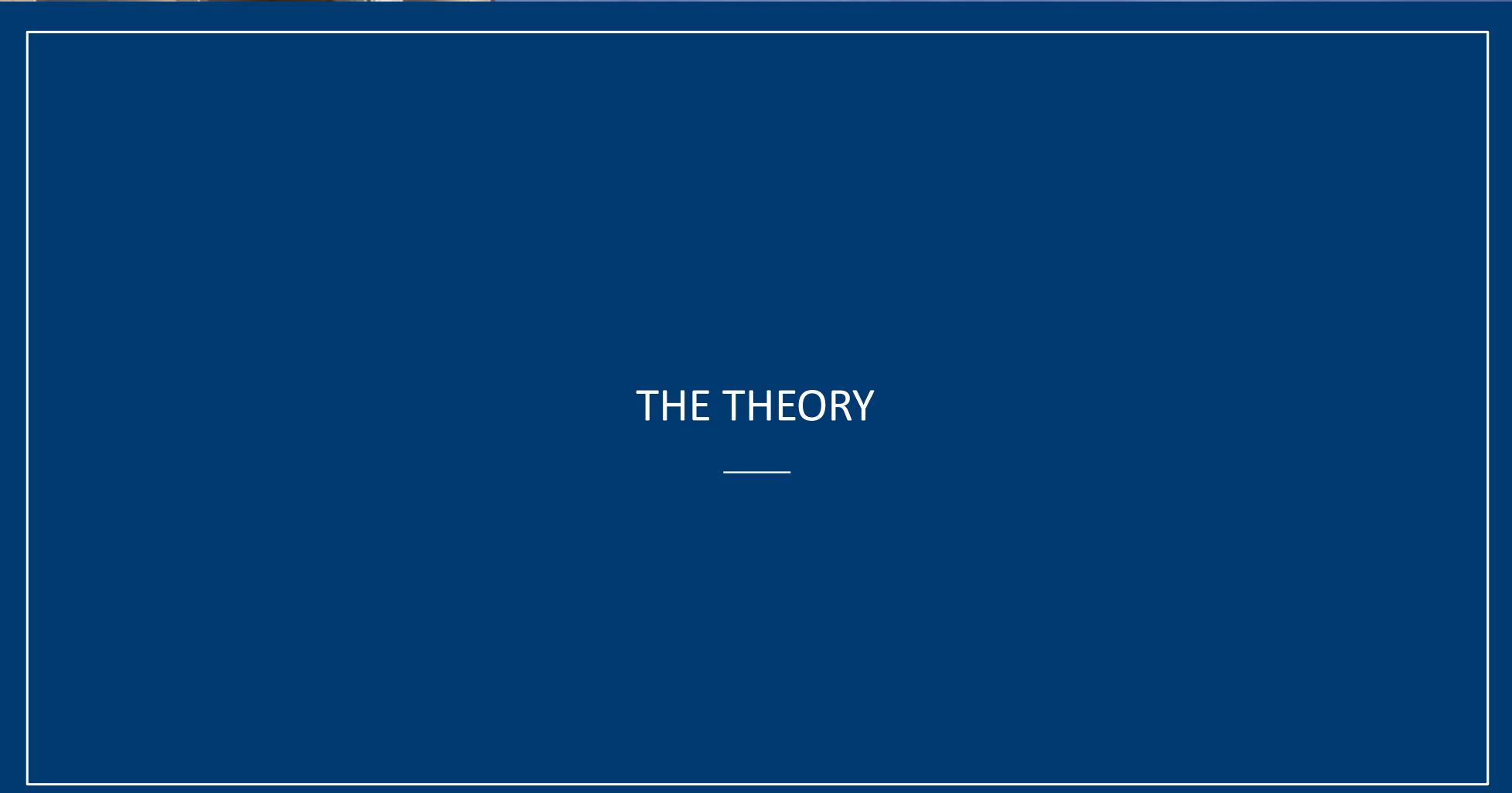




How Markets Work – The Basics

Session 2 – Managerial Economics – Pr. Jeremy Ghez (ghez@hec.fr)

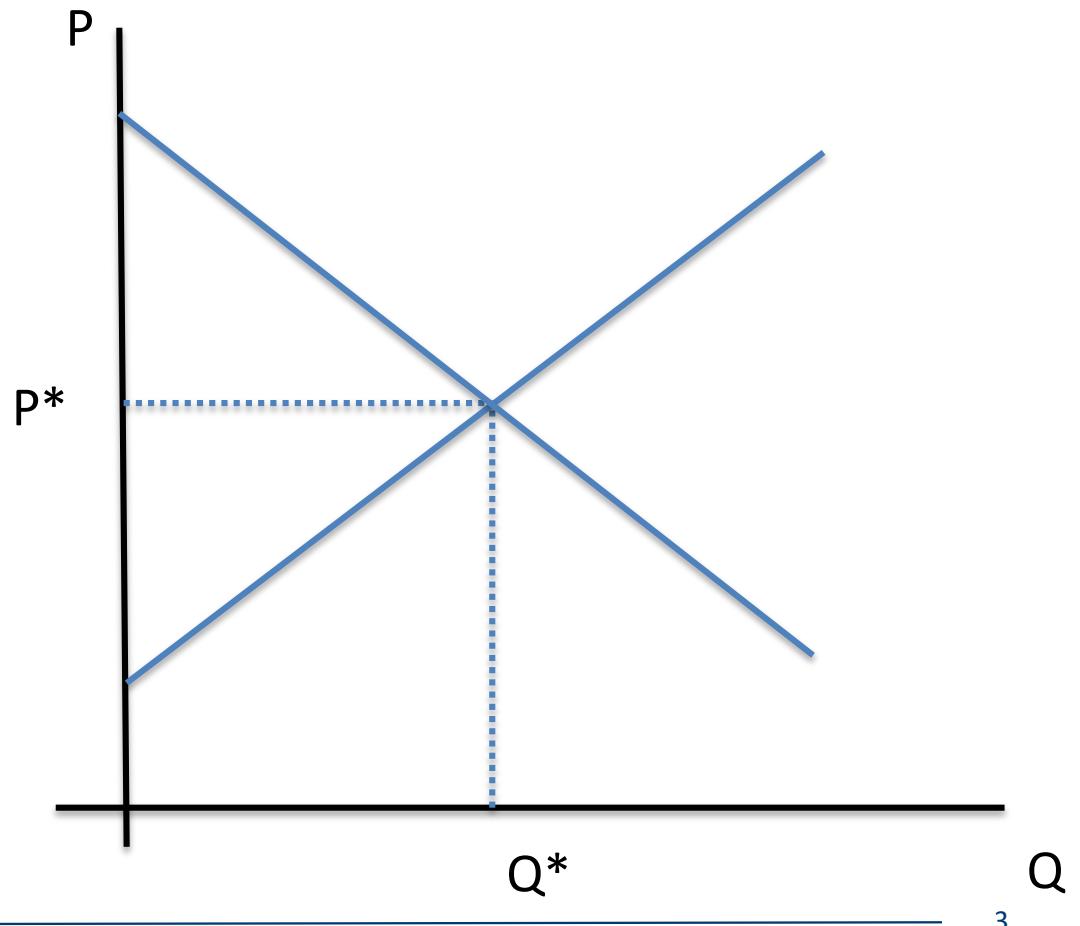


THE THEORY

THE MARKET: WHERE DEMAND MEETS SUPPLY

We need to understand how markets work

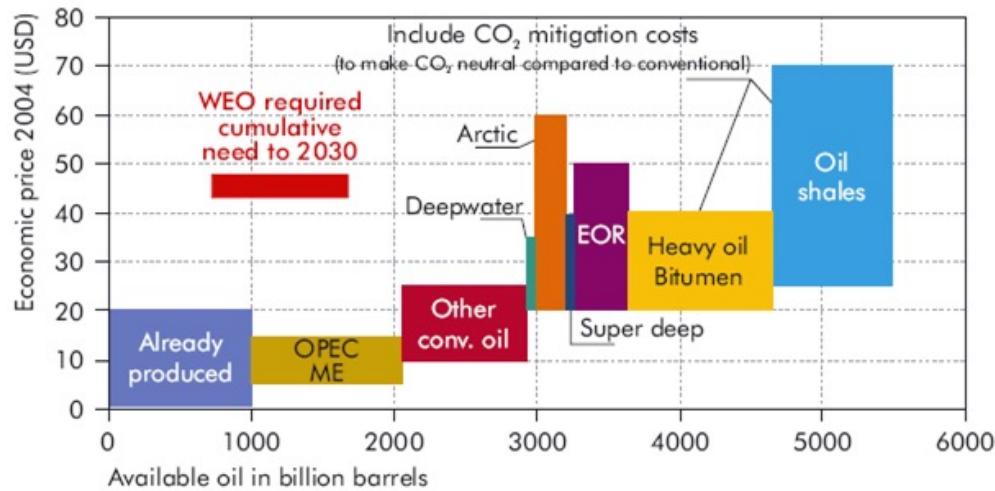
This means introducing ourselves to demand, to supply and putting them both in the same graph...



WHAT DRIVES SUPPLY?

Considering the shale revolution in the US

What made it possible?



Source: IEA.

WHAT DRIVES SUPPLY?

Introducing the “supply function”

The **supply function** relates supply of a good to its determinants (drivers): It translates the relationship between supply of the good and its price, the number of firms, cost of inputs (including labor) and productivity changes.

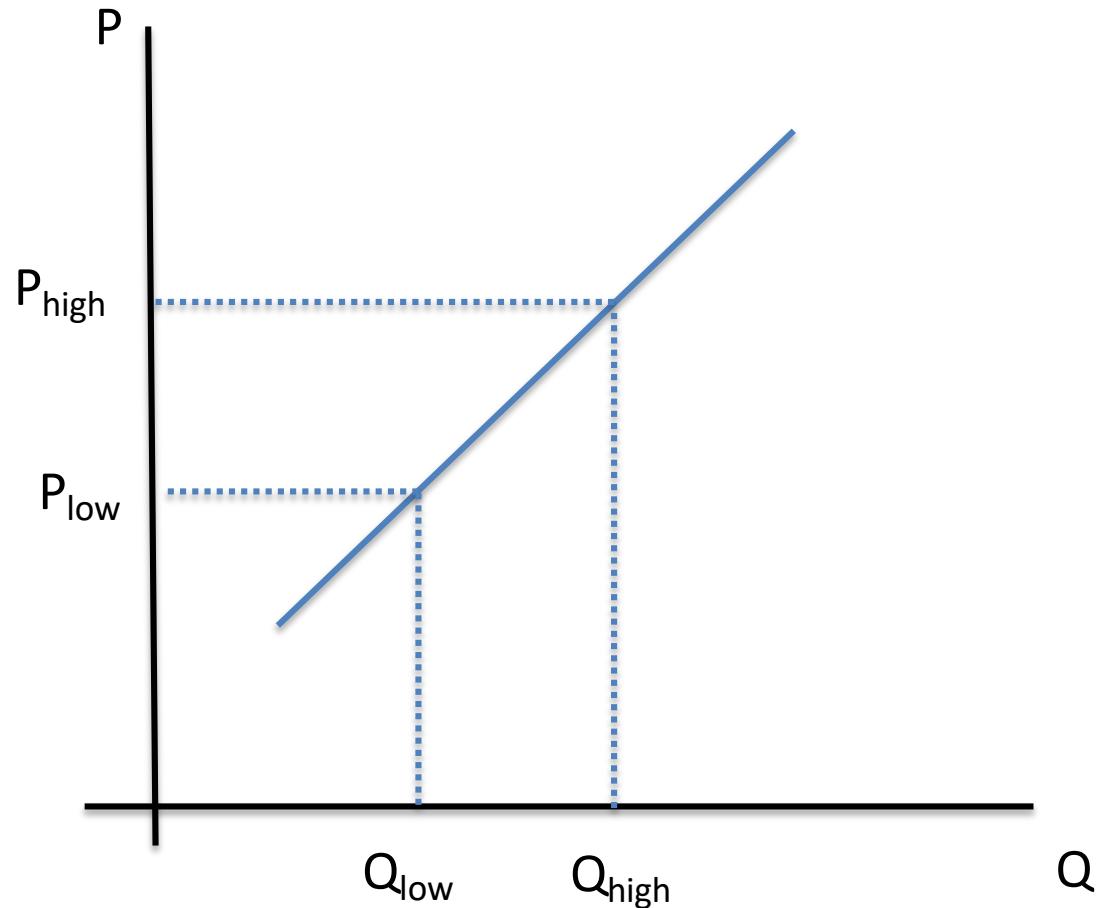
$$\text{Supply} = f(p, \#, i, \Delta)$$

WHAT DRIVES SUPPLY?

Introducing the “supply curve”

The **supply curve** displays the relationship between supply of the good and price, *all else remaining equal* – namely: no change in the number of firms, in the cost of inputs or in productivity.

The supply curve illustrates the law of supply which states that at a lower price, the number of actors willing and able to supply will be lower than when the price is high.



WHAT DRIVES SUPPLY?

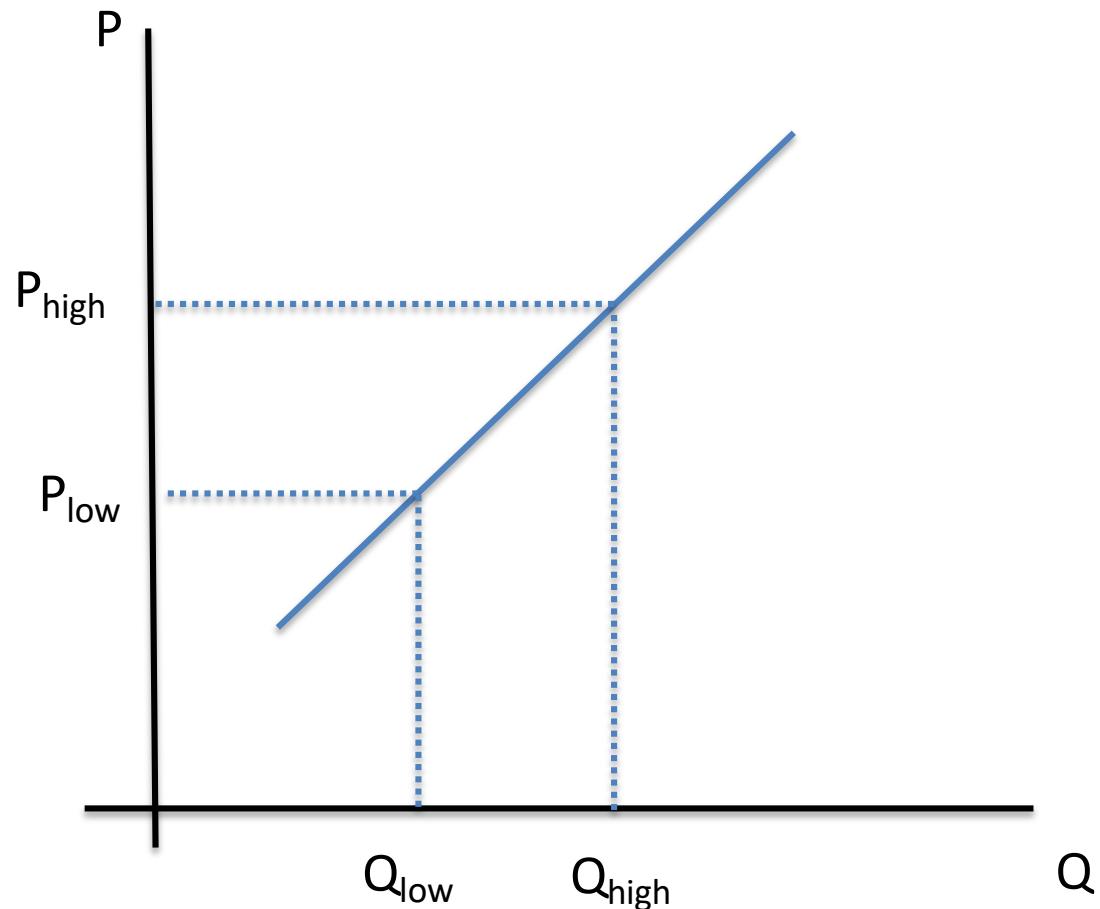
Is it linear?

Same as the demand curve. We will assume it is because even if we did not, we would just complicate calculations without any additional business insights.

This means that the generic supply curve looks like:

✓ $P = c + dQ$

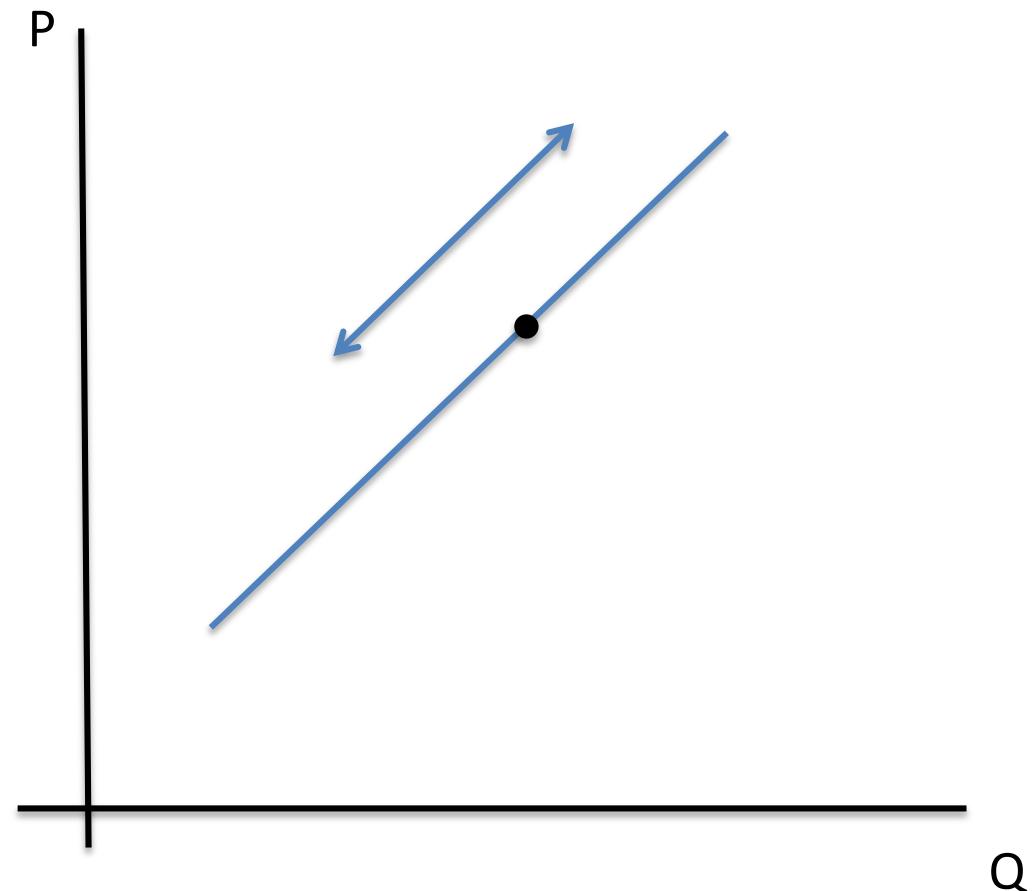
Parameters c and d are considered as given, though there are ways in practice to estimate these at the industry level especially.



WHAT DRIVES SUPPLY?

Movements matter

Movement **along the curve** (up and down) means that the price of the good is changing (going up and going down).

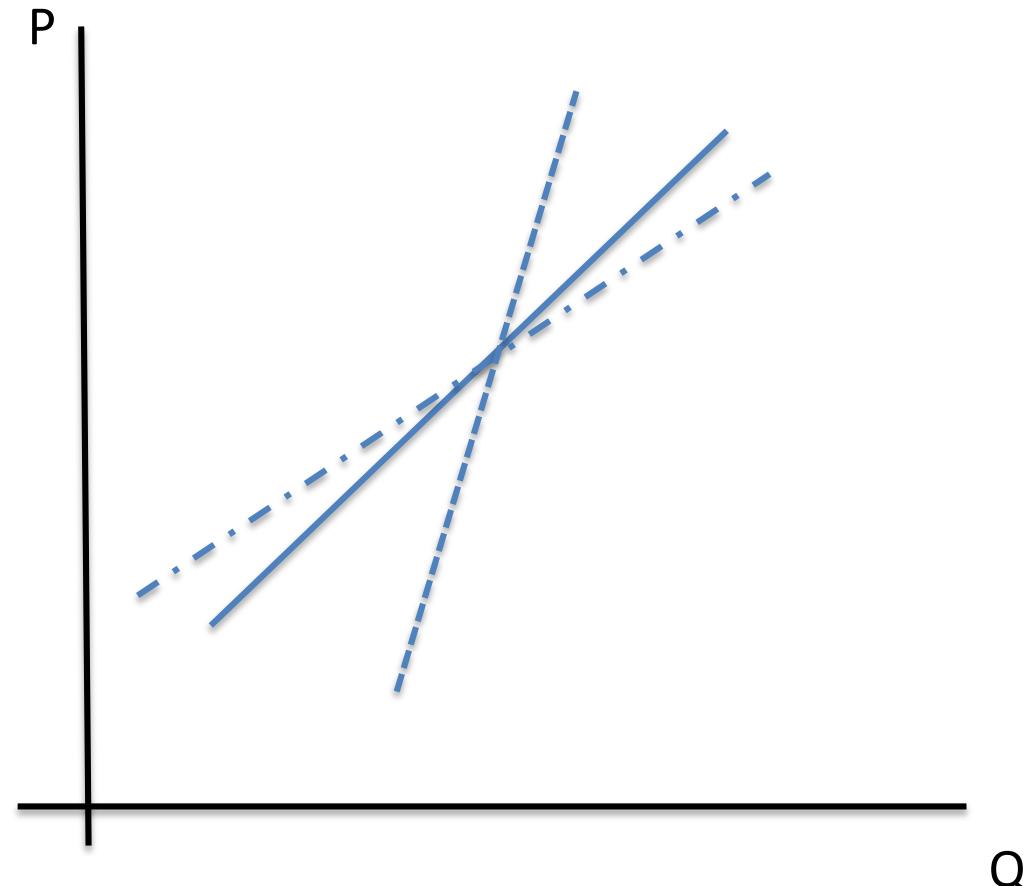


WHAT DRIVES SUPPLY?

Movements matter

Changes in the slope of the curve means that the nature of this relationship is changing:

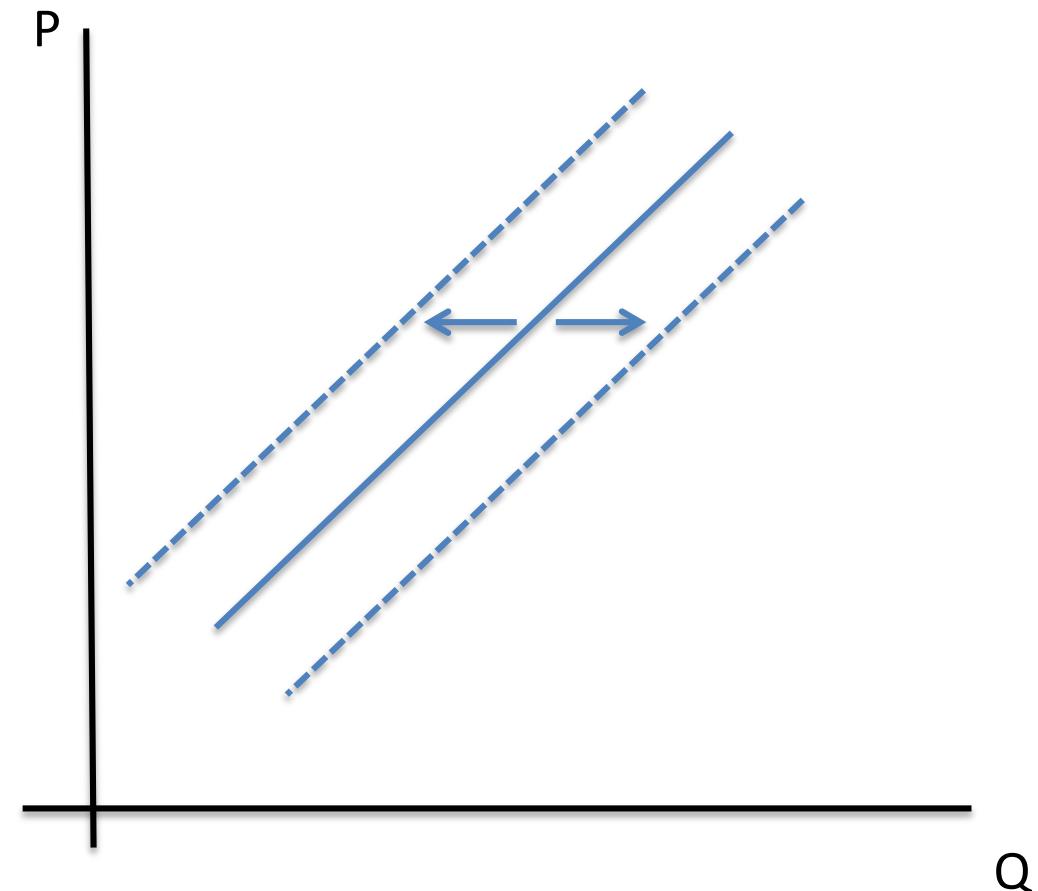
- ✓ A steeper slope means supply is getting increasingly less reactive to price;
- ✓ A flatter slope means supply is getting increasing more reactive to price.



WHAT DRIVES SUPPLY?

Movements matter

Movements of the curve mean that the other drivers of supply are changing.



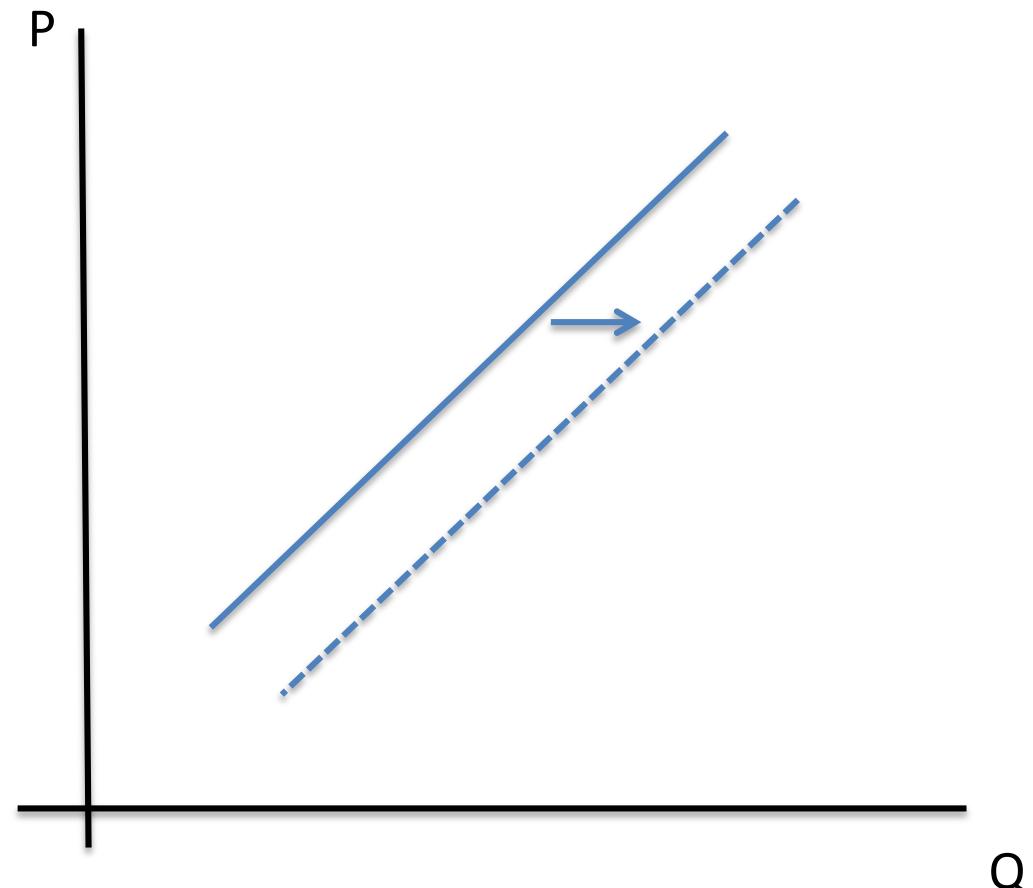
WHAT DRIVES SUPPLY?

Movements matter

Movements of the curve mean that the other drivers of supply are changing.

Movements to the right means that supply is increasing and that either:

- ✓ The number of firms has increased;
- ✓ The cost of inputs has decreased;
- ✓ Productivity has increased;
- ✓ Or a combination of the above.



WHAT DRIVES SUPPLY?

Movements matter

Movements of the curve mean that the other drivers of supply are changing.

Movements to the left means that supply is decreasing and that either:

- ✓ The number of firms has decreased;
- ✓ The cost of inputs has increased;
- ✓ Productivity has decreased;
- ✓ Or a combination of the above.

