Engineering Economics

Md. Roni Hossain

Assistant Professor

Department of Economics

Jahangirnagar University

Lecture 3
Market

The Market Forces of Supply and Demand

- **Supply**
- **The quantity supplied of any good or service is the amount that sellers are willing and able to sell.**
- **The quantity supplied is the number of units that sellers want to sell over a specified period of time at a particular price.**

The Market Forces of Supply and Demand

- **Law of Supply**
- **The law of supply states that all other things remaining unchanged, the quantity supplied of a good increases as its price increases the quantity supplied of a good decreases as its price decreases.**
- **When the price of a commodity is raised, other things remain constant, sellers tend to sell more of the commodity and vice versa.**

The Market Forces of Supply and Demand

Supply Schedule

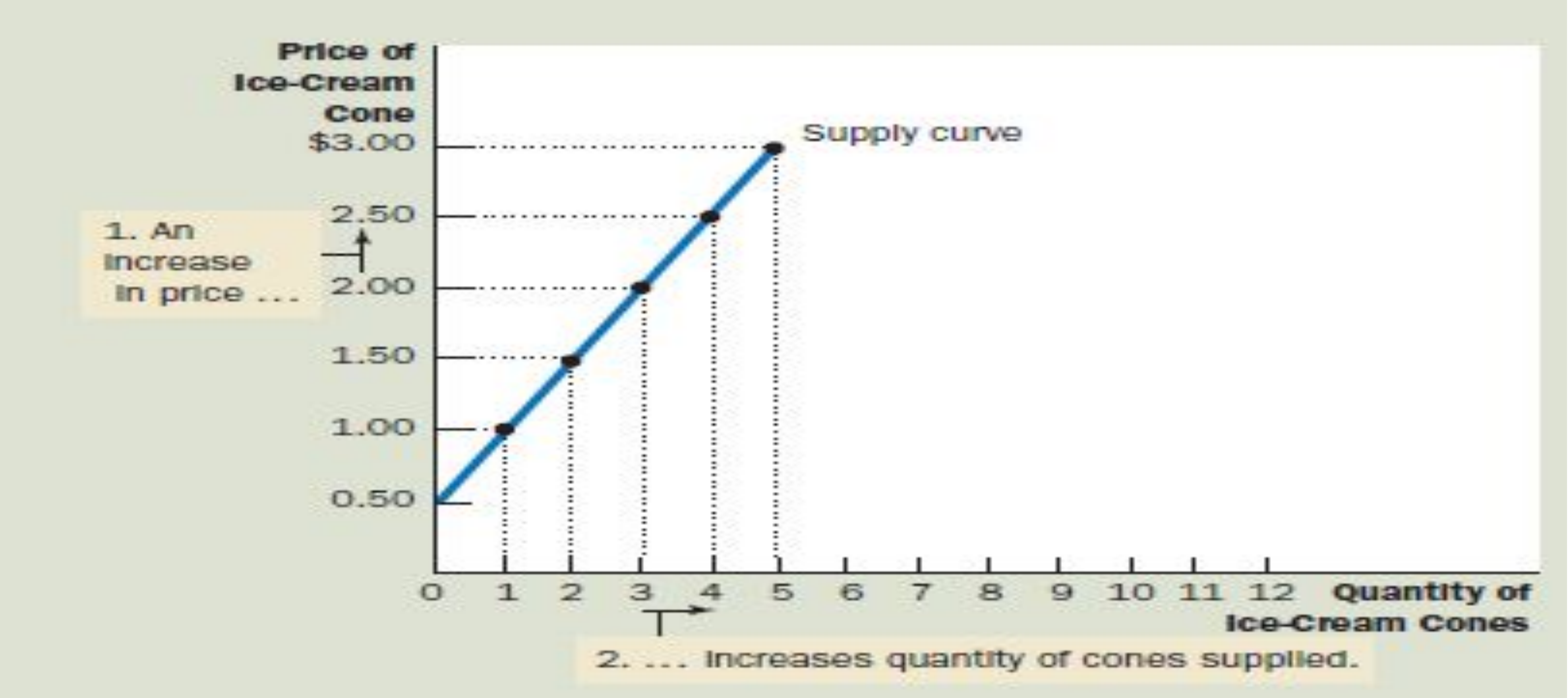
- **Supply schedule is a table that shows the relationship between the price of a good and the quantity supplied of that good.**

Ben's Supply Schedule and Supply Curve

Price of Ice-Cream Cone	Quantity of Cones Supplied
$0.00	0 cones
0.50	0
1.00	1
1.50	2
2.00	3
2.50	4
3.00	5

The Market Forces of Supply and Demand

- **Supply Curve**
- **Supply curve is a graph that shows the relationship between the price of a good and the quantity supplied of that good.**



The Market Forces of Supply and Demand

- **Determinants of Supply**
- **What factors determine how much ice cream will a producer supply?**

Movement Factor

- **Price of the good itself**

Shift Factors

- **Input prices**
- **Technology**
- **Govt. policy**
- **Expectations**
- **No. of sellers**
- **Natural Calamities**

The Market Forces of Supply and Demand

- **Determinants of Supply**
- **Table 2 lists the variables that influence how much producers choose to sell of a good.**

2 TABLE

Variables That Influence Sellers

This table lists the variables that affect how much producers choose to sell of any good. Notice the special role that the price of the good plays: A change in the good's price represents a movement along the supply curve, whereas a change in one of the other variables shifts the supply curve.

Variable	A Change in This Variable . . .
Price of the good itself	Represents a movement along the supply curve
Input prices	Shifts the supply curve
Technology	Shifts the supply curve
Expectations	Shifts the supply curve
Number of sellers	Shifts the supply curve

The Market Forces of Supply and Demand

Supply Function

- A supply function is a mathematical relationship between quantity supplied (dependent variable) and the determinants of supply (independent variables).

- Say, $Q_s = f(P)$

Where Q_s = Quantity supplied and P = Price of a good.

$$\text{Example:} Q_s = c + dP$$

$$Q_s = -2.5 + 5P$$

Where, c = $Autonomous\ supply\ and\ d = Slope\ coefficient$

The Market Forces of Supply and Demand

Supply Function

Example: $Q_s = -2.5 + 5P$

- Supply Schedule from a Supply Function

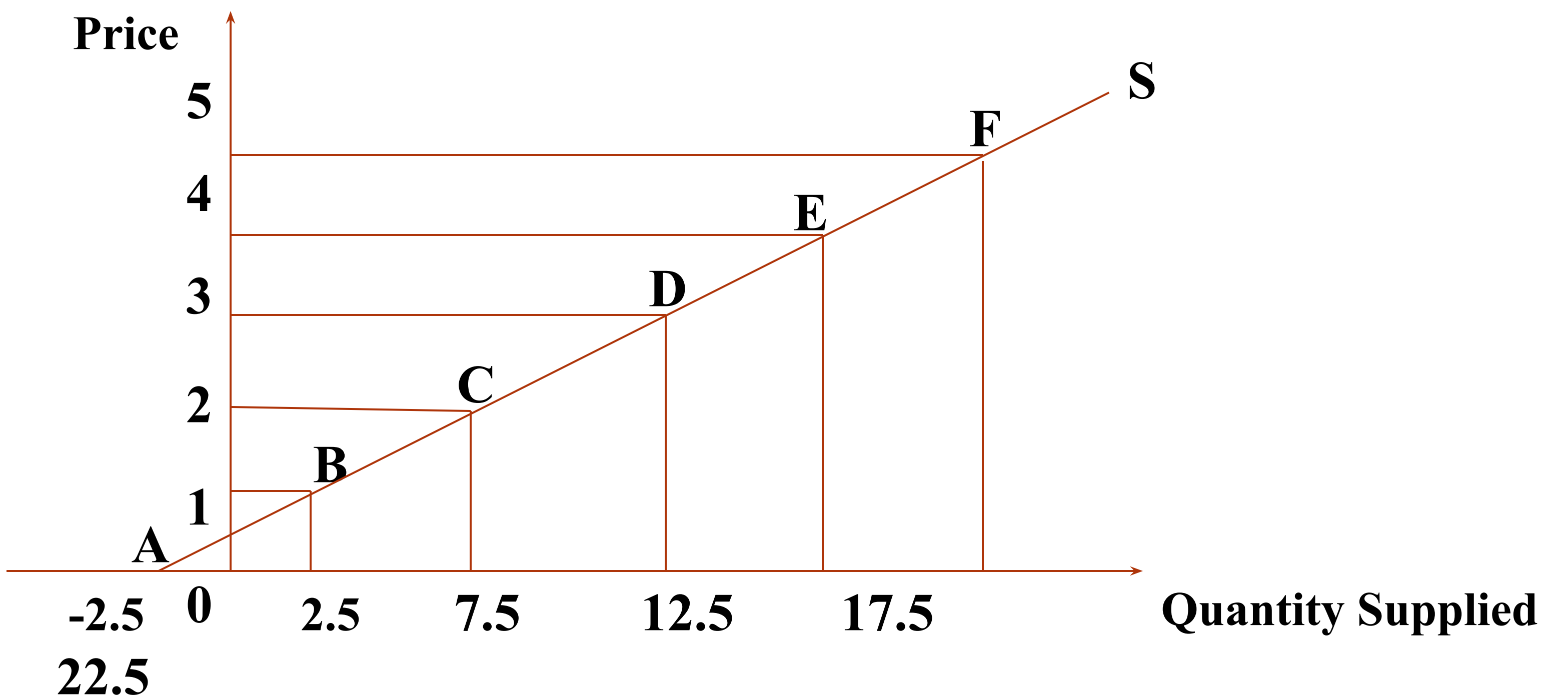
		Coordinate
0	-2.5	A
1	2.5	B
2	7.5	C
3	12.5	D
4	17.5	E
5	22.5	F

The Market Forces of Supply and Demand

- **Supply Function**

Example: $Q_s = -2.5 + 5P$

- **Supply Curve from a Supply Function**



Readings

- **N. G. Mankiw- Principles of Microeconomics, 5th Edition, Chapter – 4.**

- **Michael Parkin - Microeconomics, 10th Edition (Pearson Series in Economics) - Prentice Hall (2011), Chapter – 3.**


ANY
QUESTIONS?

Thank You