Law of Supply

Background Story

Popcorn has been a popular snack food since long before Columbus came to America.

Corn is also fed to cattle and pigs for beef and pork production.

Increasingly, corn is also used to produce ethanol, an additive to gasoline and an alternative fuel for cars.

Farmers in every state except Alaska and Hawaii grow large quantities of corn.

Background Story

Between 2005 and 2008, the price of corn tripled from about $2 per bushel to more than $6 per bushel.

As a result, farmers found it more profitable to grow corn than other crops.

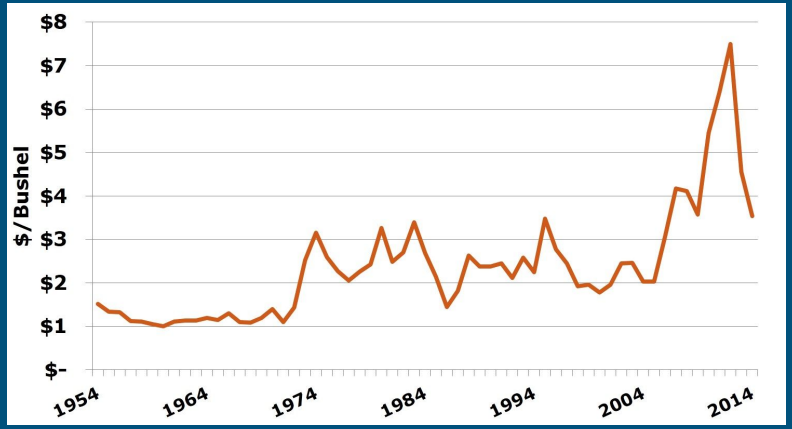
Many farmers stopped growing wheat and instead planted corn.

Some land that was being used to grow crops were planted with corn seed.

Farms also applied more fertilizer to existing corn fields and used better seeds to increase their yields.

Background Story

All of these efforts caused the quantity of corn supplied in the market to increase by 25% in just a few years.



BOTTOM LINE:

Firms strive to make as much profit as possible. To do so, they adjust the quantity of the good or service they produce in response to changes in either the price at which it can be sold or the cost of producing it.

Law of Supply

An increase in the price of a good leads to an increase in the quantity supplied.

- Quantity supplied is the amount of a good that firms are willing to supply at a particular price over a given period of time.
- Why are firms willing to produce more? Because as production increase, the cost of making each additional unit generally rises, so it takes a higher price to cover the cost of making additional units.
- Just like with demand, the law of supply holds when only the price of the good changes.

Supply Schedule

A table listing the quantity of the good that will be supplied at specified prices.

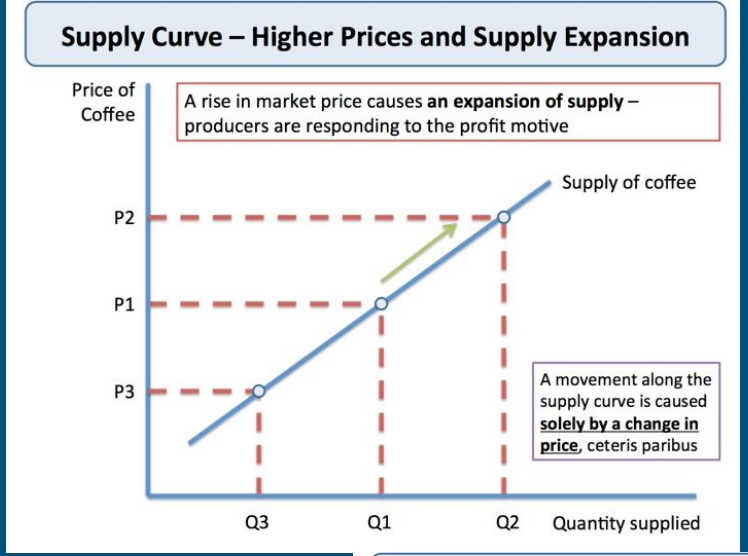
Average Price of a Gallon of Milk (dollars)	Quantity of Milk Supplied Per Week (thousands of gallons)
0	0
2.40	76
3.00	95
3.60	114
4.20	133

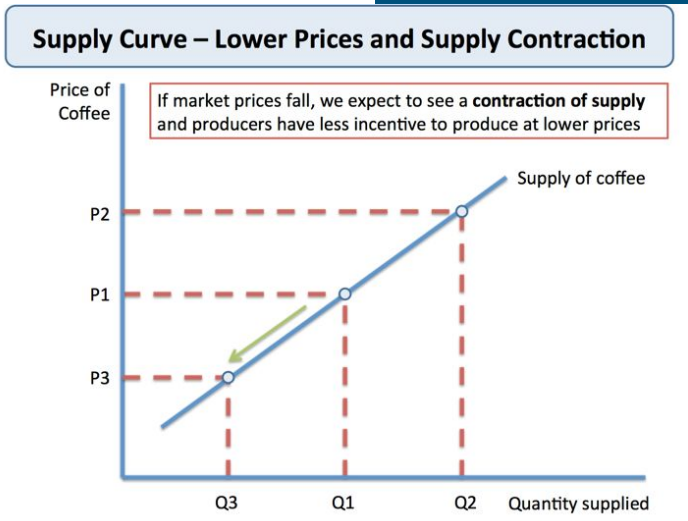
Supply Curve

A graphical representation of the supply schedule, showing the quantity the firm will supply at each price.

Just like with the demand curve, supply curves can be straight or curved depending on the data used.

Slopes upward from left to right.

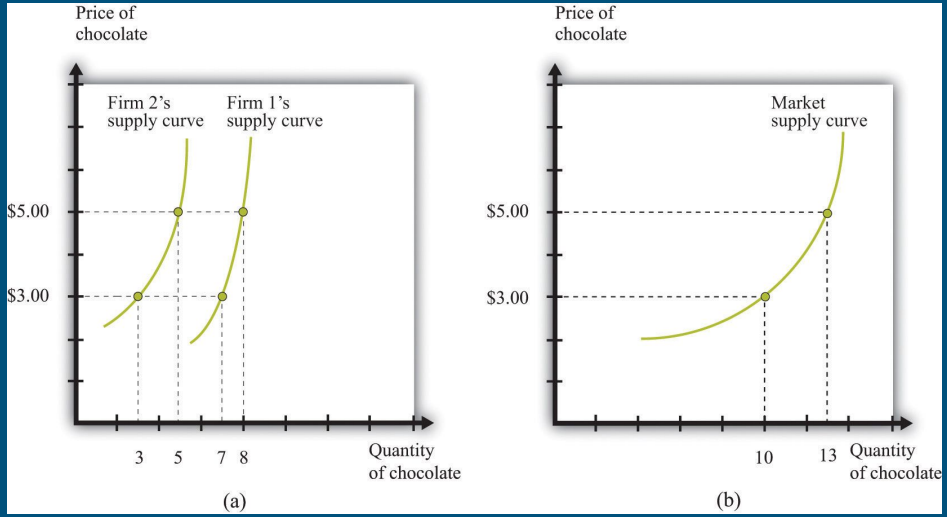




Market Supply Curve

Supply curves can represent just one firm or the entire market for a product.

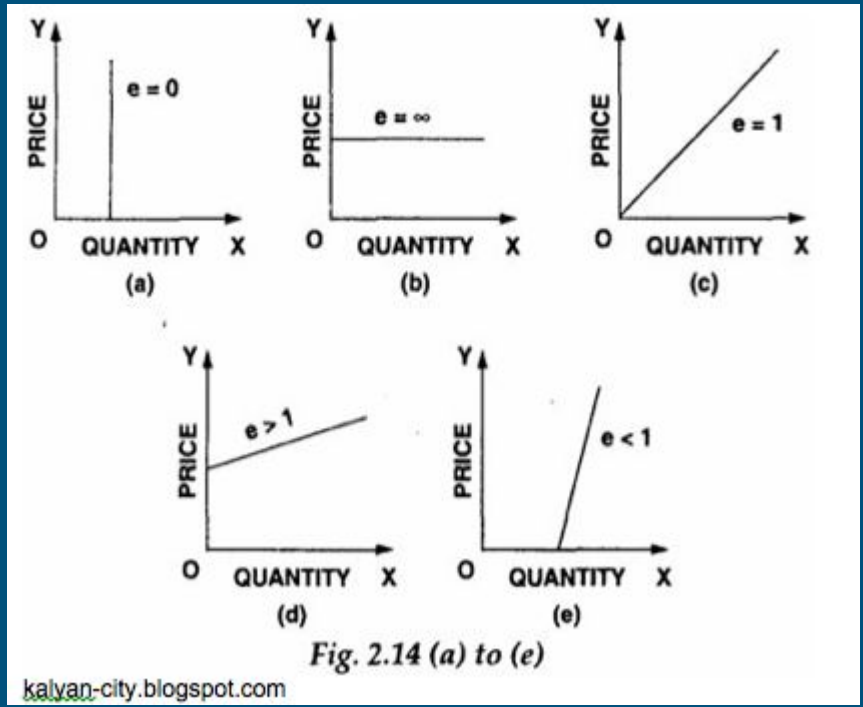
Market supply curves reflect the quantity supplied at various prices by all firms in the market.



Elasticity of Supply

A measure of the responsiveness of the quantity supplied to price changes.

Calculated by dividing the percentage change in the quantity supplied by the percentage change in price.



Inelastic Supply

Elasticity < 1

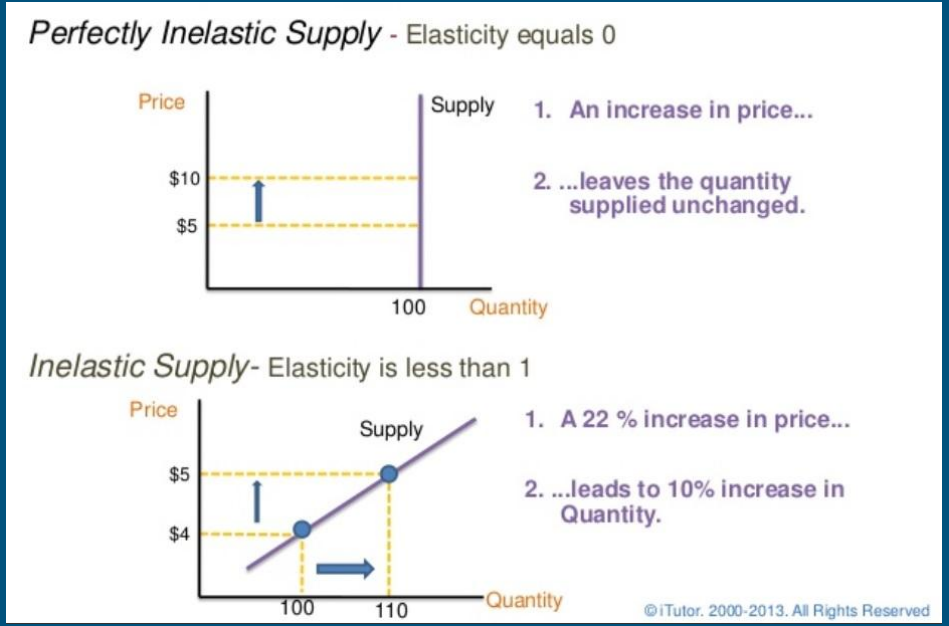
Quantity supplied is NOT very sensitive to price changes.

Steeper sloping curve

Perfectly Inelastic

Elasticity = 0

Vertical Supply curve

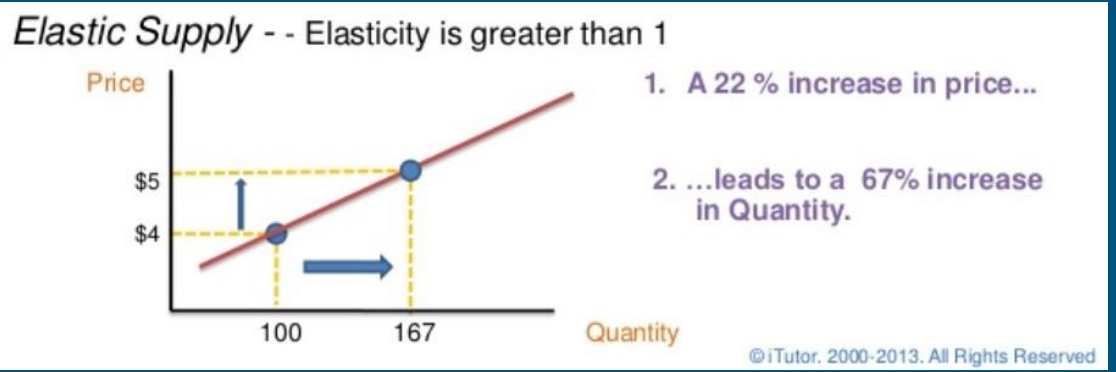


Elastic Supply

Elasticity > 1

Quantity supplied is VERY sensitive to price changes.

Flatter sloping curve

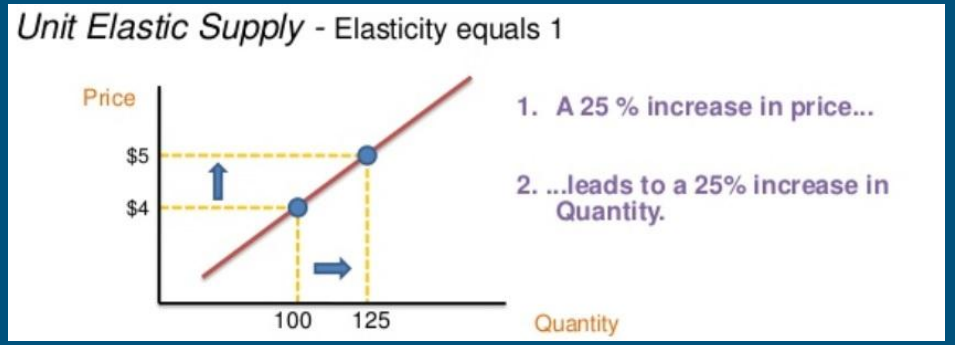


Unit-Elastic Supply

Elasticity = 1

Quantity supplied is moderately sensitive to price changes.

45 degree curve



What determines the elasticity of supply?

Production Costs

When it is difficult or expensive to make more of something, supply will be inelastic.

EXAMPLE: Gold or houses

If it is cheap and easy to produce more, supply will be elastic.

EXAMPLE: T-shirts or cookies

Time

In the short term, it's difficult for firms to adjust production so supply will be inelastic.

The more time firms have to adjust their production, the more elastic supply becomes.