

The Economics
Department, UMR
Presents:

**Supply and Demand: Price
and Quantity
Determination in
Competitive Markets**



Starring

- ◆ Changes in Equilibrium

Featuring

- ◆ Increases in Demand, *c.p.*
- ◆ Increases in Supply, *c.p.*
- ◆ Decreases in Demand, *c.p.*
- ◆ Decreases in Supply, *c.p.*
- ◆ Simultaneous Changes

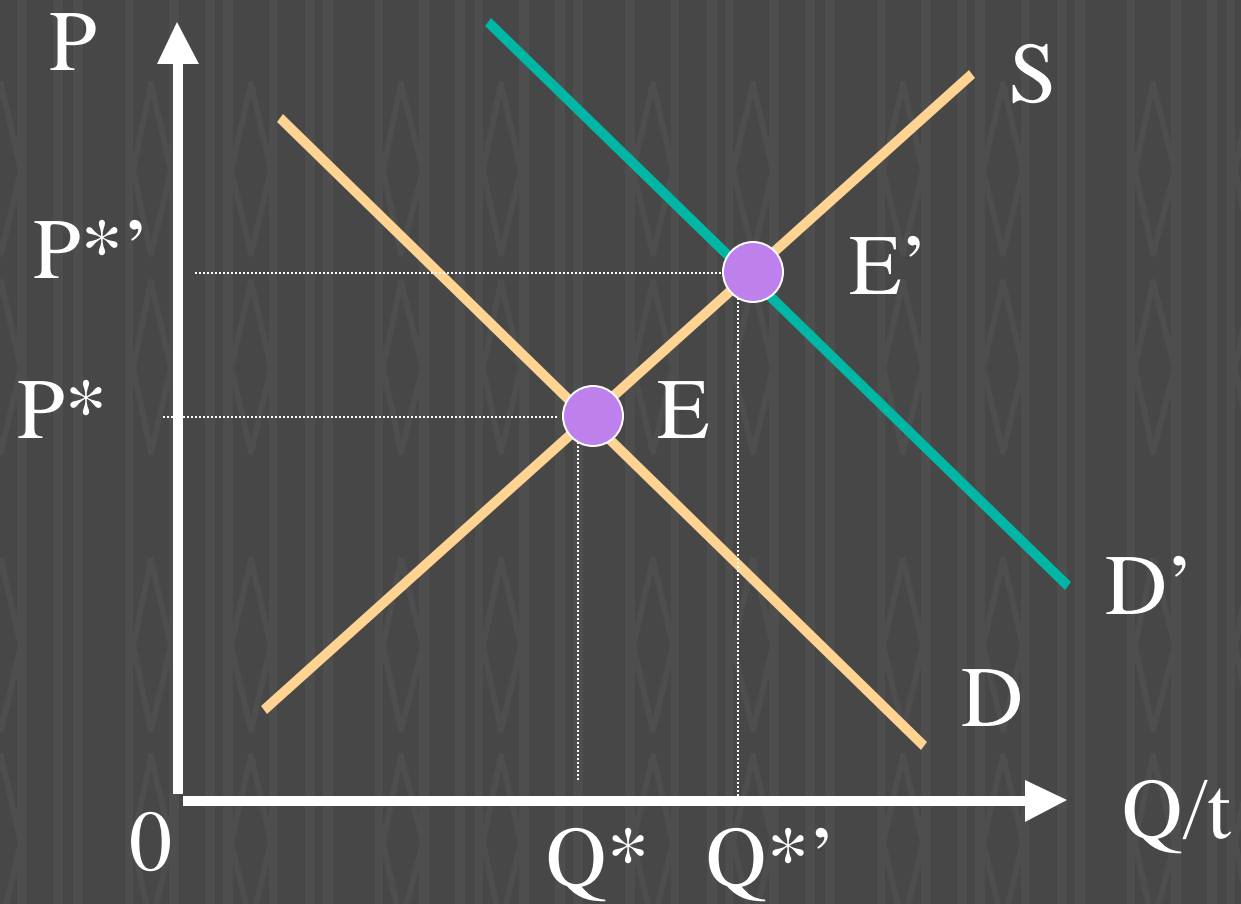
Changes in Equilibrium

- ◆ Remember that Supply and Demand are drawn under the *ceteris paribus* assumption.
- ◆ Any factors which cause Supply and/or Demand to change will affect equilibrium price and quantity.

Change in Demand

- ◆ Demand will change for any of the factors discussed previously.
- ◆ Remember **PINTE** (except for the price of the good itself)
- ◆ For instance, let's say the demand for CDs increased due to an increase in income

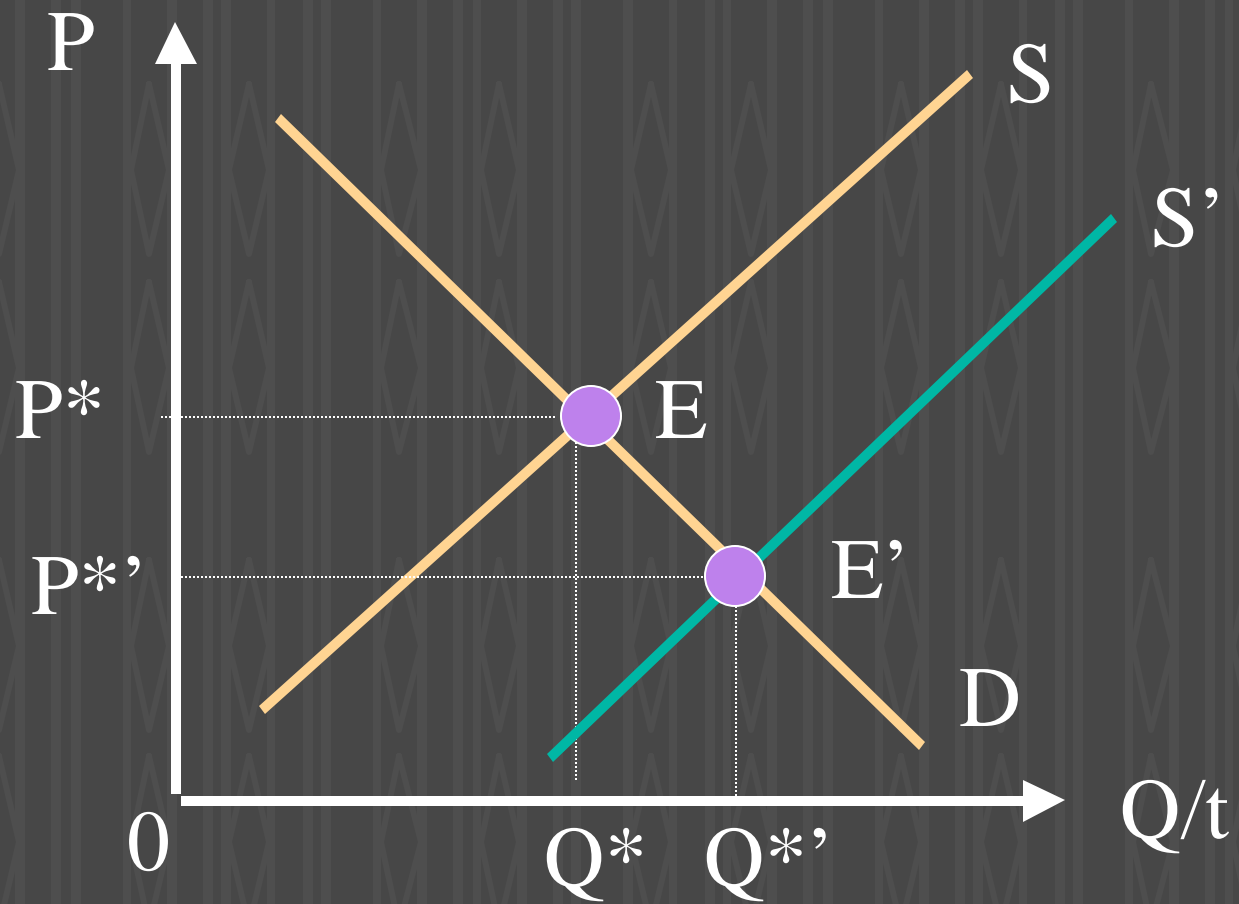
Increase in Demand



Change in Supply

- ◆ Supply will change for any of the factors discussed previously
- ◆ Remember **PENT** (except for the price of the good itself)
- ◆ For instance, let's say that the government lowers taxes on CDs

Increase in Supply



Changes in Demand and Supply

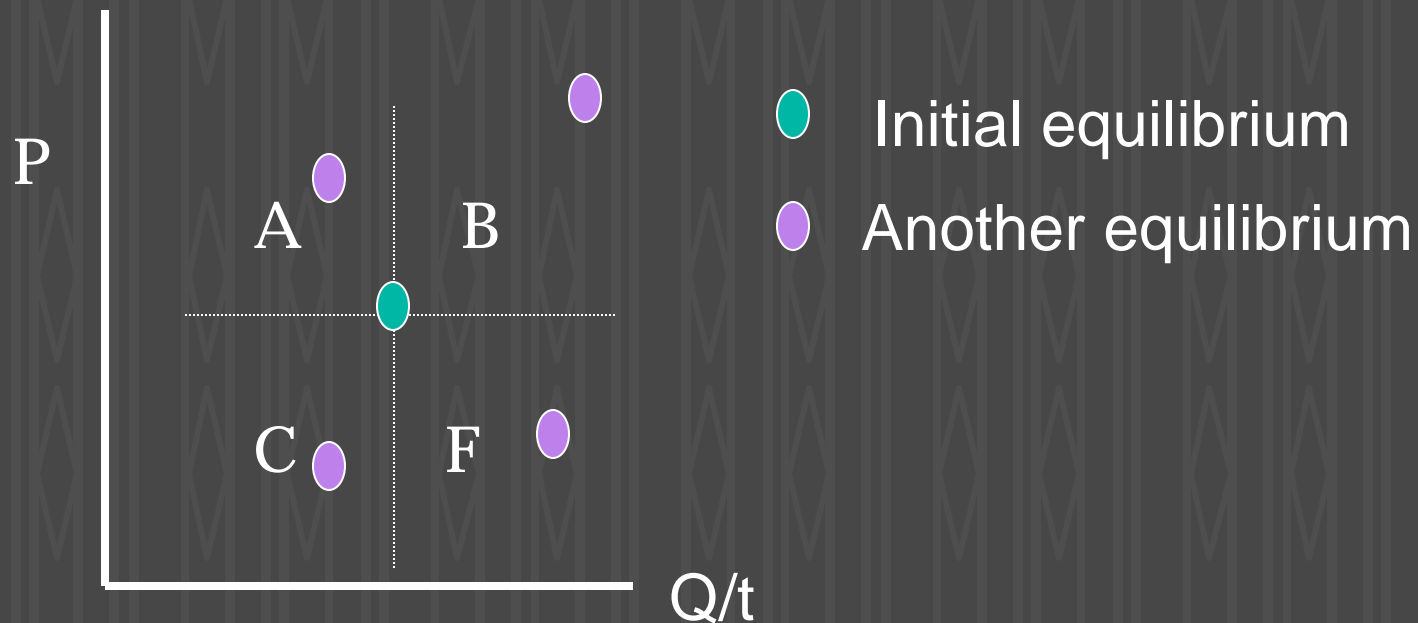
To determine the impact of both supply and demand changing:

- ◆ First examine what happens to equilibrium price and quantity when just demand shifts.
- ◆ Second, examine what happens to equilibrium price and quantity when just supply changes
- ◆ Finally, add the two effects together.

Changes in Demand and Supply

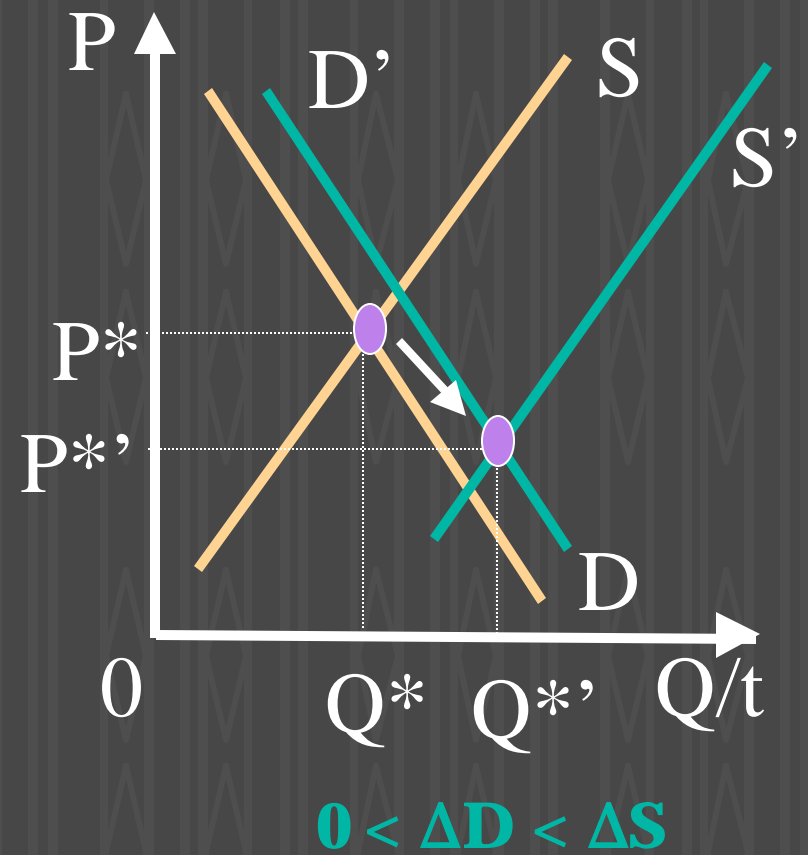
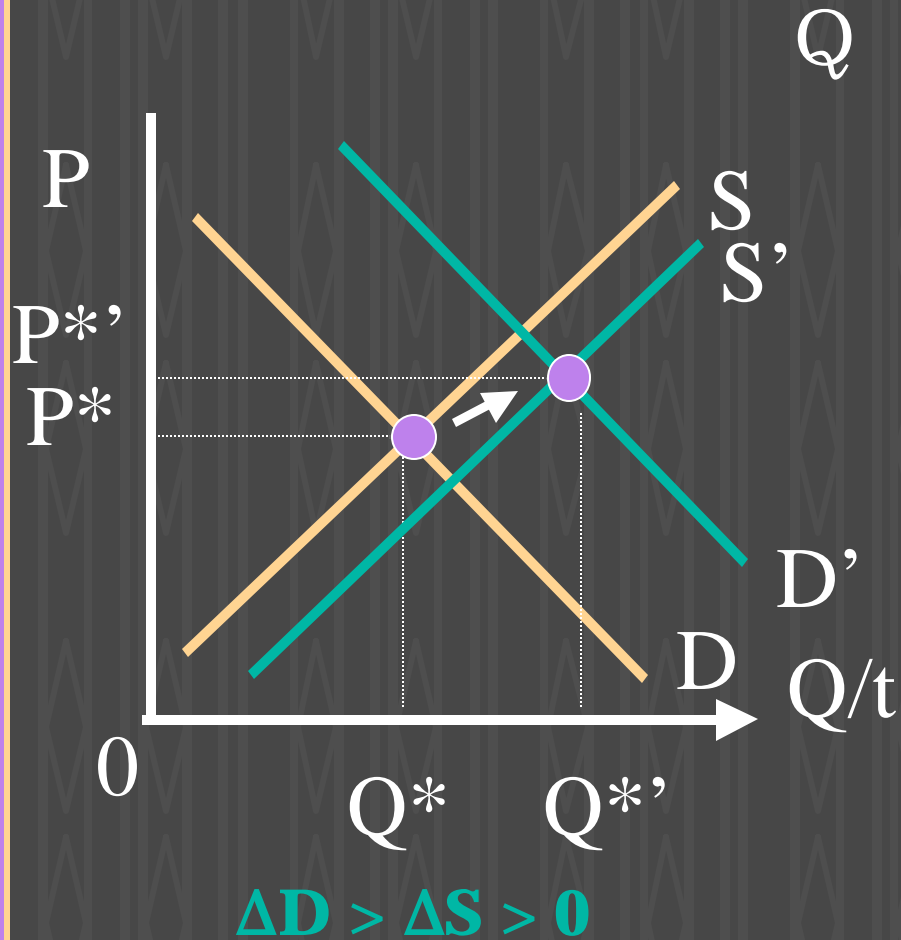
- ◆ When supply and demand move in the same direction equilibrium price is ambiguous
- ◆ When supply and demand move in opposite directions equilibrium quantity is ambiguous
- ◆ If P and Q both increase the dominant force must have been an increase in D
- ◆ If P and Q both decrease the dominant force must have been an decrease in D
- ◆ If P increases and Q decreases, the dominant force must have been a decrease in S
- ◆ If P decreases and Q increases the dominant force must have been an increase in S

Explaining Changes in Equilibrium Price and Quantity

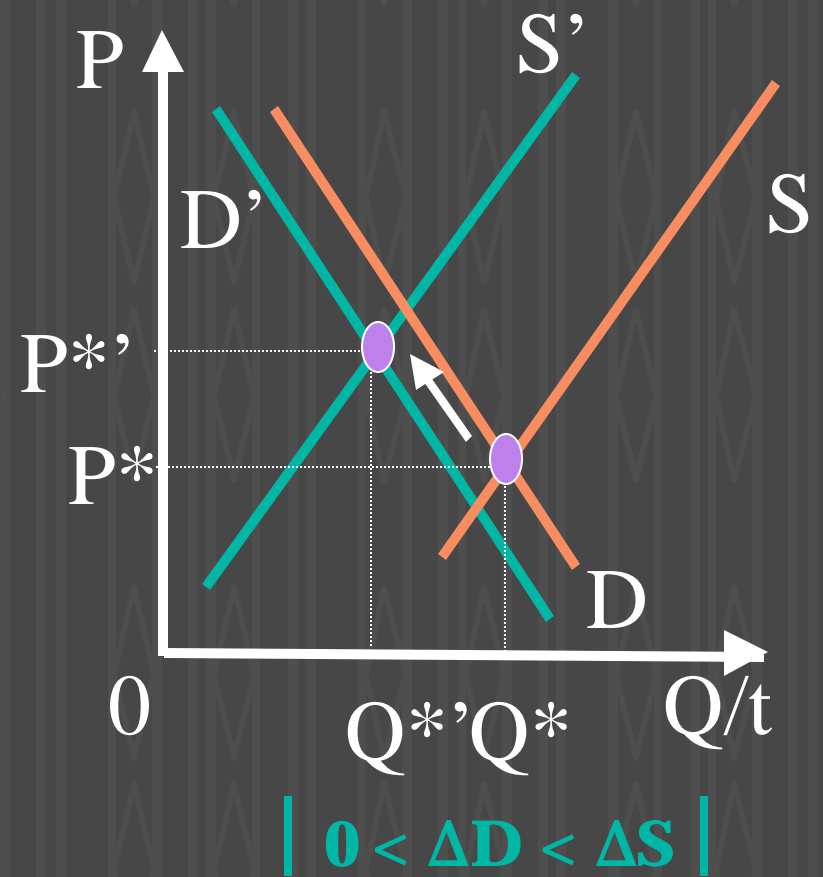
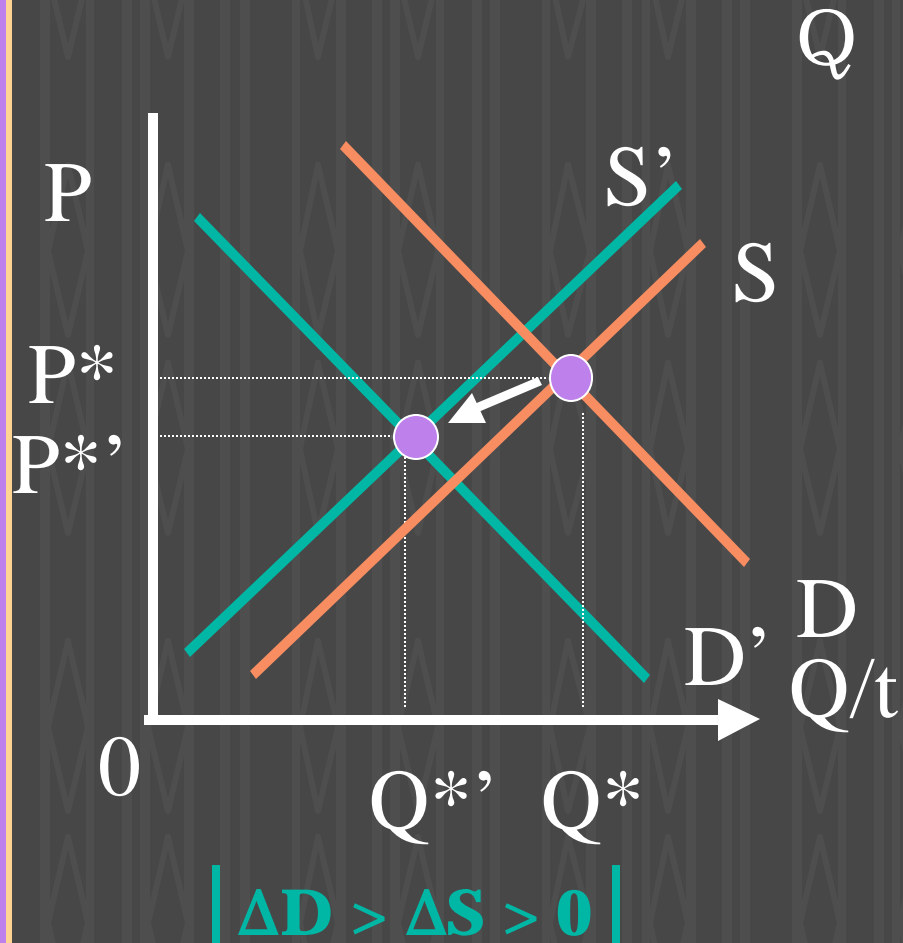


Moving to quadrant B implies the dominate force was an increase in demand. To quadrant C, the dominate force is a decrease in demand. Moving to quadrants A or F implies the dominate force was supply (decrease for A, and increase for F)

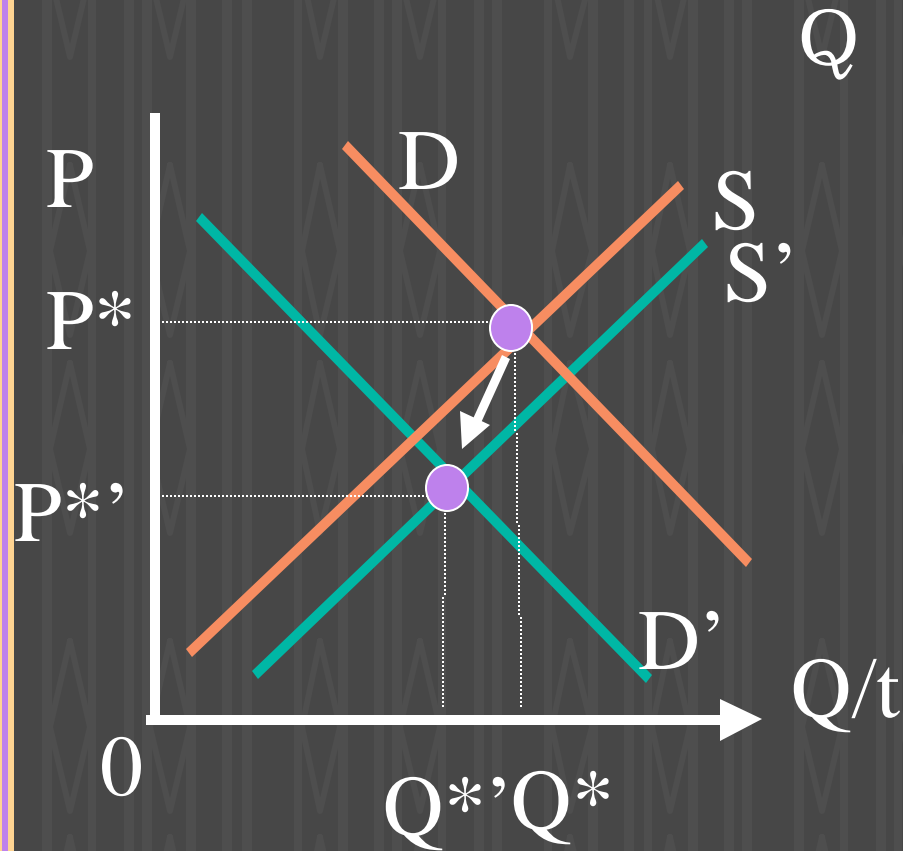
Increase in Supply and Demand: $\uparrow Q, \Delta P$?



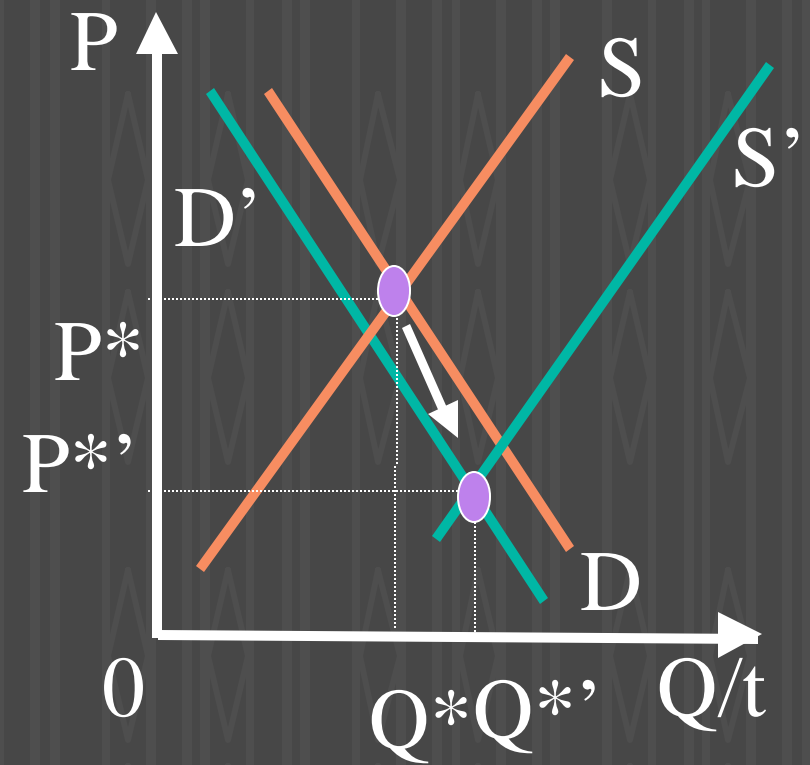
Decrease in Supply and Demand: $\downarrow Q, \Delta P$?



Increase in Supply and Decrease in Demand: $\downarrow P, \Delta Q$?

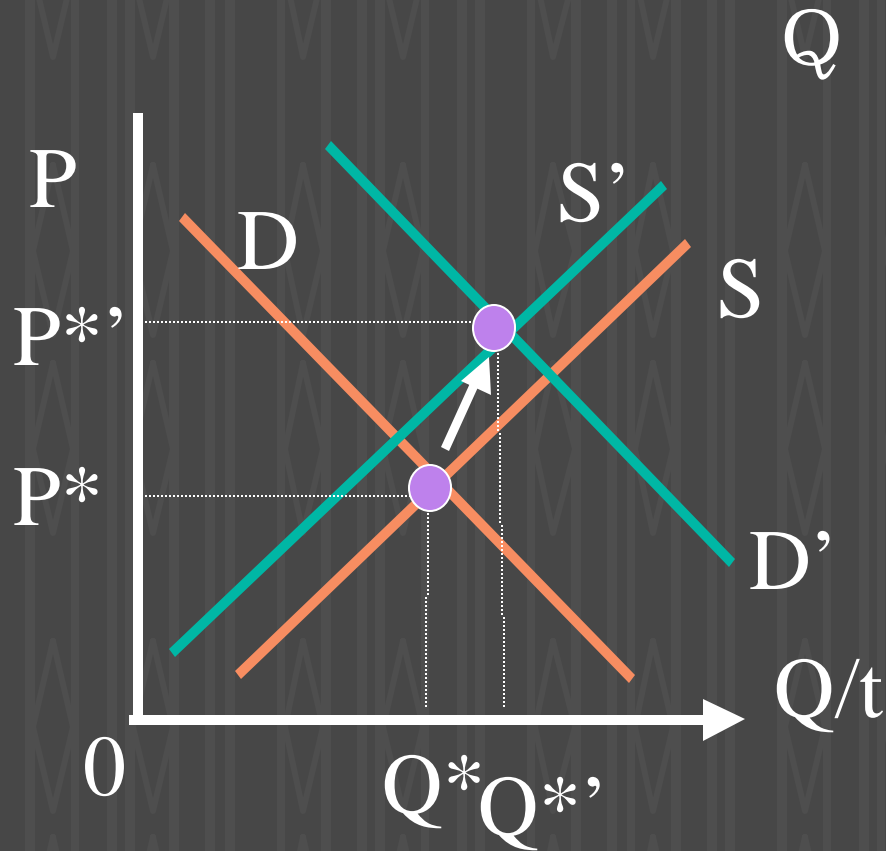


ΔD dominates, $\Delta Q < 0$

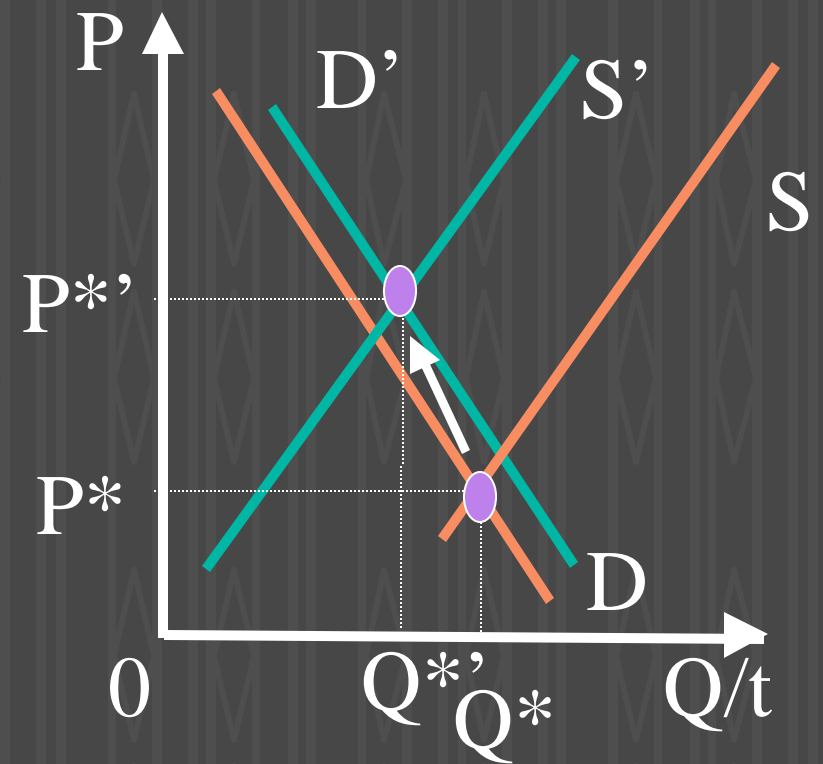


ΔS dominates, $\Delta Q > 0$

Decrease in Supply and Increase in Demand: $\uparrow P, \Delta Q$?



ΔD dominates, $\Delta Q < 0$



ΔS dominates, $\Delta Q > 0$

Helpful Hints

- ◆ Know how each of the main Demand Shifters, **PINTE**, and Supply Shifters, **PENT**, excluding the price of the good itself, effect equilibrium price and quantity
- ◆ For an income change, you also need to know whether the good is “normal” or “inferior”
- ◆ Be able to show graphically how a change in one of these shifters affects equilibrium
- ◆ Practice, Practice, Practice, Practice, Practice



The End

