

# 관리경제학 Managerial Economics

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- 강의목적
- 이 과목은 경영학의 이론적 토대를 이루는 관리경제학의 원리를 체계적으로 이해, 습득하는 데 목적을 두고 있다.
- 교재:
  - Besanko, D. and R.R. Braetigum, Microeconomics, 4th ed., John Wiley & Sons, Inc., 2011.
  - (참고서적)
    - 서승환, *미시경제학*, 홍문사사, 제 1판, 2010.
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# LECTURE 1: Overview and Basic Concepts

1. The Themes of Microeconomics
2. Microeconomic Modeling
3. The Types of Microeconomic Analysis
4. What Is a Market?
5. The Demand Curve and Supply Curve
6. Equilibrium

# Managerial, Micro- , and Macro- Economics

- Managerial Economics 관리경제학
  - Essentially microeconomics with managerial applications
- Microeconomics 미시경제학
  - Branch of economics that deals with the behavior of individual economic units—consumers, firms, workers, and investors—as well as the markets that these units comprise.
- Macroeconomics 거시경제학
  - Branch of economics that deals with aggregate economic variables, such as the level and growth rate of national output, interest rates, unemployment, and inflation.

# Prices and Markets

Microeconomics describes how prices are determined.

In a centrally planned economy, prices are set by the government.

In a market economy, prices are determined by the interactions of consumers, workers, and firms. These interactions occur in *markets*.

Markets are collections of buyers and sellers that together determine the price of a good.

# Market Participants

## Consumers

Consumers have limited incomes, which can be spent on a wide variety of goods and services, or saved for the future.

## Workers

Workers also face constraints and make trade-offs. First, people must decide whether and when to enter the workforce. Second, workers face trade-offs in their choice of employment. Finally, workers must sometimes decide how many hours per week they wish to work, thereby trading off labor for leisure.

## Firms

Firms also face limits in terms of the kinds of products that they can produce, and the resources available to produce them.

# Who and Why Should Study Microeconomics?

## *Market Participants*

*Consumers, Workers, Firms:*

*Households, Policy Makers, Managers,*

*Union Leaders, Lenders, Business Owners*

## *Problems to be solved:*

1. *What goods and services will be produced and in what quantities*
2. *Who will produce these services and how will they produce them*
3. *Who will receive these goods and services and how will they get them*

# Theories and Models: Positive versus Normative Analysis

In economics, explanation and prediction are based on *theories*. Theories are developed to explain observed phenomena in terms of a set of basic rules and assumptions.

A *model* is a mathematical representation, based on economic theory, of a firm, a market, or some other entity.

Models are like maps – using visual methods, they simplify the process and facilitate understanding of complex concepts.

# Positive versus Normative Analysis

- **positive analysis** 실증적 분석
  - Analysis describing relationships of cause and effect.
- **normative analysis** 규범적 분석
  - Analysis examining questions of what ought to be.

# Market Model 시장모형

- **market** Collection of buyers and sellers that, through their actual or potential interactions, determine the price of a product or set of products.
- **market definition** Determination of the buyers, sellers, and range of products that should be included in a particular market.

# Competitive vs Noncompetitive Markets

## Perfectly competitive market

Market with many buyers and sellers, so that no single buyer or seller has a significant impact on price.

### Market Price

Price prevailing in a competitive market.

# Market Definition-The Extent of a Market

## Extent of a market 시장의 범위

Boundaries of a market, both geographical and in terms of range of products produced and sold within it.

Market definition is important for two reasons:

A company must understand who its actual and potential competitors are for the various products that it sells or might sell in the future.

Market definition can be important for public policy decisions.

# REAL VERSUS NOMINAL PRICES

**Nominal price** 명목가격

Absolute price of a good, unadjusted for inflation.

**Real price** 실질가격

Price of a good relative to an aggregate measure of prices; price adjusted for inflation.

- **Consumer Price Index** Measure of the aggregate price level.

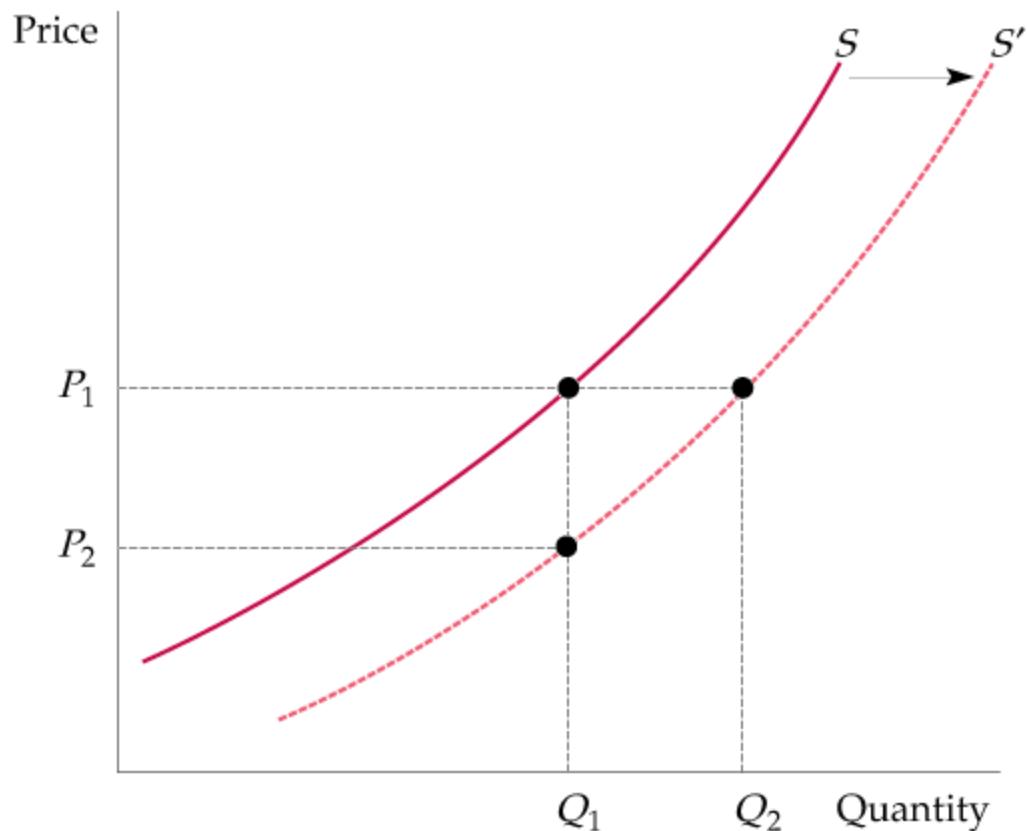
- **Producer Price Index** Measure of the aggregate price level for intermediate products and wholesale goods.

# Supply and Demand

- Supply-demand analysis is a fundamental and powerful tool that can be applied to a wide variety of interesting and important problems. To name a few:
  - Understanding and predicting how changing world economic conditions affect market price and production
  - Evaluating the impact of government price controls, minimum wages, price supports, and production incentives
  - Determining how taxes, subsidies, tariffs, and import quotas affect consumers and producers

# The Supply Curve

- **supply curve** Relationship between the quantity of a good that producers are willing to sell and the price of the good.



# The Supply Curve

The supply curve is thus a relationship between the quantity supplied and the price. We can write this relationship as an equation:

$$Q_S = Q_S(P)$$

## Other Variables That Affect Supply

The quantity that producers are willing to sell depends not only on the price they receive but also on their production costs, including wages, interest charges, and the costs of raw materials.

When production costs *decrease*, output *increases* no matter what the market price happens to be. *The entire supply curve thus shifts to the right.*

Economists often use the phrase *change in supply* to refer to shifts in the supply curve, while reserving the phrase *change in the quantity supplied* to apply to movements along the supply curve.

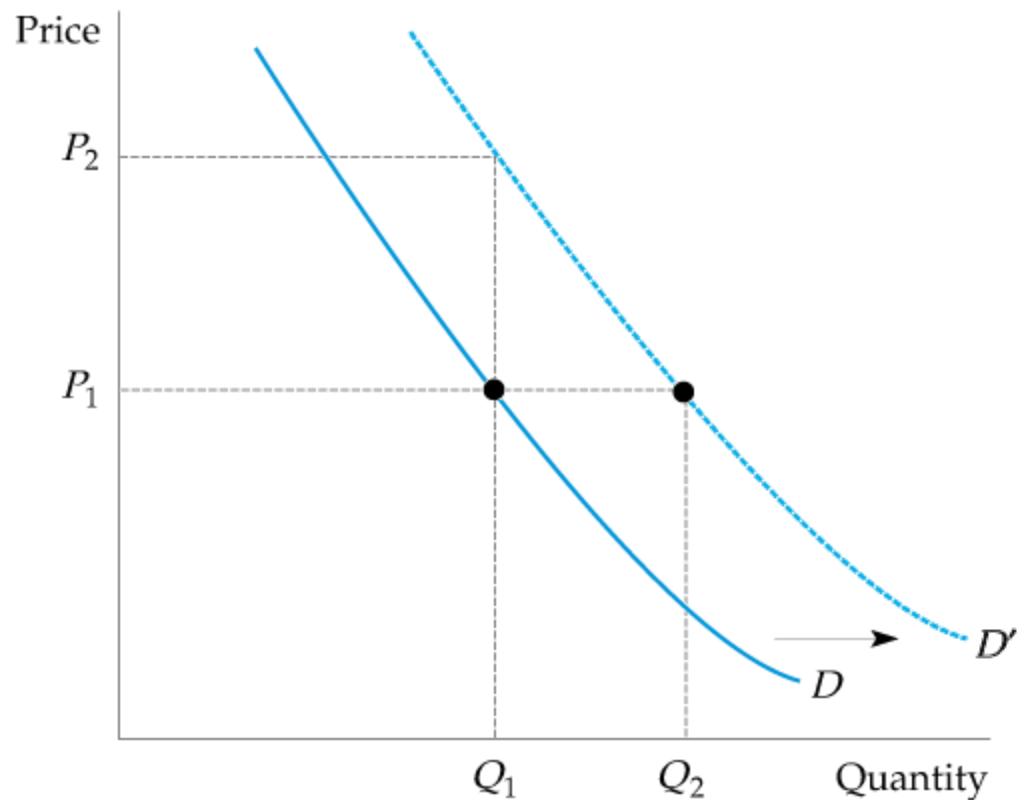
# The Demand Curve

- **demand curve** Relationship between the quantity of a good that consumers are willing to buy and the price of the good.

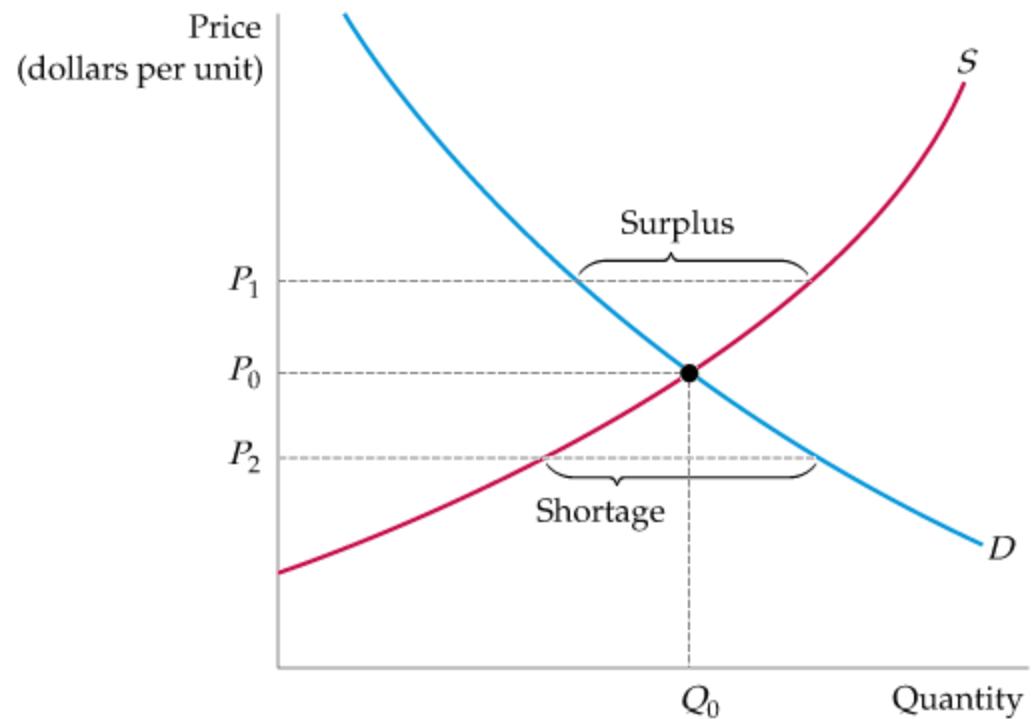
We can write this relationship between quantity demanded and price as an equation:

$$Q_D = Q_D(P)$$

# The Demand Curve



# THE MARKET EQUILIBRIUM 시장균형

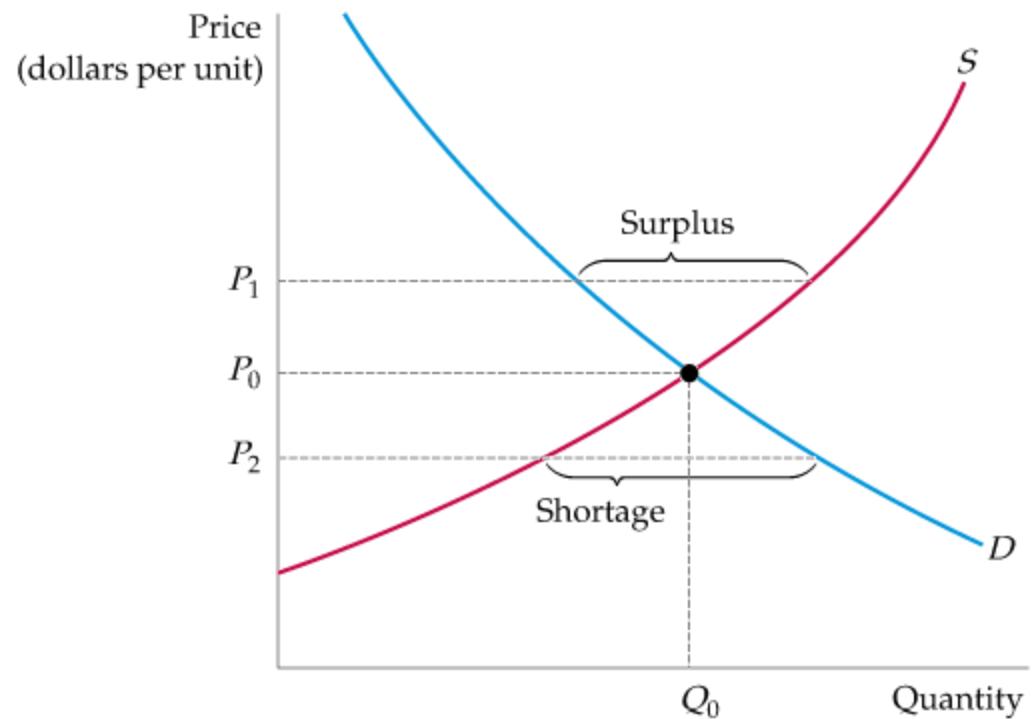


# THE MARKET EQUILIBRIUM

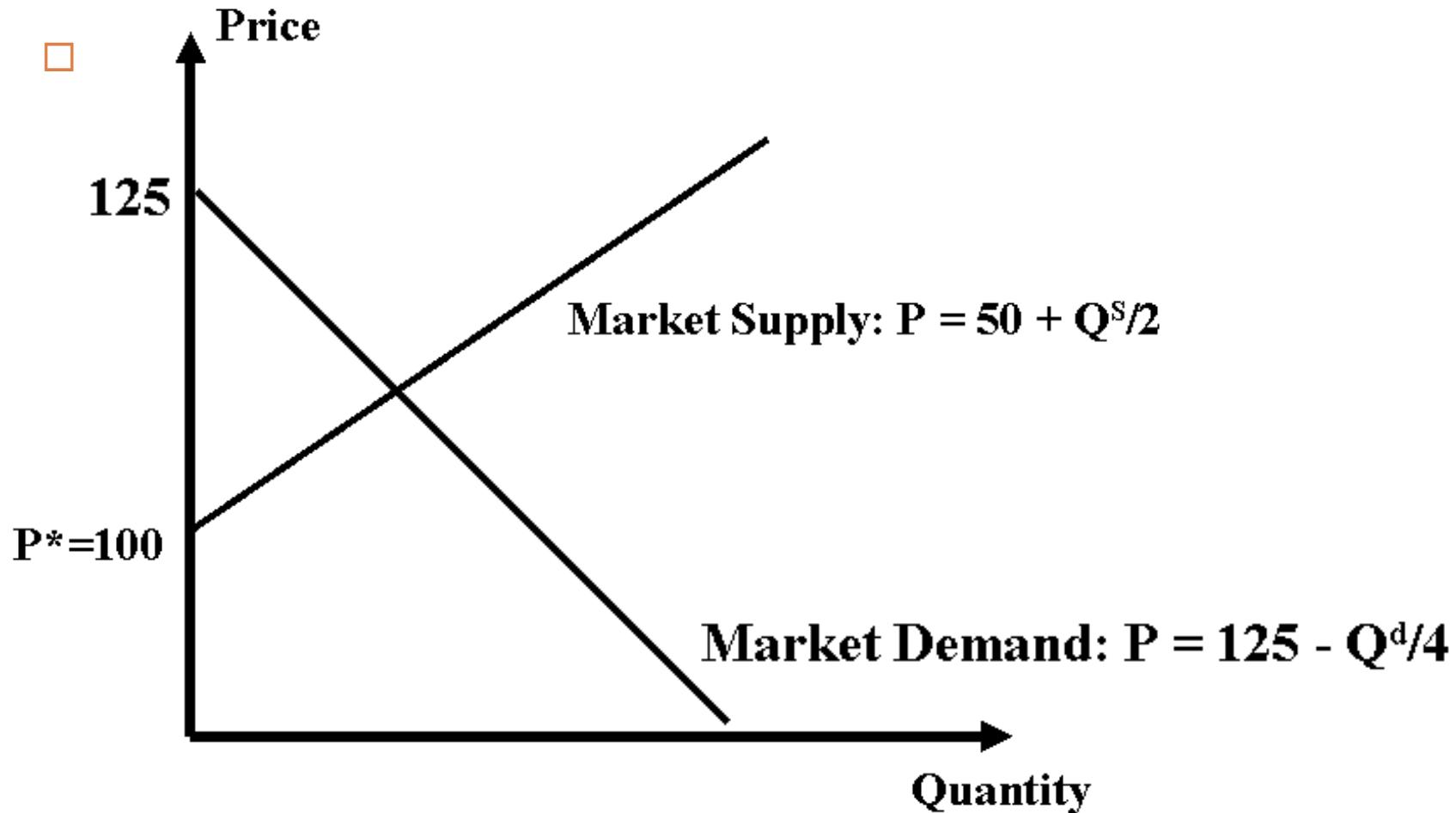
- **equilibrium (or market clearing) price**
  - Price that equates the quantity supplied to the quantity demanded
- **market mechanism**

Tendency in a free market for price to change until the market clears.
- **surplus**
  - Situation in which the quantity supplied exceeds the quantity demanded.
- **shortage**
  - Situation in which the quantity demanded exceeds the quantity supplied

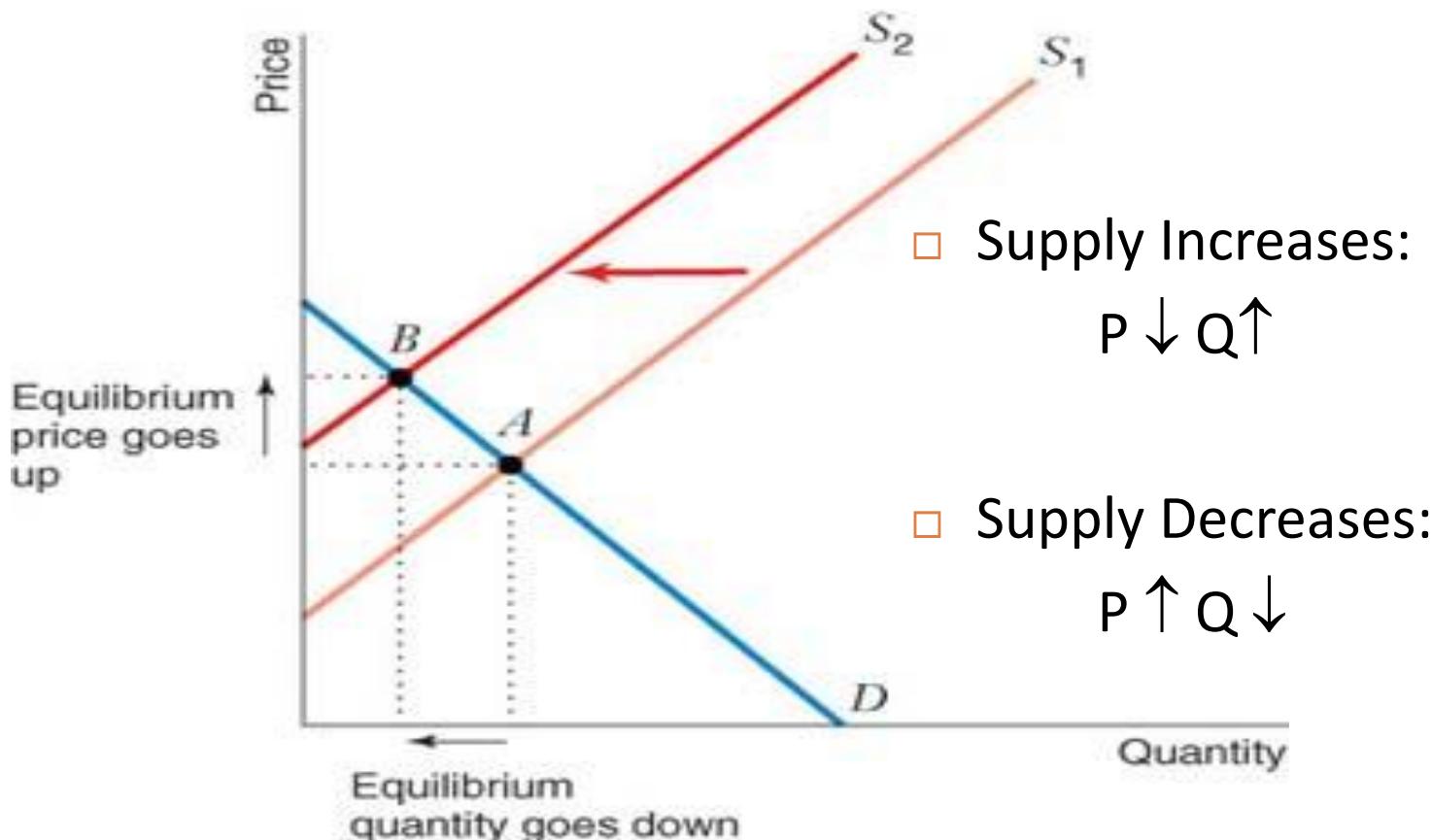
# THE MARKET EQUILIBRIUM



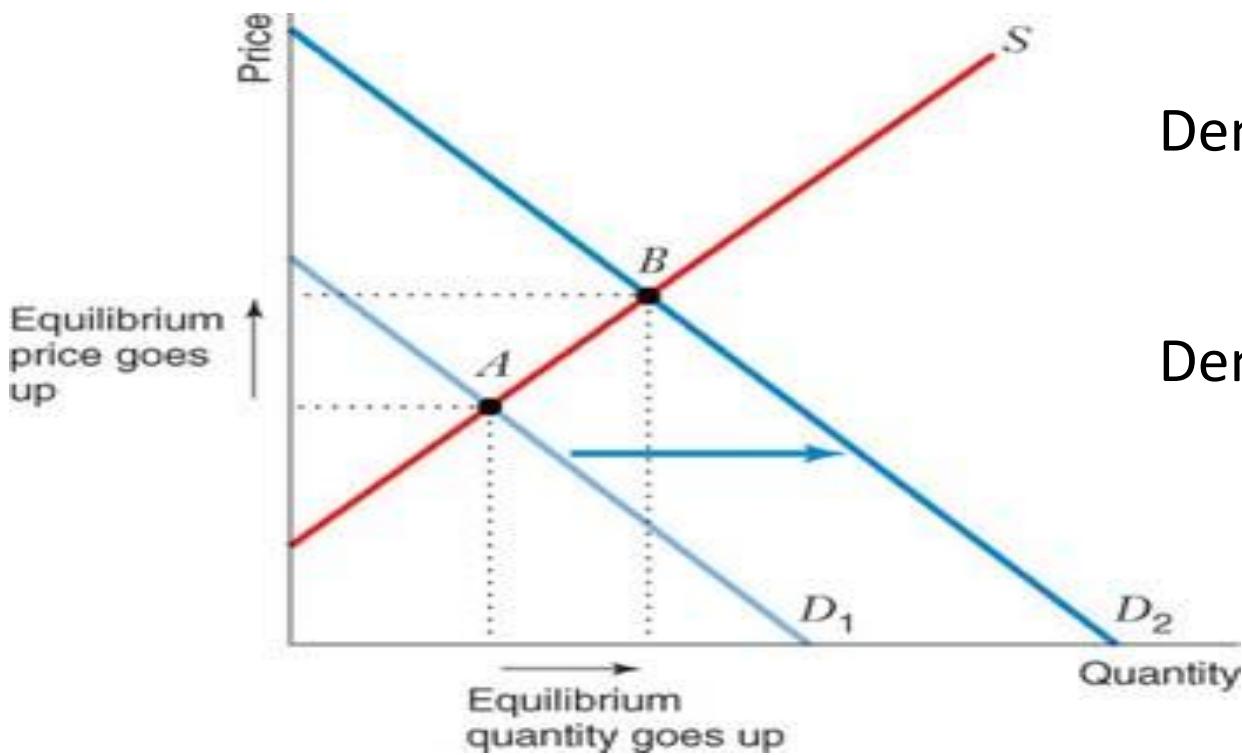
# Market Equilibrium



# Shifts in Supply, Demand Unchanged



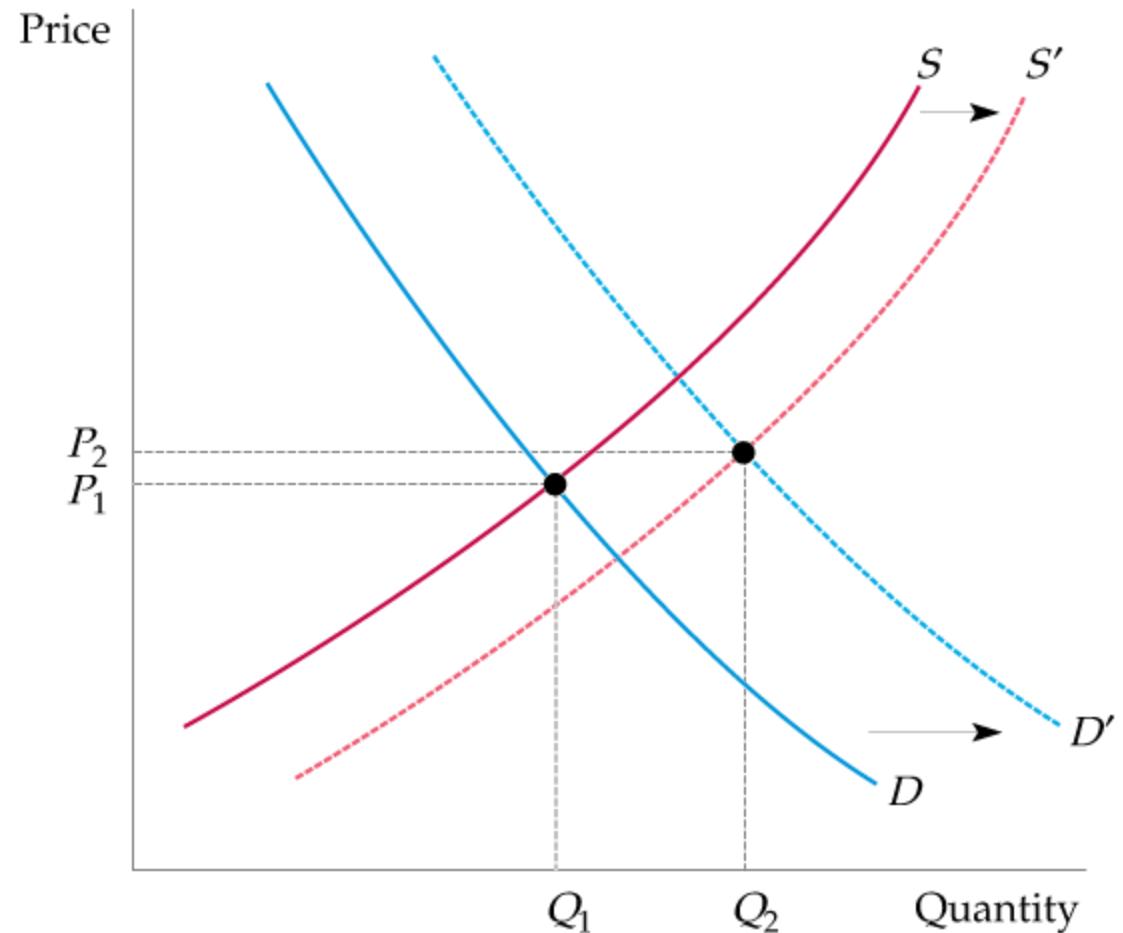
# Shifts in Demand, Supply Unchanged



Demand Increases:  
 $P \uparrow Q \uparrow$

Demand Decreases:  
 $P \downarrow Q \downarrow$

# CHANGES IN MARKET EQUILIBRIUM



# ELASTICITIES OF SUPPLY AND DEMAND

- **Elasticity** 탄력성 Percentage change in one variable resulting from a 1-percent increase in another.

## Price Elasticity of Demand 수요의 가격탄력성

- **price elasticity of demand** Percentage change in quantity demanded of a good resulting from a 1-percent increase in its price.

$$E_p = (\% \Delta Q) / (\% \Delta P)$$

$$E_p = \frac{\Delta Q / Q}{\Delta P / P} = \frac{P}{Q} \frac{\Delta Q}{\Delta P}$$

# ELASTICITIES OF SUPPLY AND DEMAND

## Other Demand Elasticities

- **income elasticity of demand** 수요의 소득탄력성
- Percentage change in the quantity demanded resulting from a 1-percent increase in income.

$$E_I = \frac{\Delta Q/Q}{\Delta I/I} = \frac{I \Delta Q}{Q \Delta I}$$

- **cross-price elasticity of demand** 수요의 교차탄력성
- Percentage change in the quantity demanded of one good resulting from a 1-percent increase in the price of another.

$$E_{Q_b P_m} = \frac{\Delta Q_b / Q_b}{\Delta P_m / P_m} = \frac{P_m}{Q_b} \frac{\Delta Q_b}{\Delta P_m}$$

## Elasticities of Supply      공급 의 (가격)탄력성

- **price elasticity of supply** Percentage change in quantity supplied resulting from a 1-percent increase in price.

# ELASTICITIES OF SUPPLY AND DEMAND

## Point versus Arc Elasticities

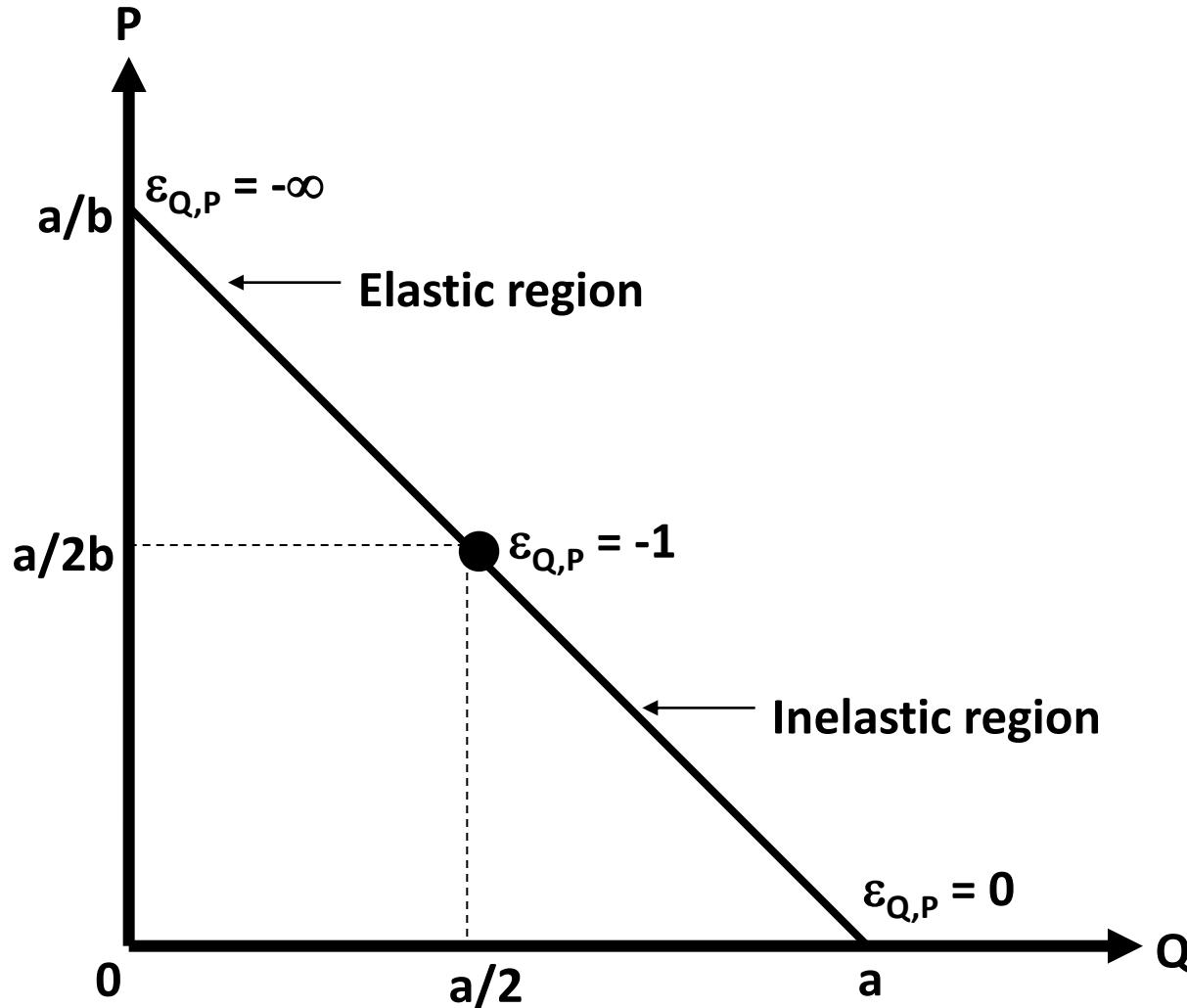
- **point elasticity of demand** 수요의 점탄력성
- Price elasticity at a particular point on the demand curve.

## Arc Elasticity of Demand

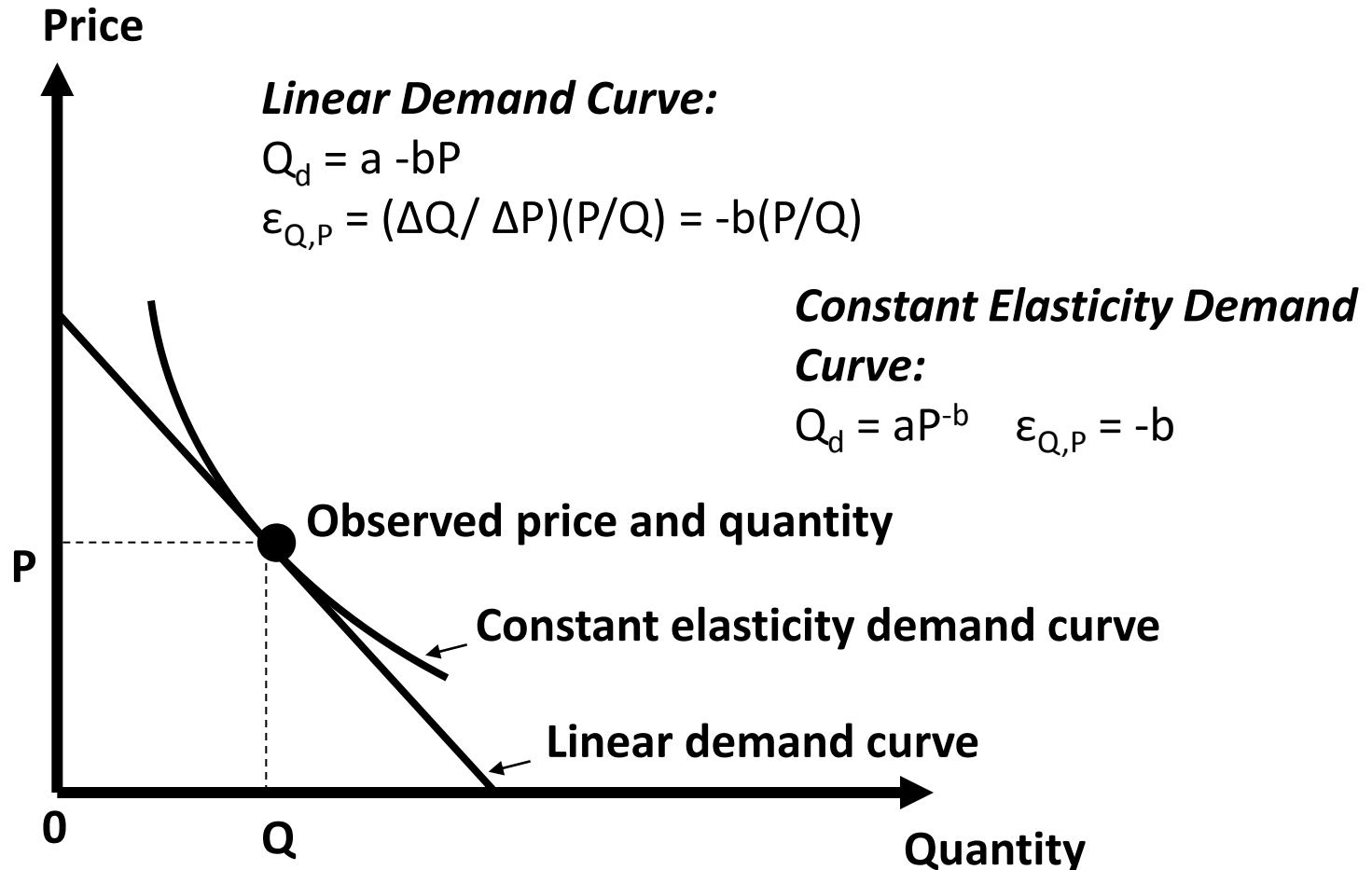
- **arc elasticity of demand** 수요의 호탄력성  
Price elasticity calculated over a range of prices.

$$\text{Arc elasticity: } E_p = (\Delta Q / \Delta P)(\bar{P} / \bar{Q})$$

# Elasticity – Linear Demand Curve



# Constant Elasticity vs. Linear Demand Curve



# Perfectly Elastic or Inelastic cases

Completely (Perfectly) Inelastic Demand

