ***Key Step 4*** - What Happens When Things Change

- ▶ An example of using this 4-step procedure
  - You are asked to examine the role of relaxing import restrictions for steel on the price of new cars

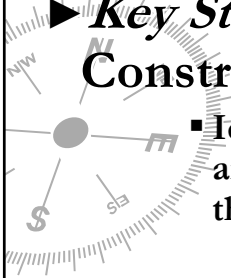


- ▶ ***Key Step 1 - Characterize the Market***

- Decide which market or markets best suit the problem being analyzed, and identify the buyers and sellers in the market

- ▶ ***Key Step 2 - Identify the Goals and Constraints***

- Identify the goals that the decision makers are trying to achieve, and the constraints they face in achieving those goals



► ***Key Step 3 - Find the Equilibrium***

- Describe the conditions necessary for equilibrium in the market and a method for determining that equilibrium

► ***Key Step 4 - What Happens When Things Change***

- Explore how events or government policies change the market equilibrium

