

Supply

# Supply

- Individuals control the factors of production – inputs, or resources, necessary to produce goods.
- Individuals supply factors of production to intermediaries or firms.

# Supply

- The analysis of the supply of produced goods has two parts:
  - An analysis of the supply of the factors of production to households and firms.
  - An analysis of why firms transform those factors of production into usable goods and services.

# The Law of Supply

- There is a direct relationship between price and quantity supplied.
  - Quantity supplied rises as price rises, other things constant.
  - Quantity supplied falls as price falls, other things constant.

# Law of Supply

- **Law of Supply**

- As the price of a product rises, producers will be willing to supply more.
- The height of the supply curve at any quantity shows the **minimum price** necessary to induce producers **to supply** that next unit to market.
- The height of the supply curve at any quantity also shows the **opportunity cost of producing the next unit** of the good.

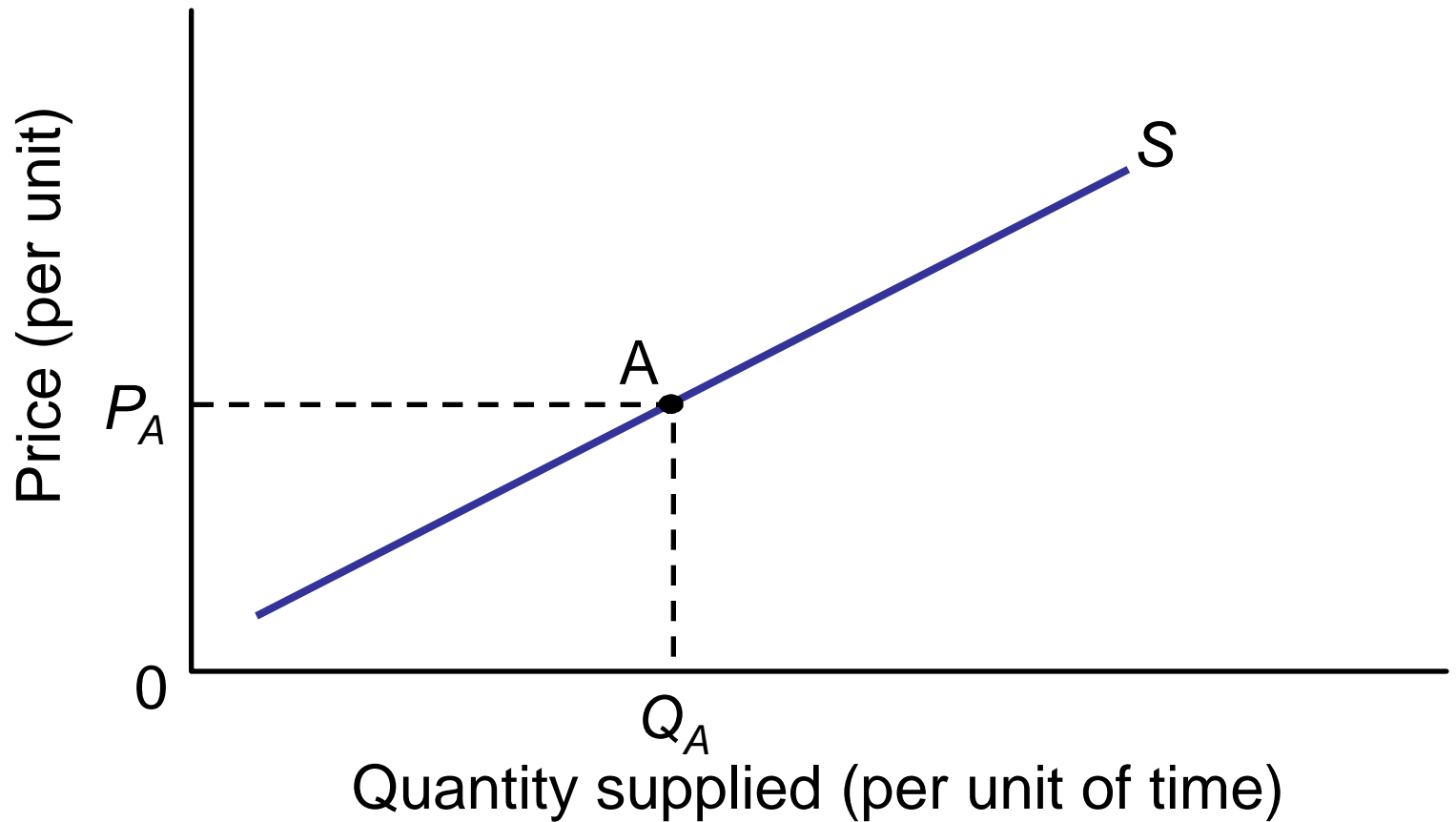
# The Law of Supply

- The law of supply is accounted for by two factors:
  - When prices rise, firms substitute production of one good for another.
  - Assuming firms' costs are constant, a higher price means higher profits.

# The Supply Curve

- The supply curve is the graphic representation of the law of supply.
- The supply curve slopes upward to the right.
- The slope tells us that the quantity supplied varies directly – in the same direction – with the price.

# A Sample Supply Curve

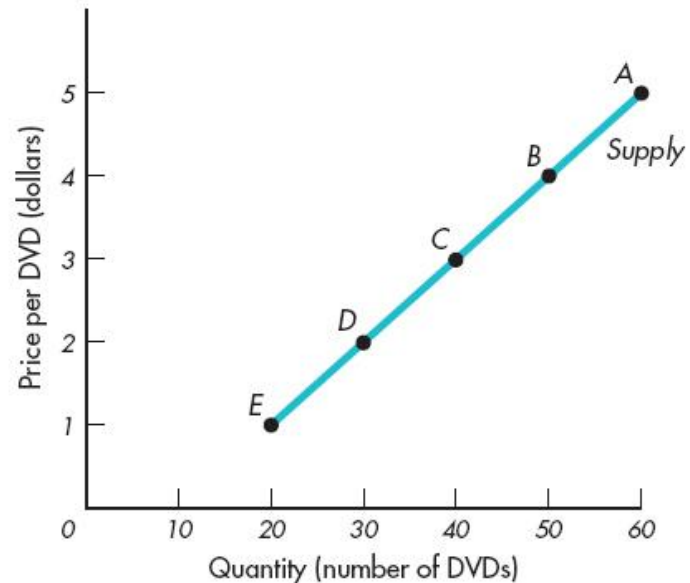




# Supply Curve DVDs

**FIGURE 6** NetRent's Supply Schedule and Supply Curve for DVDs

Combination	Price per DVD (constant-quality units)	Quantity Supplied per Week (constant-quality units)
A	\$5	60
B	\$4	50
C	\$3	40
D	\$2	30
E	\$1	20



The quantity that NetRent is willing and able to offer for sale at each price is listed in the supply schedule and shown on the supply curve. At point A, the price is \$5 per DVD and the quantity supplied is 60 DVDs. The combination of \$4 per DVD and 50 DVDs is point B. Each price-quantity combination is plotted, and the points are connected to form the supply curve.

# Shifts in Supply Versus Movements Along a Supply Curve

- Supply refers to a schedule of quantities a seller is willing to sell per unit of time at various prices, other things constant.

# Shifts in Supply Versus Movements Along a Supply Curve

- ***Quantity supplied*** refers to a specific amount that will be supplied at a specific price.

# Shifts in Supply Versus Movements Along a Supply Curve

- Changes in price causes changes in quantity supplied represented by a movement along a supply curve.

# Shifts in Supply Versus Movements Along a Supply Curve

- A ***movement along a supply curve*** – the graphic representation of the effect of a change in price on the quantity supplied.

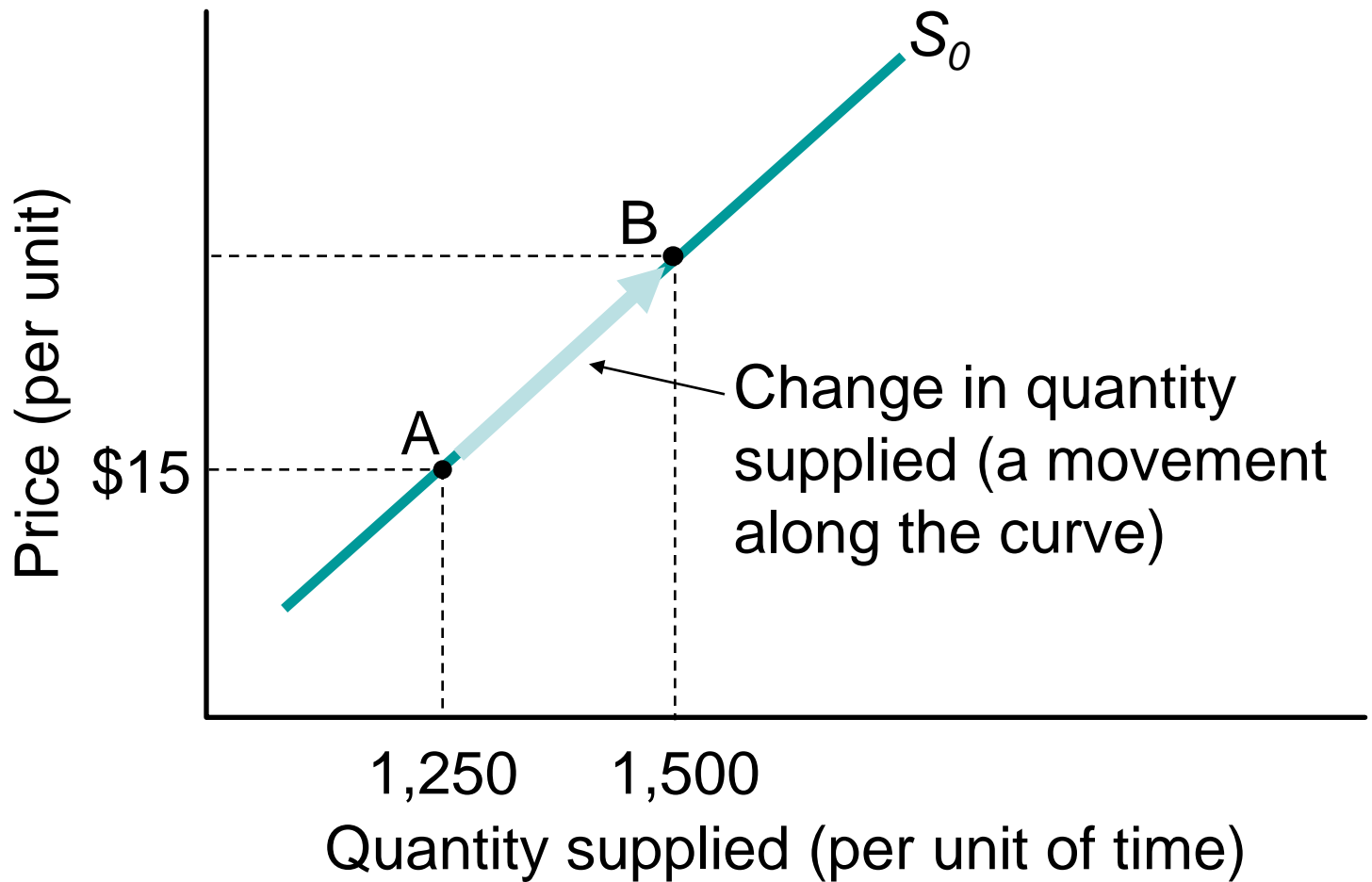
# Shifts in Supply Versus Movements Along a Supply Curve

- If the amount supplied is affected by anything other than a change in price, there will be a shift in supply.

# Shifts in Supply Versus Movements Along a Supply Curve

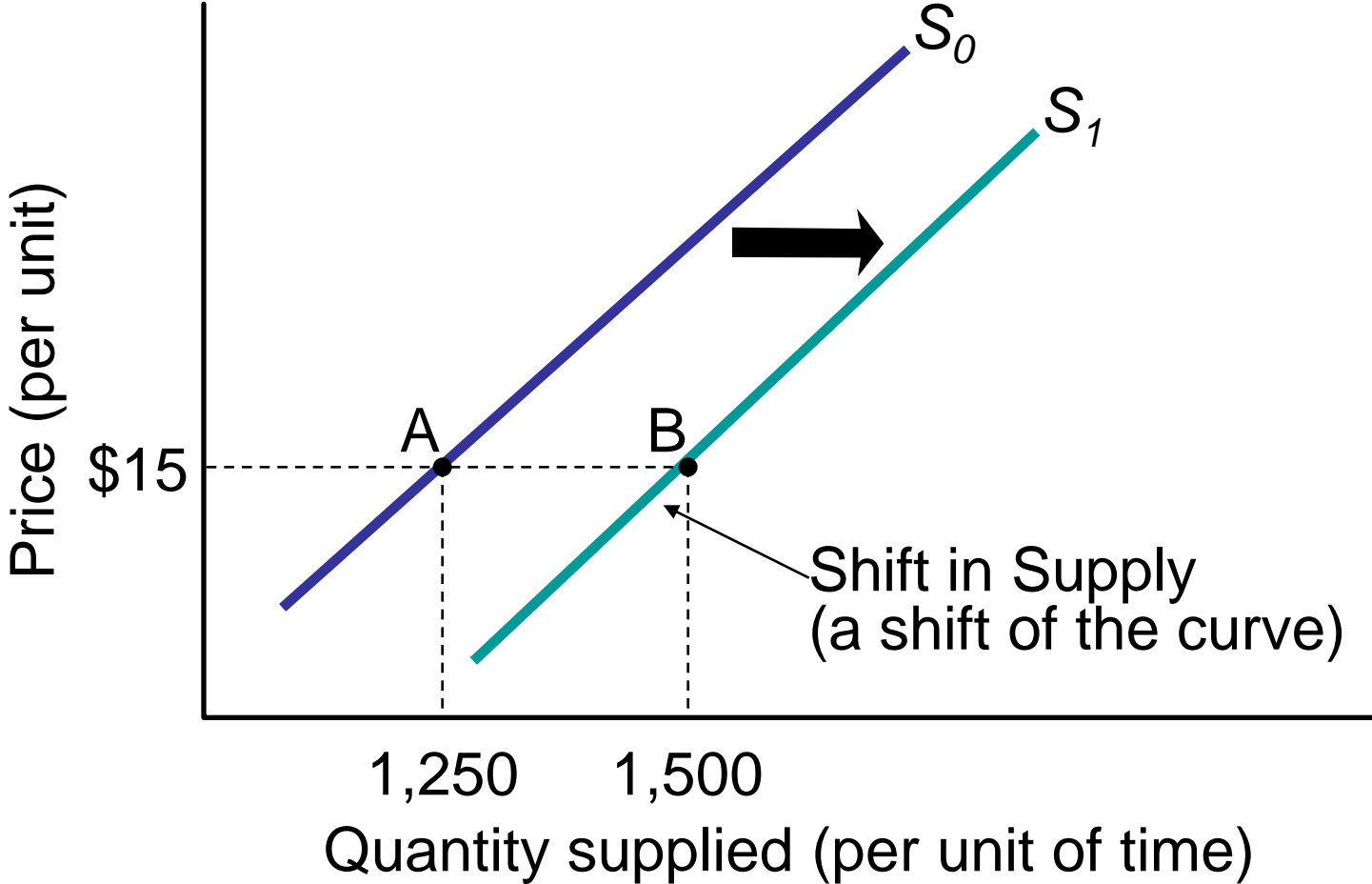
- ***Shift in supply*** – the graphic representation of the effect of a change in a factor other than price on supply.

# Change in Quantity Supplied





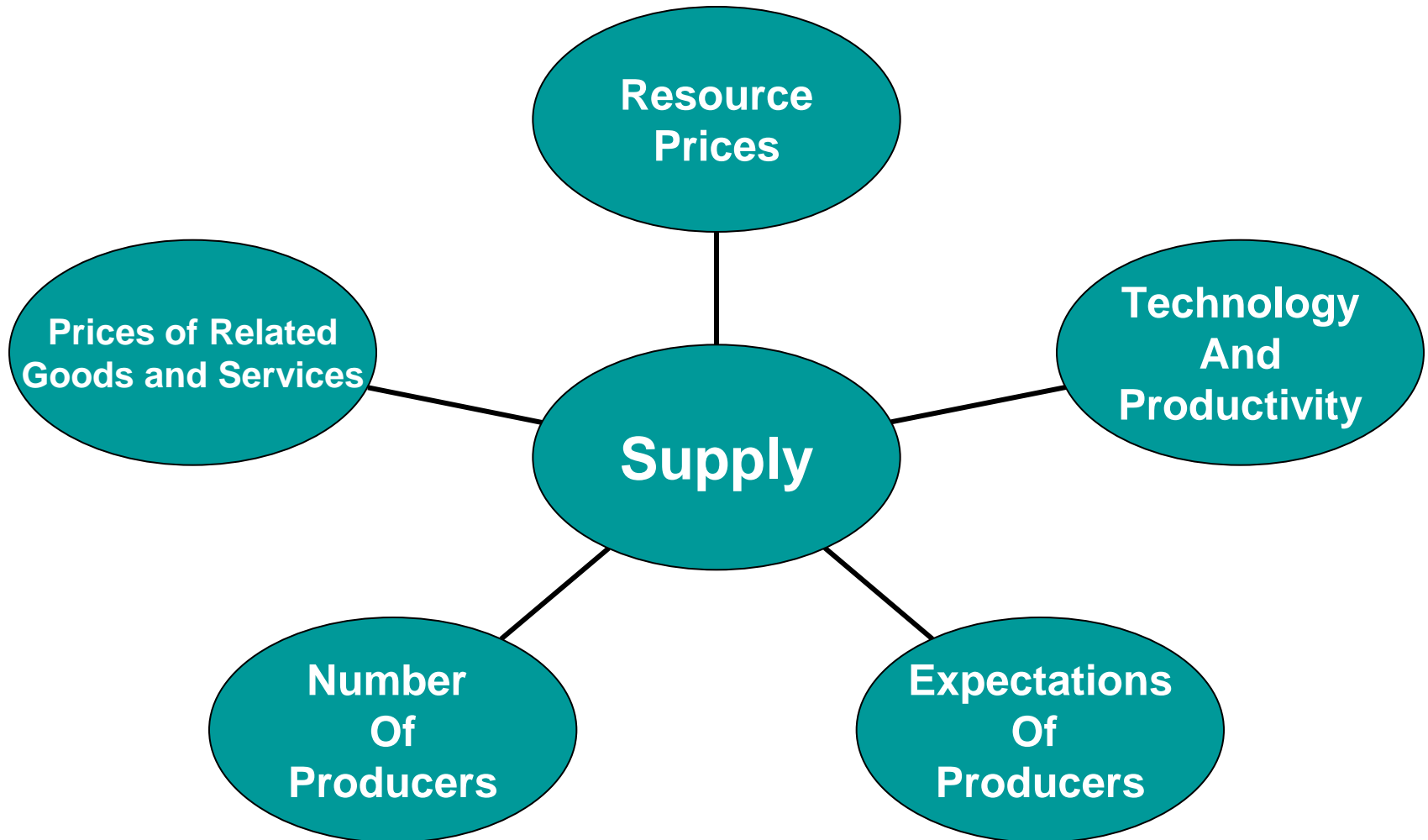
# Shift in Supply



# Shift Factors of Supply

- Other factors besides price affect how much will be supplied:
  - Prices of inputs used in the production of a good.
  - Technology.
  - Suppliers' expectations.
  - Taxes and subsidies.

# Factors that Shift Supply



# Price of Inputs (Resource Prices)

- When costs go up, profits go down, so that the incentive to supply also goes down.

# Technology

- Advances in technology reduce the number of inputs needed to produce a given supply of goods.
- Costs go down, profits go up, leading to increased supply.

# Expectations

- If suppliers expect prices to rise in the future, they may store today's supply to reap higher profits later.

# Number of Suppliers

- As more people decide to supply a good the market supply increases (Rightward Shift).

# Individual and Market Supply Curves

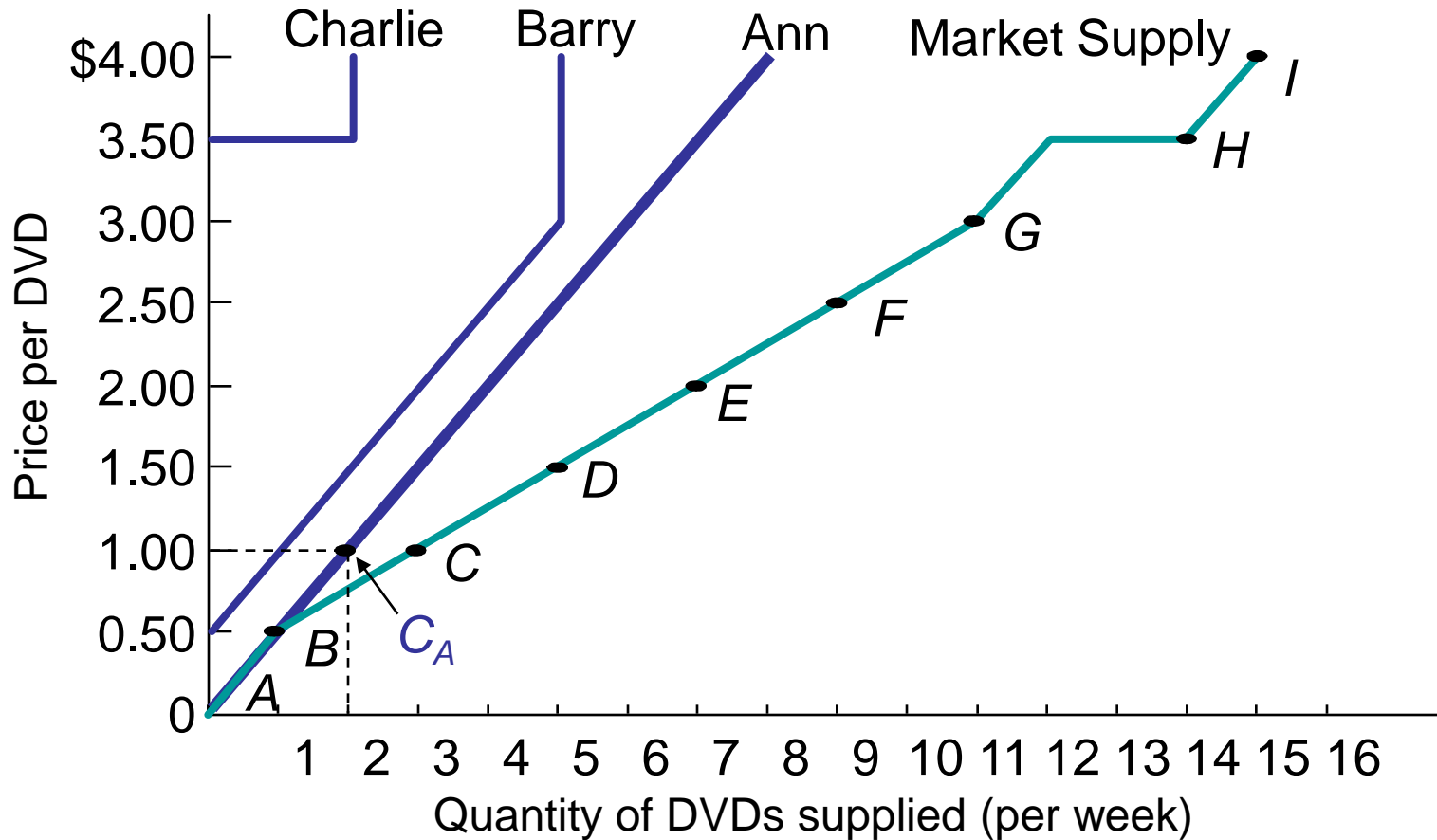
- The *market supply curve* is derived by horizontally adding the individual supply curves of each supplier.



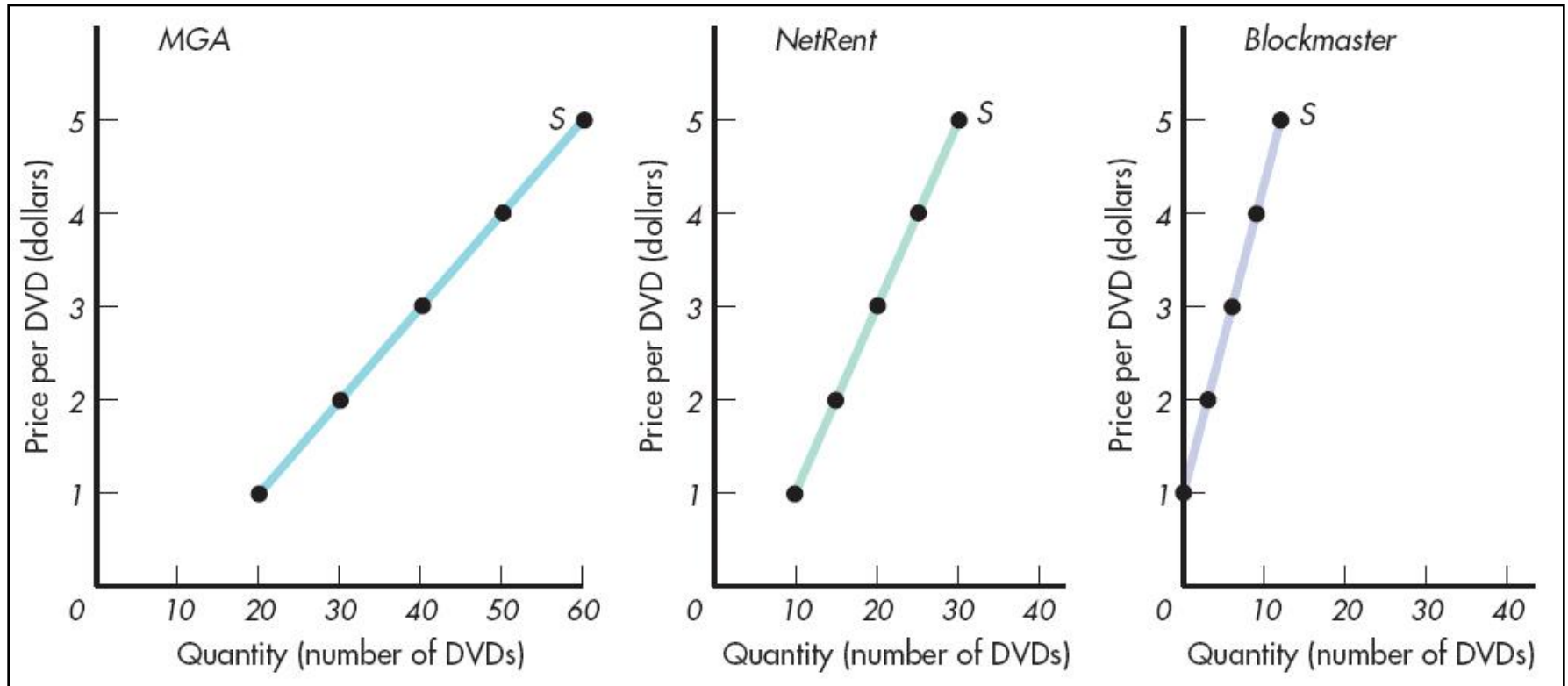
# From Individual Supplies to a Market Supply

	(1)	(2)	(3)	(4)	(5)
Quantities Supplied	Price (per DVD)	Ann's Supply	Barry's Supply	Charlie's Supply	Market Supply
<i>A</i>	\$0.00	0	0	0	0
<i>B</i>	0.50	1	0	0	1
<i>C</i>	1.00	2	1	0	3
<i>D</i>	1.50	3	2	0	5
<i>E</i>	2.00	4	3	0	7
<i>F</i>	2.50	5	4	0	9
<i>G</i>	3.00	6	5	0	11
<i>H</i>	3.50	7	5	2	14
<i>I</i>	4.00	8	5	2	15

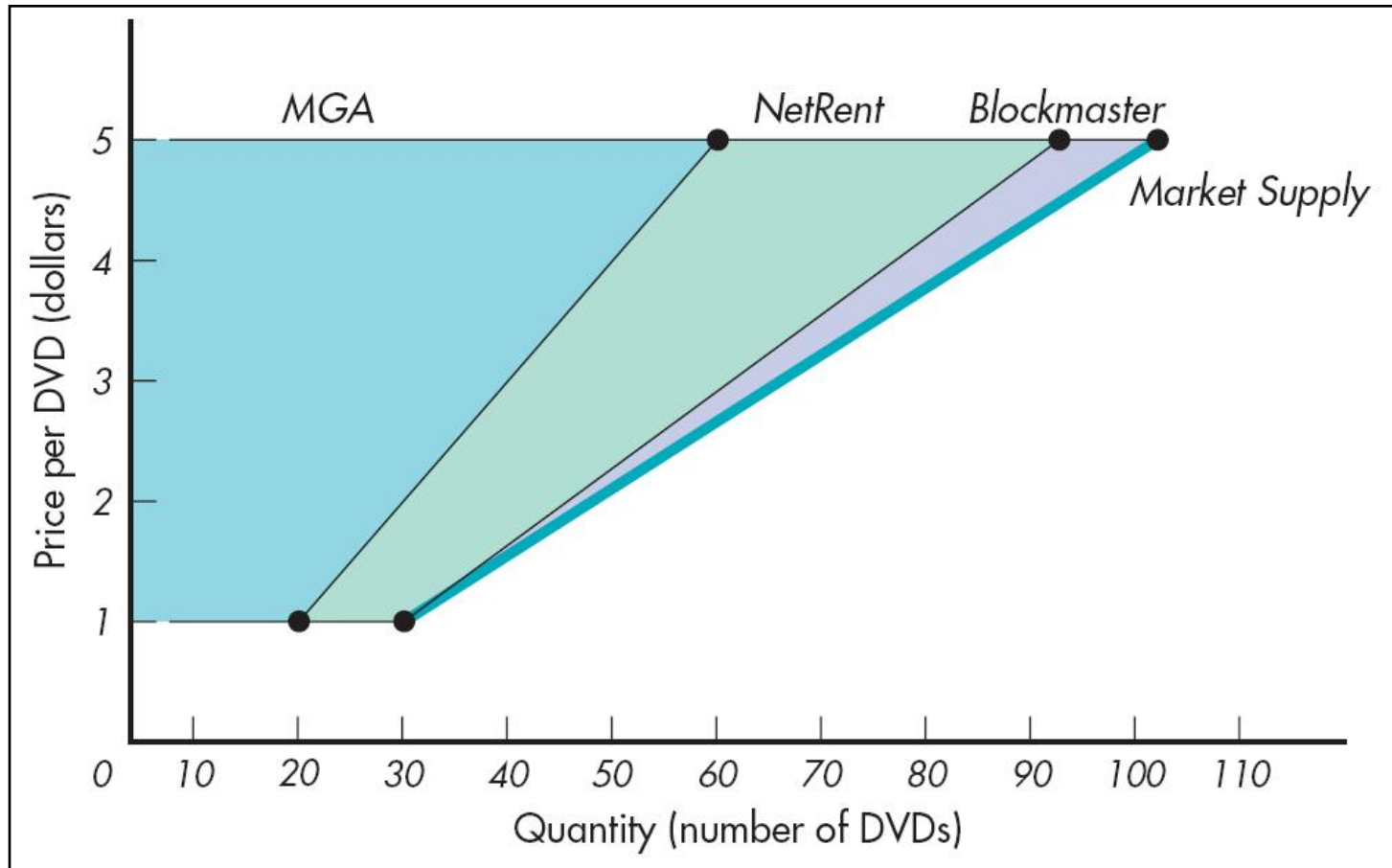
# From Individual Supplies to a Market Supply



# Aggregation of Supply (I)



# Aggregation of Supply (II)



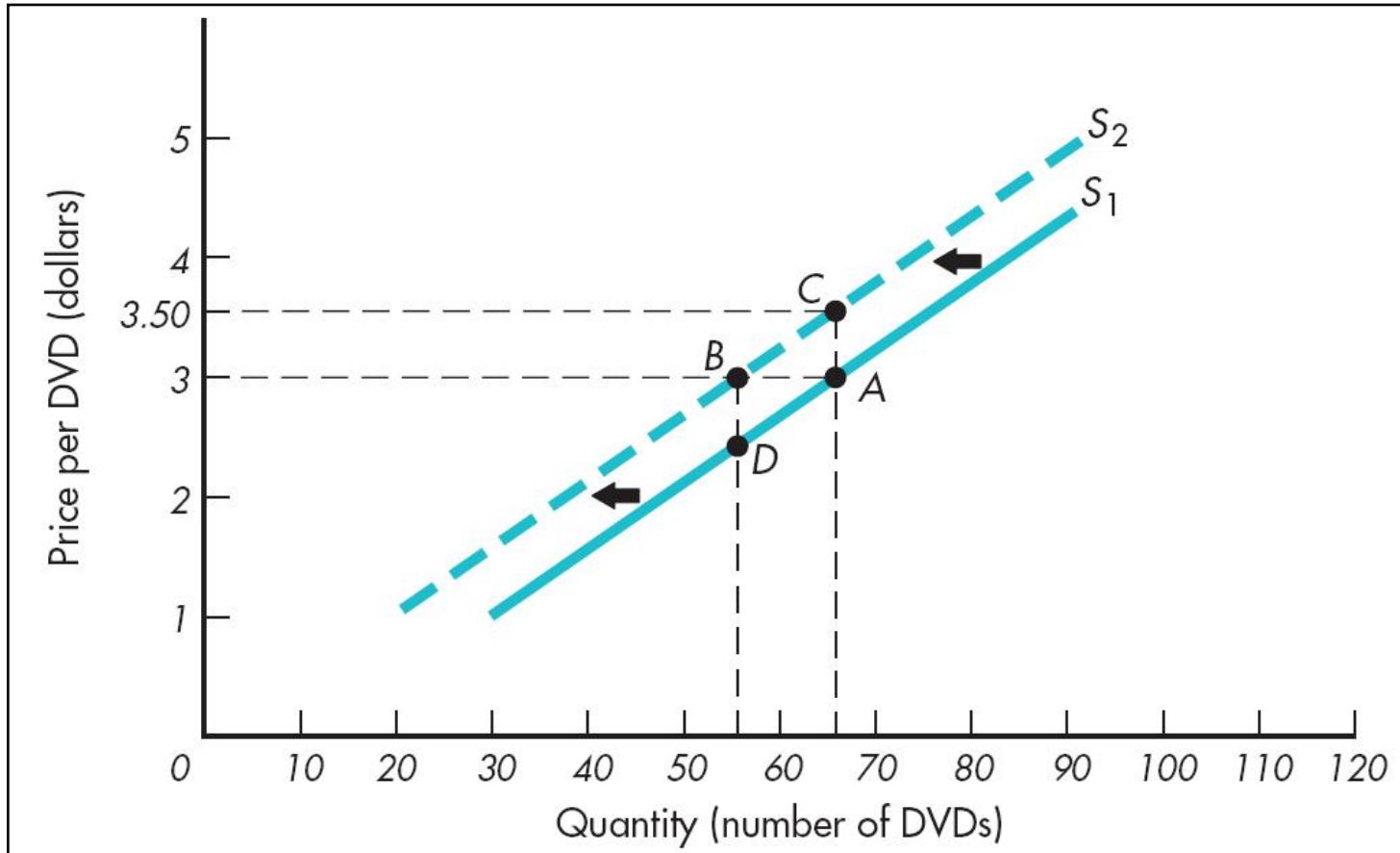
# Price of Related Goods or Services

- The opportunity cost of producing and selling any good is the forgone opportunity to produce another good.
- If the price of alternate good changes then the opportunity cost of producing changes too!
- Example Mc Don selling Hamburgers vs. Salads.

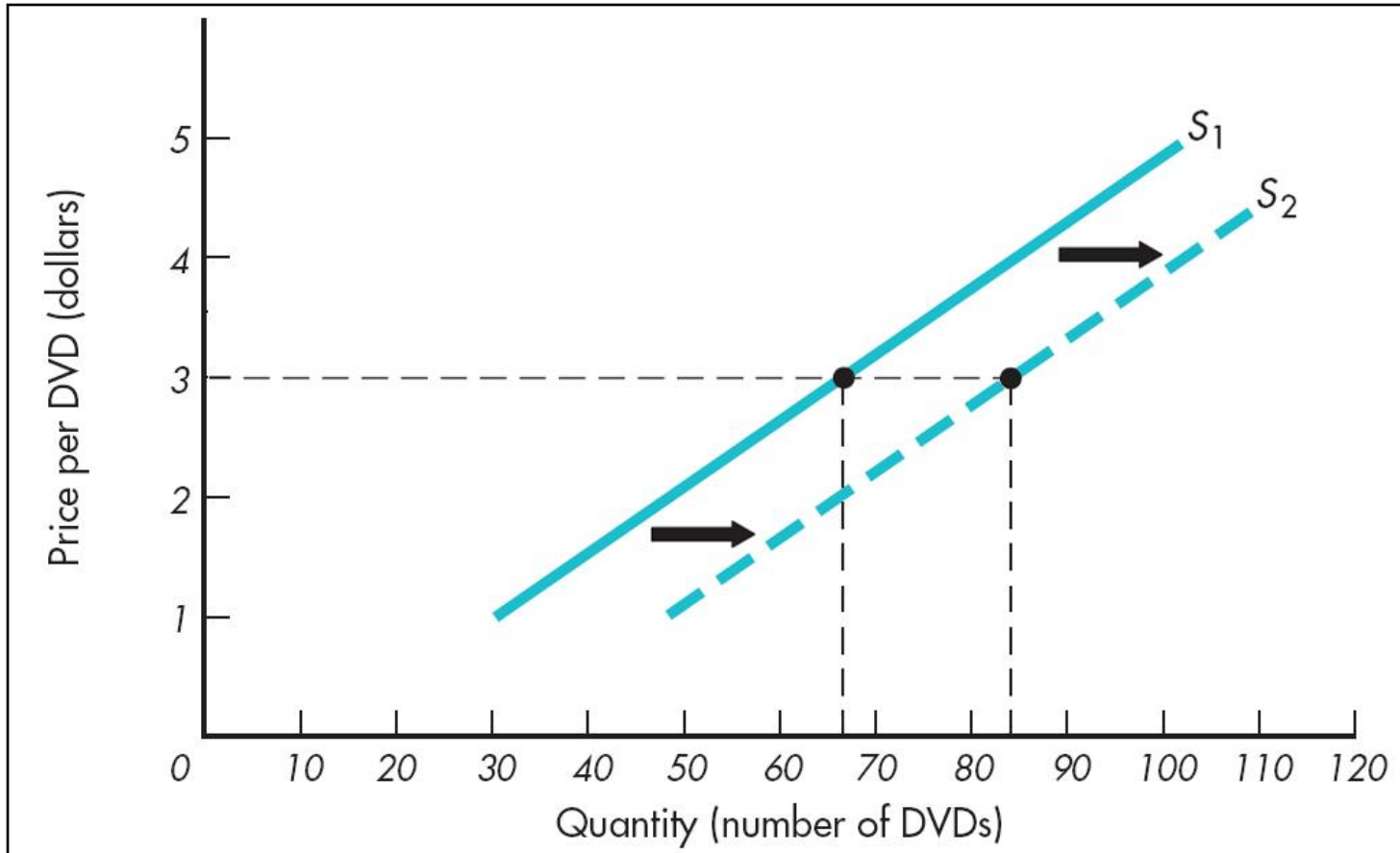
# Taxes and Subsidies

- When taxes go up, costs go up, and profits go down, leading suppliers to reduce output.
- When government subsidies go up, costs go down, and profits go up, leading suppliers to increase output.

# Decrease in Supply



# Increase in Supply



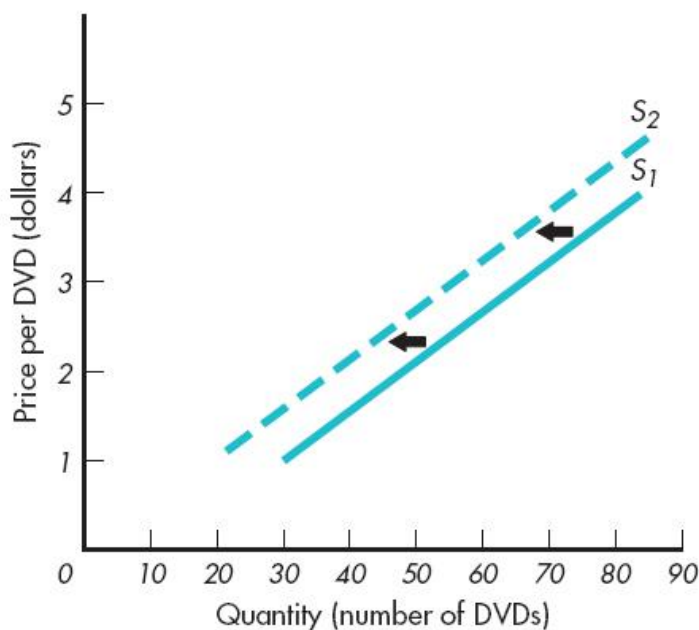


# Change in Supply vs. a Change in the Quantity Supplied

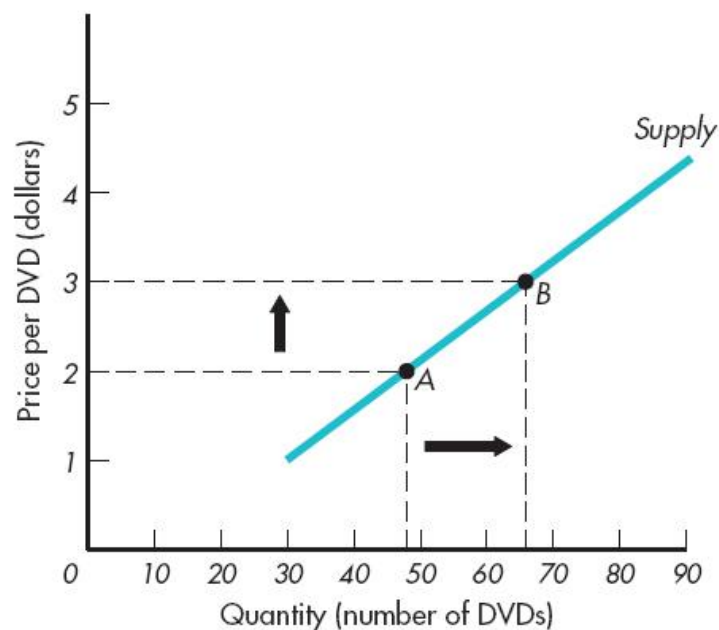
**FIGURE 9**

**A Change in Supply and a Change in the Quantity Supplied**

(a) Change in Supply



(b) Change in Quantity Supplied



In Figure 9(a), the quantities that producers are willing and able to offer for sale at every price decrease, causing a leftward shift of the supply curve from  $S_1$  to  $S_2$ . In Figure 9(b), the quantities that producers are willing and able to offer for sale increase, because of an increase in the price of the good, causing a movement along the supply curve from point A to point B.