#### **HALAMAN PENGESAHAN**

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Kode mata kuliah : EMKU4402

SKS : 3

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Dosen pengampu

Drs. Wihandaru Sotya P, M.Si



### **Handout**

### **Ekonomi Manajerial**

[EMKU4402]

Drs. Wihandaru SP, M.Si

Fak. Ekonomi / Manajemen



### **Chapter 1**

Managers, Profits, and Markets

### Managerial Economics & Theory

- Managerial economics applies microeconomic theory to business problems
  - How to use economic analysis to make decisions to achieve firm's goal of profit maximization
- Microeconomics
  - Study of behavior of individual economic agents

### **Economic Cost of Resources**

- Opportunity cost of using any resource is:
  - What firm owners must give up to use the resource
- Market-supplied resources
  - Owned by others & hired, rented, or leased
- Owner-supplied resources
  - · Owned & used by the firm

### Total Economic Cost

### Total Economic Cost

 Sum of opportunity costs of both market-supplied resources & ownersupplied resources

### Explicit Costs

 Monetary payments to owners of market-supplied resources

### Implicit Costs

 Nonmonetary opportunity costs of using owner-supplied resources

# Economic Cost of Using Resources (Figure 1.1)

#### **Explicit Costs**

of

#### **Market-Supplied Resources**

The monetary payments to resource owners



#### **Implicit Costs**

Of

#### **Owner-Supplied Resources**

The returns forgone by not taking the owners' resources to market

#### **Total Economic Cost**

The total opportunity costs of both kinds of resources

## Types of Implicit Costs

- Opportunity cost of cash provided by owners
  - Equity capital
- Opportunity cost of using land or capital owned by the firm
- Opportunity cost of owner's time spent managing or working for the firm

# Economic Profit versus Accounting Profit

- •Economic profit = Total revenue Total economic cost = Total revenue – Explicit costs – Implicit costs
- Accounting profit = Total revenue Explicit costs
- Accounting profit does not subtract implicit costs from total revenue
- Firm owners must cover all costs of all resources used by the firm
  - · Objective is to maximize economic profit

### Maximizing the Value of a Firm

#### Value of a firm

- Price for which it can be sold
- Equal to net present value of expected future profit

### Risk premium

- Accounts for risk of not knowing future profits
- The larger the rise, the higher the risk premium, & the lower the firm's value

# Maximizing the Value of a Firm

- Maximize firm's value by maximizing profit in each time period
  - Cost & revenue conditions must be independent across time periods

Value of a firm =

$$\frac{\pi_1}{(1+r)} + \frac{\pi_2}{(1+r)^2} + \dots + \frac{\pi_T}{(1+r)^T} = \sum_{t=1}^T \frac{\pi_t}{(1+r)^t}$$

# Separation of Ownership & Control

### Principal-agent problem

 Conflict that arises when goals of management (agent) do not match goals of owner (principal)

### Moral Hazard

 When either party to an agreement has incentive not to abide by all its provisions & one party cannot cost effectively monitor the agreement

### Corporate Control Mechanisms

- Require managers to hold stipulated amount of firm's equity
- Increase percentage of outsiders serving on board of directors
- Finance corporate investments with debt instead of equity

### Price-Takers vs. Price-Setters

### Price-taking firm

- · Cannot set price of its product
- Price is determined strictly by market forces of demand & supply

### Price-setting firm

- Can set price of its product
- Has a degree of market power, which is ability to raise price without losing all sales

### What is a Market?

- A market is any arrangement through which buyers & sellers exchange goods & services
- Markets reduce transaction costs
  - Costs of making a transaction other than the price of the good or service

### Market Structures

- Market characteristics that determine the economic environment in which a firm operates
  - · Number & size of firms in market
  - Degree of product differentiation
  - · Likelihood of new firms entering market

# **Perfect Competition**

- Large number of relatively small firms
- Undifferentiated product
- No barriers to entry



- Single firm
- Produces product with no close substitutes
- Protected by a barrier to entry

# Monopolistic Competition

- Large number of relatively small firms
- Differentiated products
- No barriers to entry



- Few firms produce all or most of market output
- Profits are interdependent
  - Actions by any one firm will affect sales & profits of the other firms

### Globalization of Markets

- Economic integration of markets located in nations around the world
  - Provides opportunity to sell more goods & services to foreign buyers
  - Presents threat of increased competition from foreign producers



### **Chapter 2**

# Demand, Supply, and Market Equilibrium



- Quantity demanded  $(Q_d)$ 
  - Amount of a good or service consumers are willing & able to purchase during a given period of time

### General Demand Function

- Six variables that influence  $Q_d$ 
  - Price of good or service (P)
  - Incomes of consumers (M)
  - Prices of related goods & services  $(P_R)$
  - Taste patterns of consumers ( $\mathfrak{I}$ )
  - Expected future price of product  $(P_e)$
  - Number of consumers in market (N)
- General demand function

• 
$$Q_d = f(P, M, P_R, \mathfrak{I}, P_e, N)$$

### General Demand Function

$$Q_d = a + bP + cM + dP_R + e\mathfrak{I} + fP_e + gN$$

- b, c, d, e, f, & g are slope parameters
  - Measure effect on  $\mathcal{Q}_d$  of changing one of the variables while holding the others constant
- Sign of parameter shows how variable is related to  $Q_d$ 
  - Positive sign indicates direct relationship
  - · Negative sign indicates inverse relationship

# **General Demand Function**

| Variable | Relation to $Q_d$                                  | Sign of Slope Parameter                                                         |
|----------|----------------------------------------------------|---------------------------------------------------------------------------------|
| P        | Inverse                                            | $b = \Delta Q_d/\Delta P$ is negative                                           |
| M        | Direct for normal goods Inverse for inferior goods | $c = \Delta Q_d/\Delta M$ is positive $c = \Delta Q_d/\Delta M$ is negative     |
| $P_R$    | Direct for substitutes Inverse for complements     | $d = \Delta Q_d/\Delta P_R$ is positive $d = \Delta Q_d/\Delta P_R$ is negative |
| 3        | Direct                                             | $e = \Delta Q_d/\Delta \mathfrak{I}$ is positive                                |
| $P_e$    | Direct                                             | $f = \Delta Q_d/\Delta P_e$ is positive                                         |
| N        | Direct                                             | $g = \Delta Q_d/\Delta N$ is positive                                           |

### **Direct Demand Function**

- The direct demand function, or simply demand, shows how quantity demanded,  $Q_d$ , is related to product price, P, when all other variables are held constant
  - $Q_d = f(P)$
- Law of Demand
  - $Q_d$  increases when P falls &  $Q_d$  decreases when P rises, all else constant
  - $\Delta Q_d/\Delta P$  must be negative

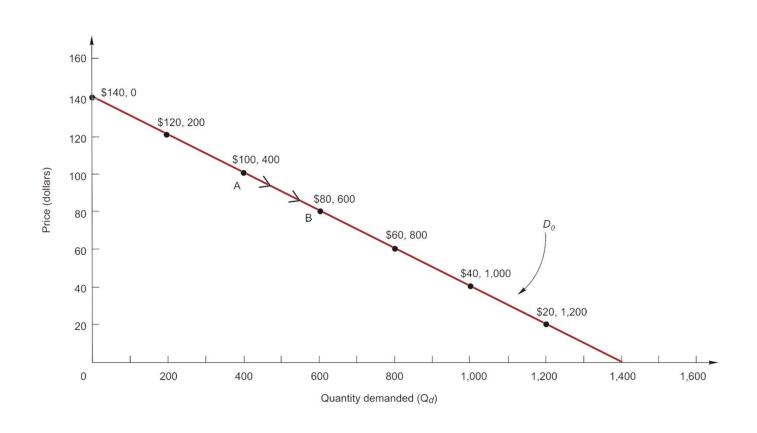
### Inverse Demand Function

- Traditionally, price (P) is plotted on the vertical axis & quantity demanded  $(Q_d)$  is plotted on the horizontal axis
  - The equation plotted is the *inverse* demand function,  $P = f(Q_d)$

### **Graphing Demand Curves**

- A point on a direct demand curve shows either:
  - Maximum amount of a good that will be purchased for a given price
  - Maximum price consumers will pay for a specific amount of the good

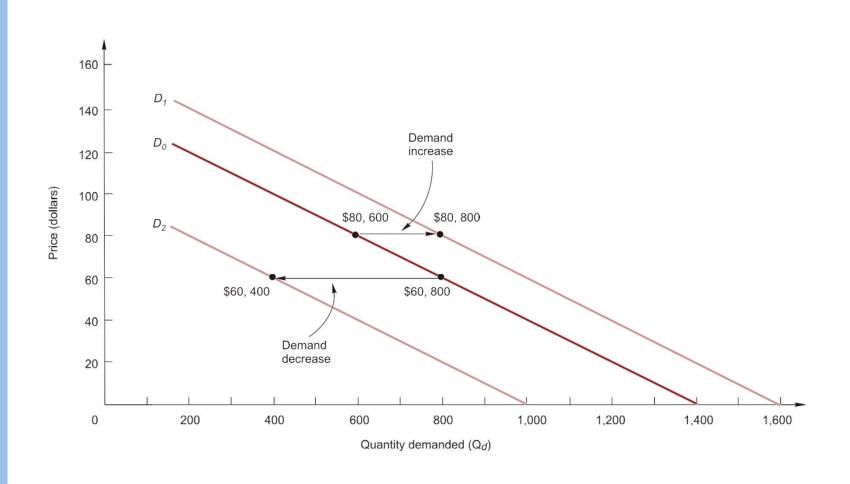
# A Demand Curve (Figure 2.1)



### **Graphing Demand Curves**

- Change in quantity demanded
  - Occurs when price changes
  - Movement along demand curve
- Change in demand
  - Occurs when one of the other variables, or determinants of demand, changes
  - Demand curve shifts rightward or leftward

## Shifts in Demand (Figure 2.2)





- Quantity supplied  $(Q_s)$ 
  - · Amount of a good or service offered for sale during a given period of time

### Supply

- Six variables that influence  $Q_s$ 
  - Price of good or service (P)
  - Input prices  $(P_I)$
  - Prices of goods related in production  $(P_r)$
  - Technological advances (T)
  - Expected future price of product  $(P_e)$
  - Number of firms producing product (F)
- General supply function
  - $Q_s = f(P, P_I, P_r, T, P_e, F)$

## General Supply Function

$$Q_s = h + kP + lP_I + mP_r + nT + rP_e + sF$$

- k, l, m, n, r, & s are slope parameters
  - Measure effect on  $Q_s$  of changing one of the variables while holding the others constant
- Sign of parameter shows how variable is related to  $Q_{\rm s}$ 
  - Positive sign indicates direct relationship
  - · Negative sign indicates inverse relationship

# General Supply Function

| Variable       | Relation to $Q_s$                              | Sign of Slope Parameter                                                         |
|----------------|------------------------------------------------|---------------------------------------------------------------------------------|
| P              | Direct                                         | $k = \Delta Q_s / \Delta P$ is positive                                         |
| $P_I$          | Inverse                                        | $l = \Delta Q_s / \Delta P_I$ is negative                                       |
| $P_r$          | Inverse for substitutes Direct for complements | $m = \Delta Q_s/\Delta P_r$ is negative $m = \Delta Q_s/\Delta P_r$ is positive |
| T              | Direct                                         | $n = \Delta Q_s/\Delta T$ is positive                                           |
| $P_e$          | Inverse                                        | $r = \Delta Q_s / \Delta P_e$ is negative                                       |
| $oldsymbol{F}$ | Direct                                         | $s = \Delta Q_s / \Delta F$ is positive                                         |

## **Direct Supply Function**

• The *direct supply function*, or simply *supply*, shows how quantity supplied,  $Q_s$ , is related to product price, P, when all other variables are held constant

• 
$$Q_s = f(P)$$

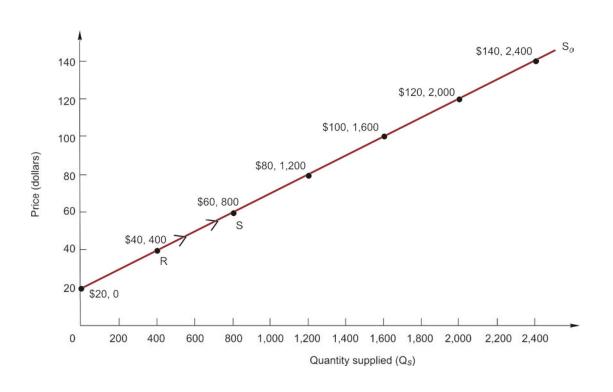
## Inverse Supply Function

- Traditionally, price (P) is plotted on the vertical axis & quantity supplied  $(Q_s)$  is plotted on the horizontal axis
  - The equation plotted is the *inverse* supply function,  $P = f(Q_s)$

## **Graphing Supply Curves**

- A point on a direct supply curve shows either:
  - Maximum amount of a good that will be offered for sale at a given price
  - Minimum price necessary to induce producers to voluntarily offer a particular quantity for sale

## A Supply Curve (Figure 2.3)

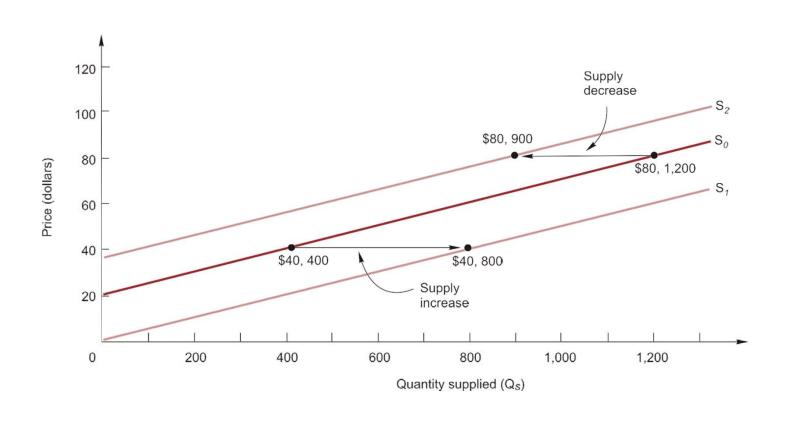


## **Graphing Supply Curves**

- Change in quantity supplied
  - Occurs when price changes
  - · Movement along supply curve
- Change in supply
  - Occurs when one of the other variables, or determinants of supply, changes
  - Supply curve shifts rightward or leftward

## Shifts in Supply

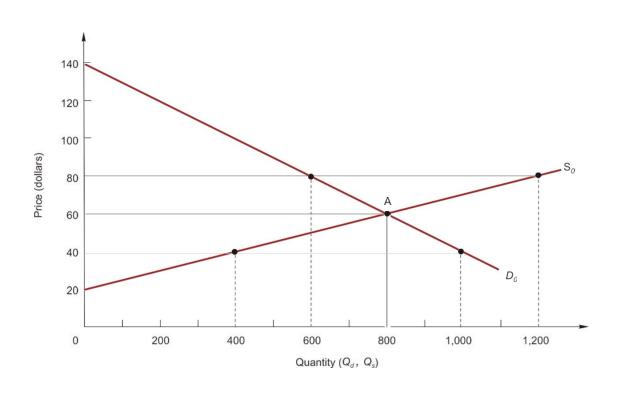
## (Figure 2.4)



## Market Equilibrium

- Equilibrium price & quantity are determined by the intersection of demand & supply curves
  - At the point of intersection,  $Q_d = Q_s$
  - Consumers can purchase all they want & producers can sell all they want at the "market-clearing" or price

## Market Equilibrium (Figure 2.5)



## Market Equilibrium

- Excess demand (shortage)
  - Exists when quantity demanded exceeds quantity supplied
- Excess supply (surplus)
  - Exists when quantity supplied exceeds quantity demanded

## Value of Market Exchange

- Typically, consumers value the goods they purchase by an amount that exceeds the purchase price of the goods
- Economic value
  - Maximum amount any buyer in the market is willing to pay for the unit, which is measured by the demand price for the unit of the good

## Measuring the Value of Market Exchange

#### Consumer surplus

 Difference between the economic value of a good (its demand price) & the market price the consumer must pay

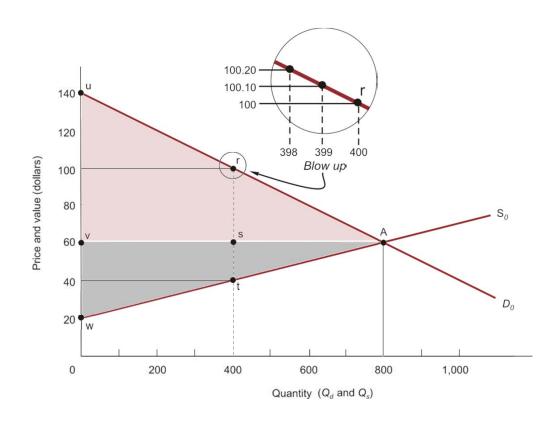
#### Producer surplus

 For each unit supplied, difference between market price & the minimum price producers would accept to supply the unit (its supply price)

#### Social surplus

- Sum of consumer & producer surplus
- Area below demand & above supply over the relevant range of output

## Measuring the Value of Market Exchange (Figure 2.6)



### Changes in Market Equilibrium

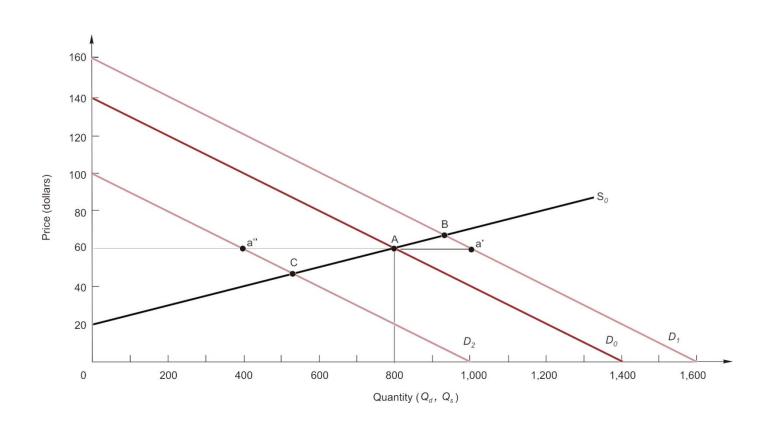
#### Qualitative forecast

 Predicts only the direction in which an economic variable will move

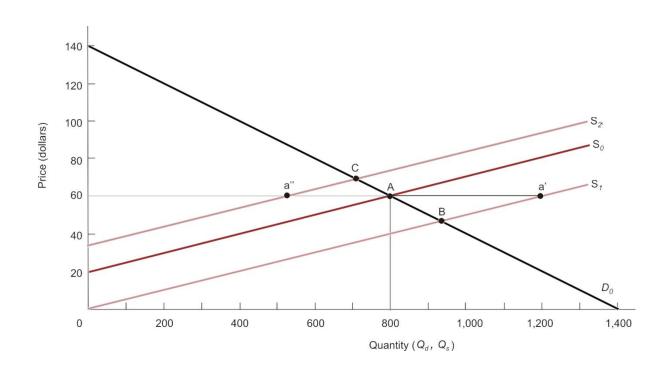
#### Quantitative forecast

 Predicts both the direction and the magnitude of the change in an economic variable

## Demand Shifts (Supply Constant) (Figure 2.7)



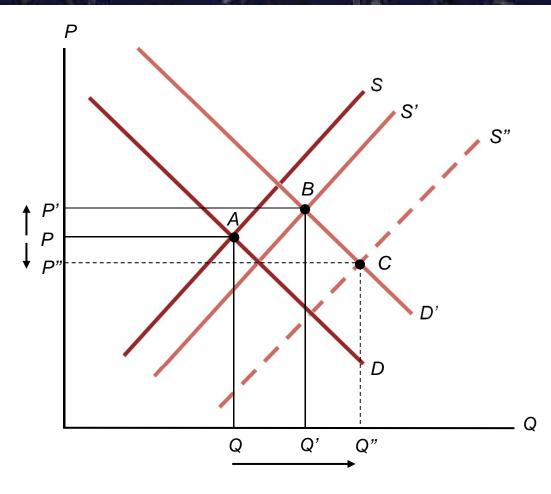
# Managerial Economics Supply Shifts (Demand Constant) (Figure 2.8)



### Simultaneous Shifts

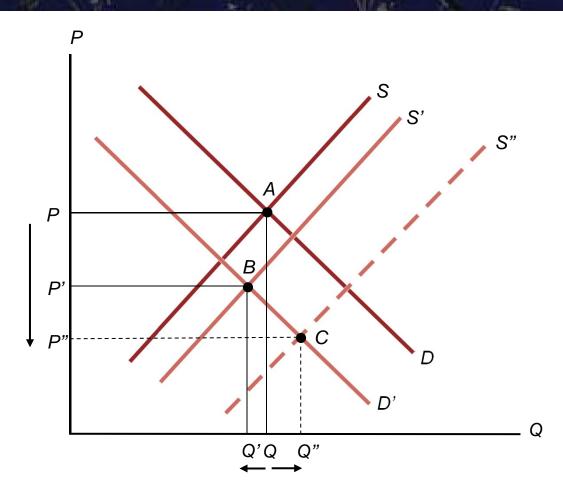
- When demand & supply shift simultaneously
  - Can predict either the direction in which price changes or the direction in which quantity changes, but not both
  - The change in equilibrium price or quantity is said to be indeterminate when the direction of change depends on the relative magnitudes by which demand & supply shift

## Simultaneous Shifts: (↑D, ↑S)



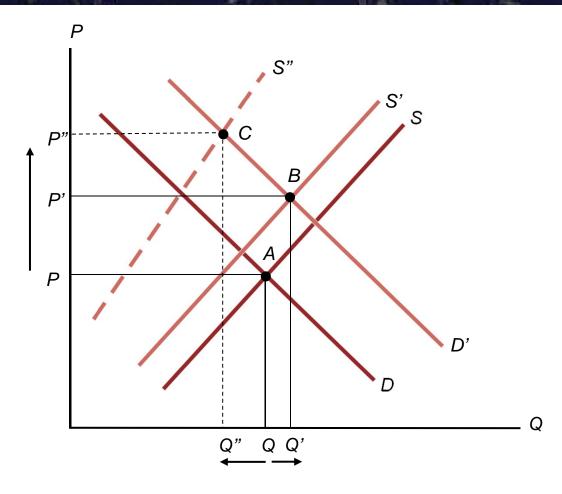
Price may rise or fall; Quantity rises

## Simultaneous Shifts: (\lambda D, 7S)



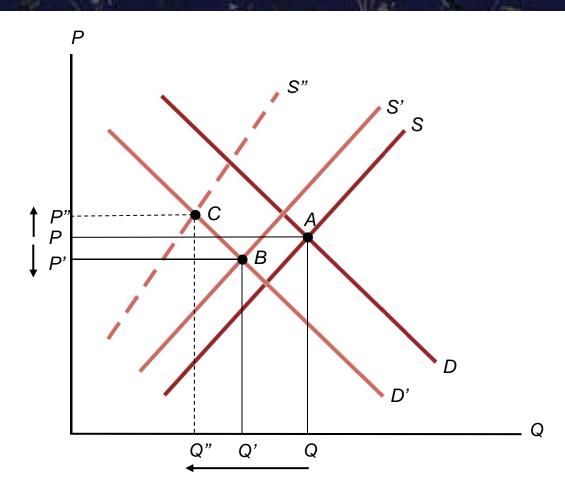
Price falls; Quantity may rise or fall

## Simultaneous Shifts: (↑D, ↓S)



Price rises; Quantity may rise or fall

## Simultaneous Shifts: (↓D, ↓S)



Price may rise or fall; Quantity falls