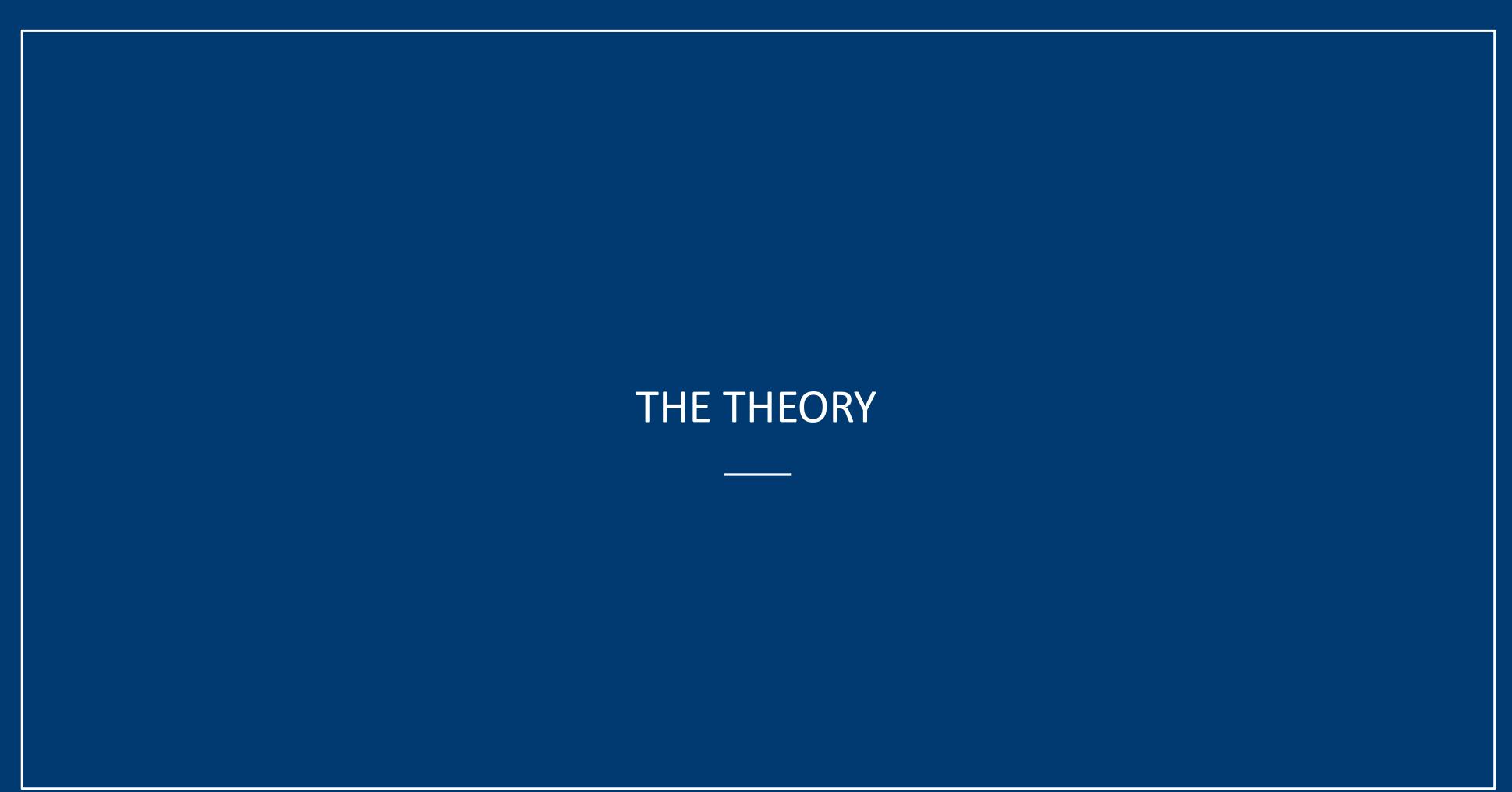




How Markets Work – The Basics

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

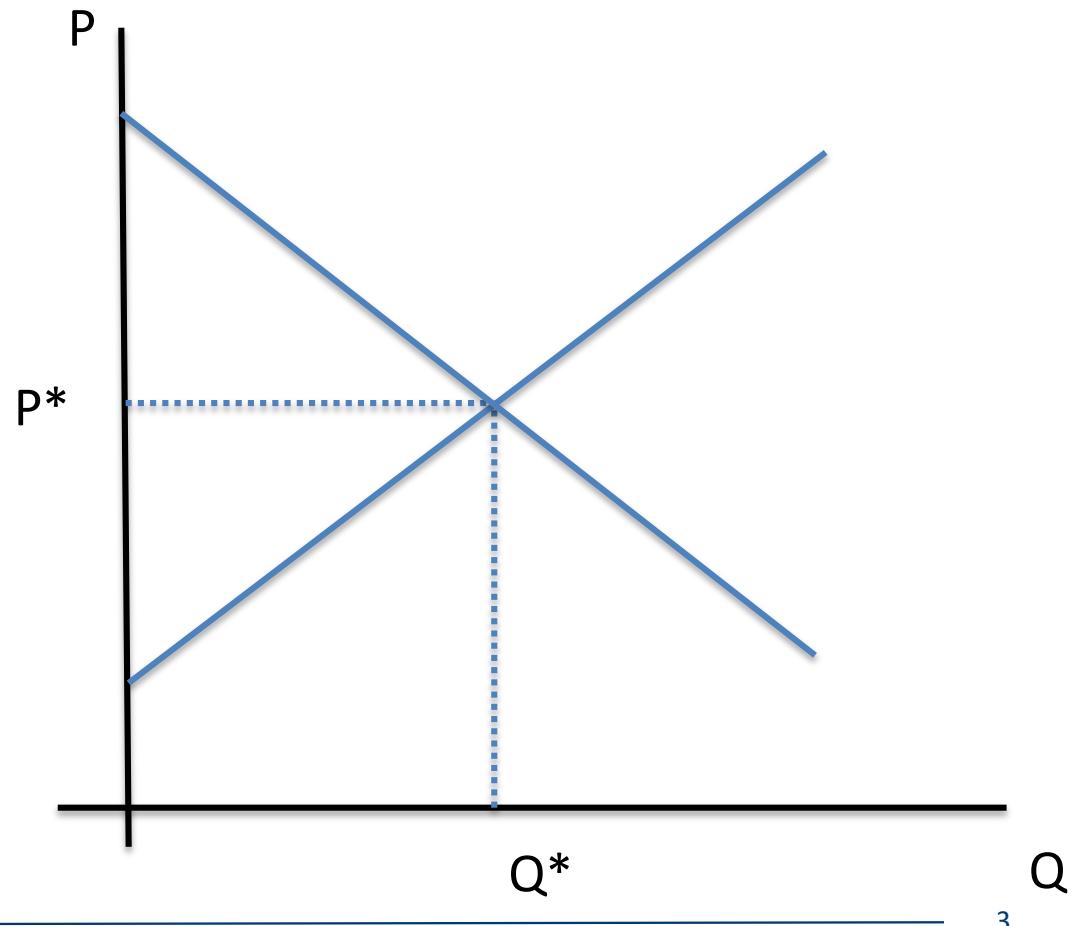


THE THEORY

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 DEMAND?

If I put my car on sale...

Before buying, you may consider:

- ✓ The price of the good
The greater the price, the lower the demand – and vice versa (except for luxury goods).
- ✓ The price of substitutes and complements
Cheaper alternatives could reduce demand or delay a purchase – and vice versa;
The price of complementary products (such as gas for cars) also influence demand.



WHAT DRIVES DEMAND?

If I put my car on sale...

Before buying, you may consider:

- ✓ Income

The first straightforward question is: Can I afford it?

For some products (e.g. potatoes), the question is trickier: Can I afford a better product thanks to a higher income?

- ✓ Preferences and tastes

Your purchase should be congruent with your preferences!

- ✓ The price expectations

The price of some products (such as gas) can be volatile, so if you expect a change, it might influence your decision further.



WHAT DRIVES DEMAND?

Introducing the “demand function”

The **demand function** relates demand for a good to its determinants (drivers): It translates the relationship between demand for the good and its price, complements, substitutes and income.

$$\text{Demand} = f(p, s, c, l, t, e)$$

WHAT DRIVES DEMAND?

Introducing the “demand curve”

The **demand curve** displays the relationship between demand for the good and price, *all else remaining equal* – namely: no change in price of other goods, in income, in preferences and tastes and in price expectations.

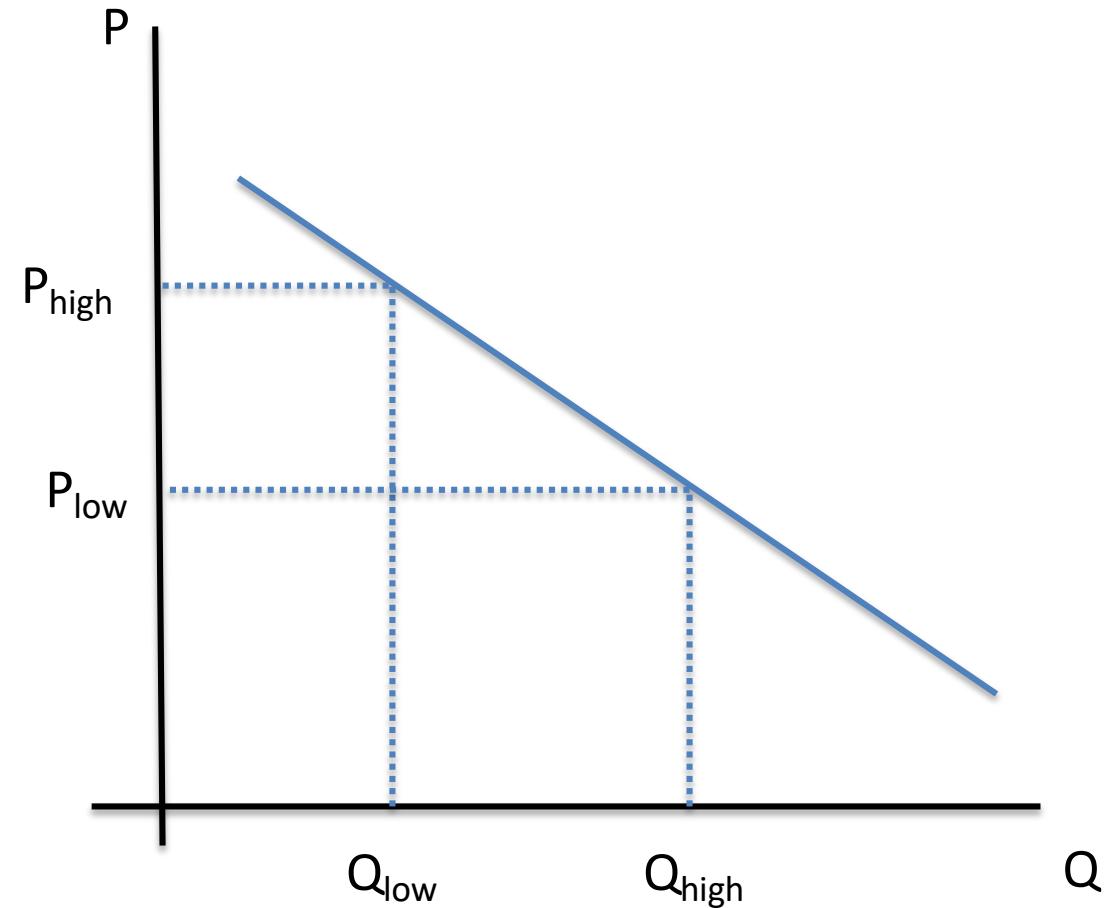
$$\text{Demand} = f(p)$$

where s, c, l, t, e remain the same

WHAT DRIVES DEMAND?

Introducing the “demand curve”

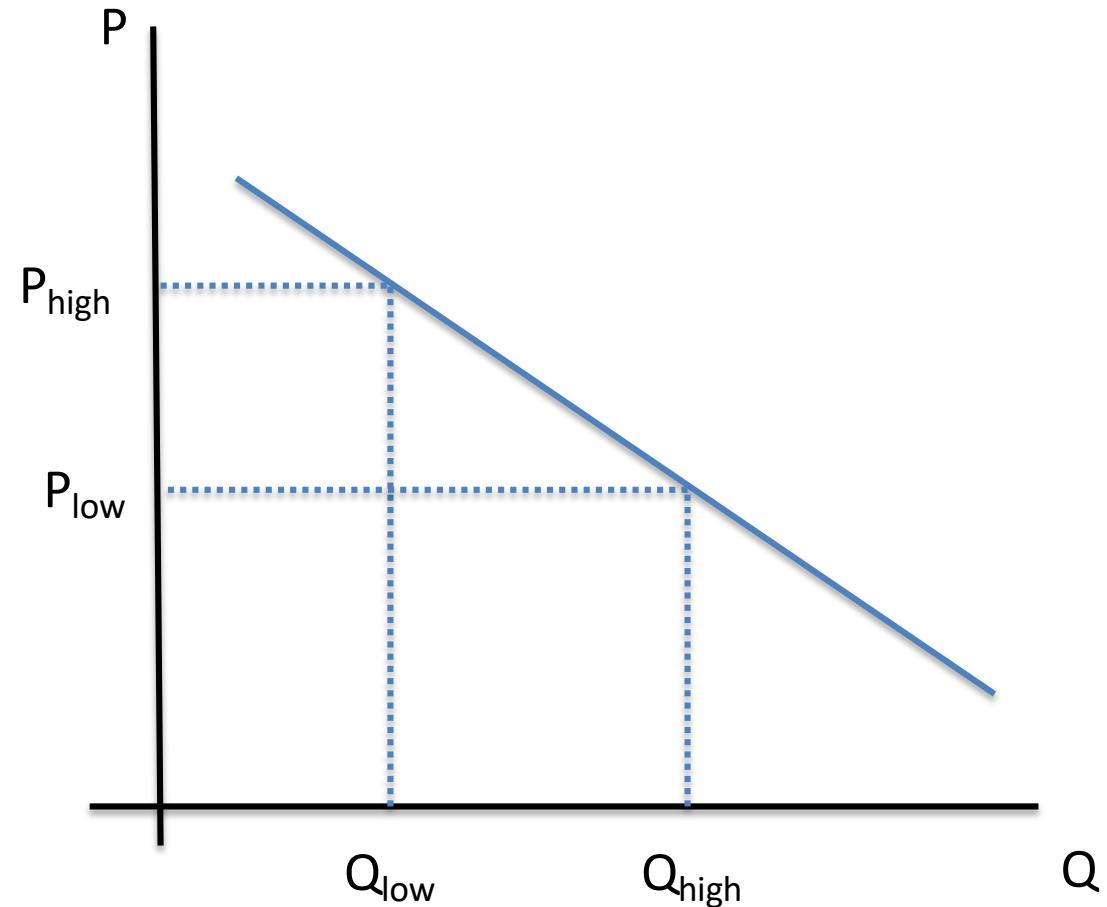
The demand curve illustrates the **law of demand** which states that the higher the price, the lower the demand and the lower the price, the higher the demand.



WHAT DRIVES DEMAND?

Introducing the “demand curve”

(At the **individual level**, this means that a high price will lead me to consume less units of the good in question, and vice-versa. At the **aggregate level**, this means that given a high price, less people will be able to consume, and vice-versa)



WHAT DRIVES DEMAND?

Is the demand curve linear?

We'll assume this relationship is linear.

Doing otherwise would bring not any additional insights

It simplifies our mathematical task!

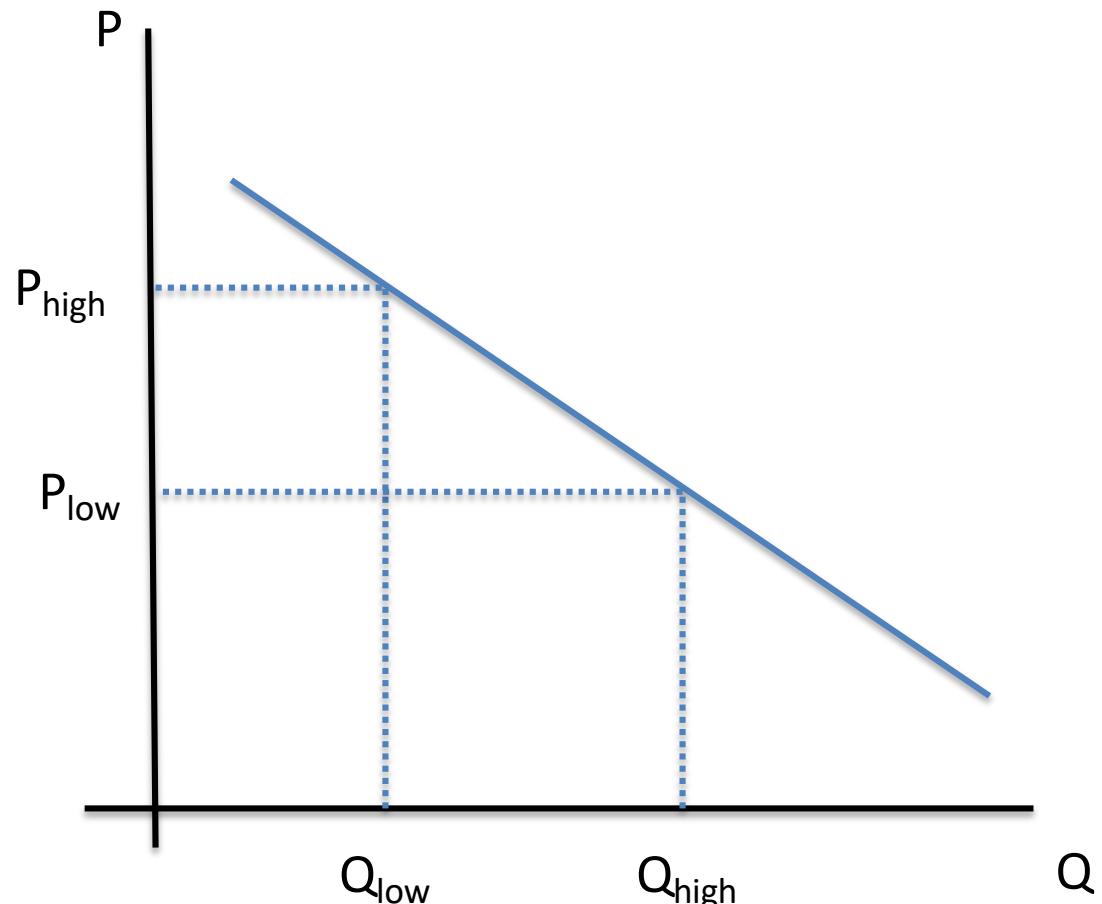
This means that the generic demand curve looks like:

- ✓ $P = a - bQ$
- ✓ $Q = a' - b'P$

For example:

- ✓ $P = 100 - Q$

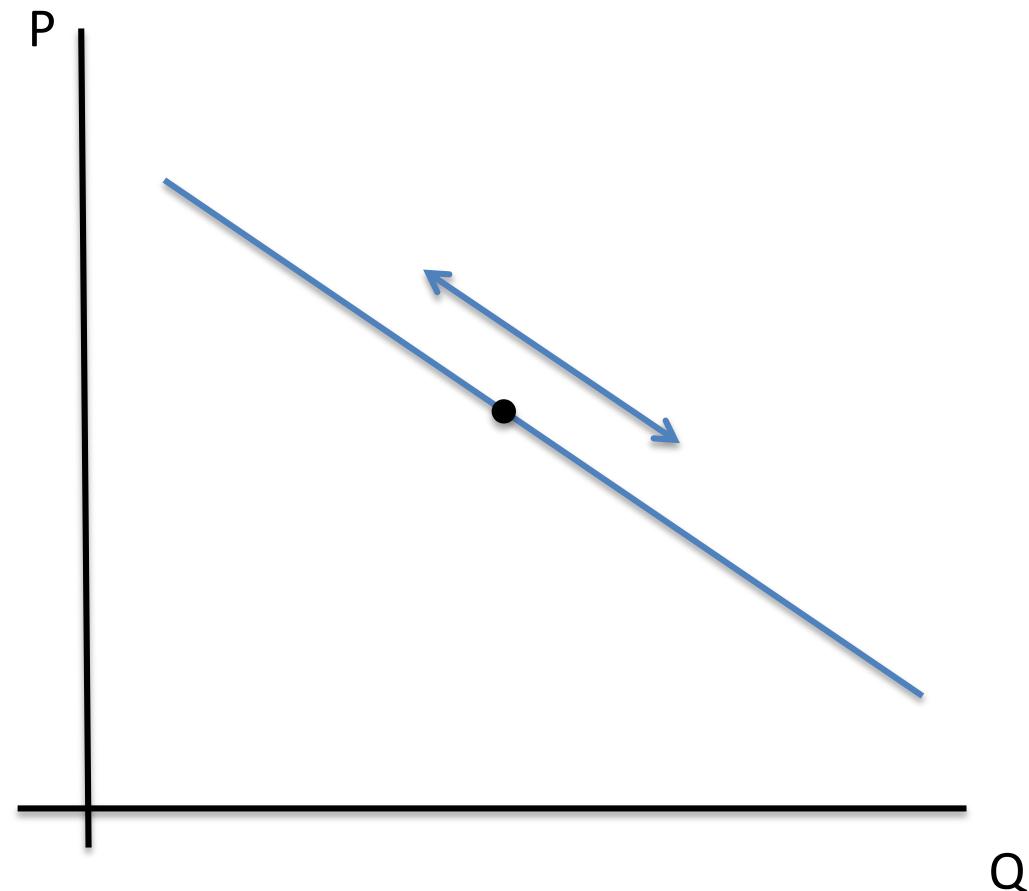
Parameters a and b are considered as given, though there are ways in practice to estimate these.



WHAT DRIVES DEMAND?

Movements matter

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

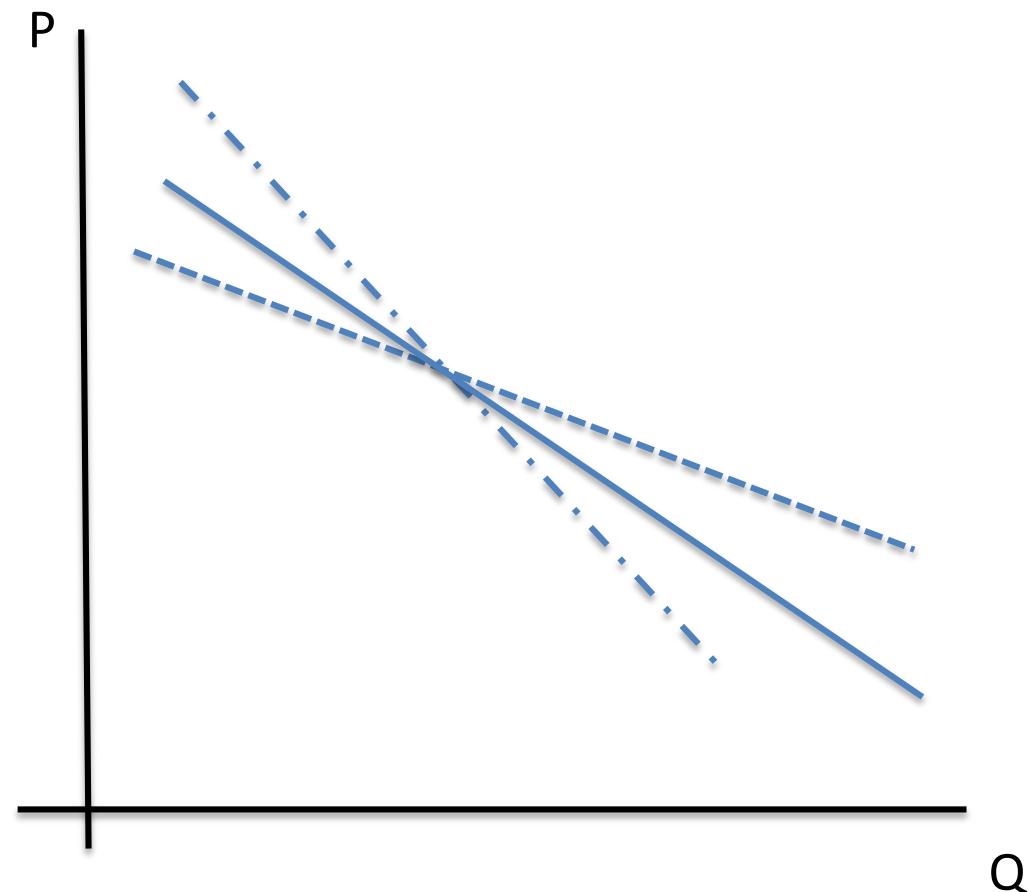


WHAT DRIVES DEMAND?

Movements matter

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

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

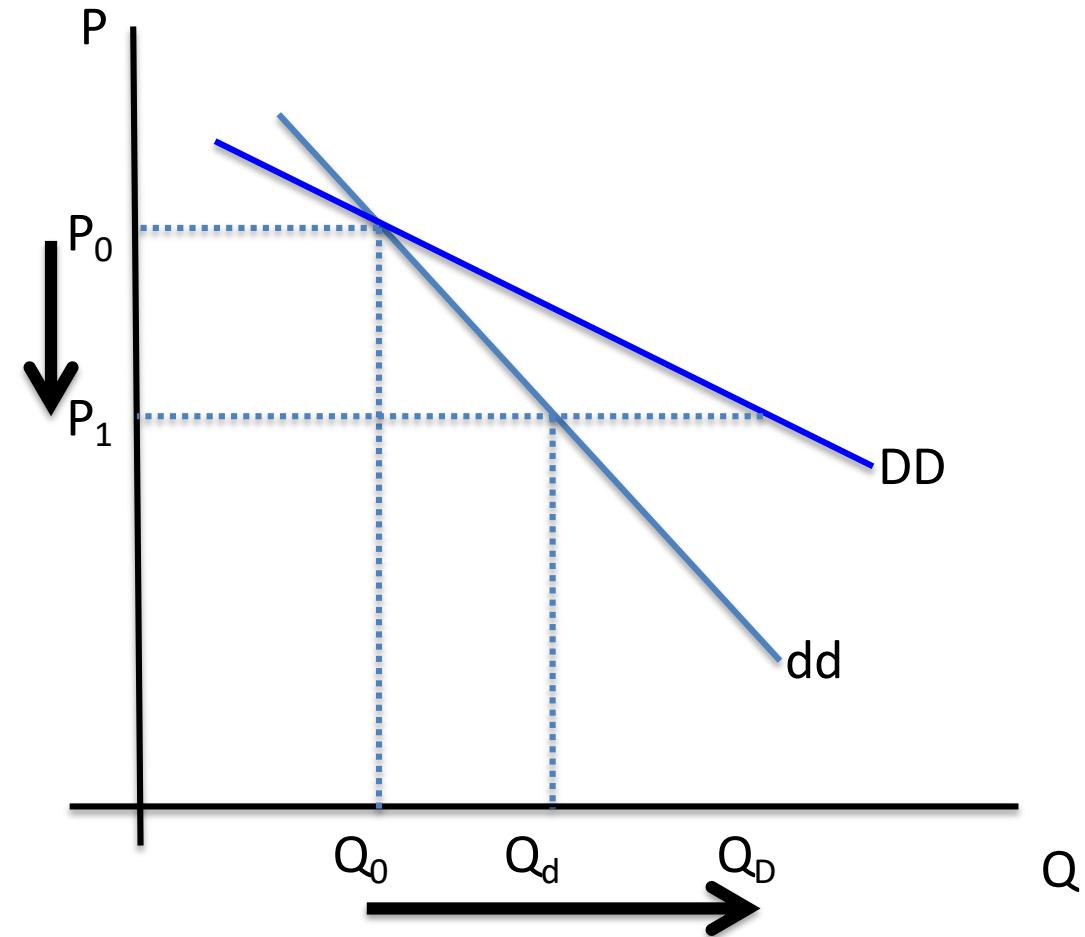


WHAT DRIVES DEMAND?

Movements matter (illustration)

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

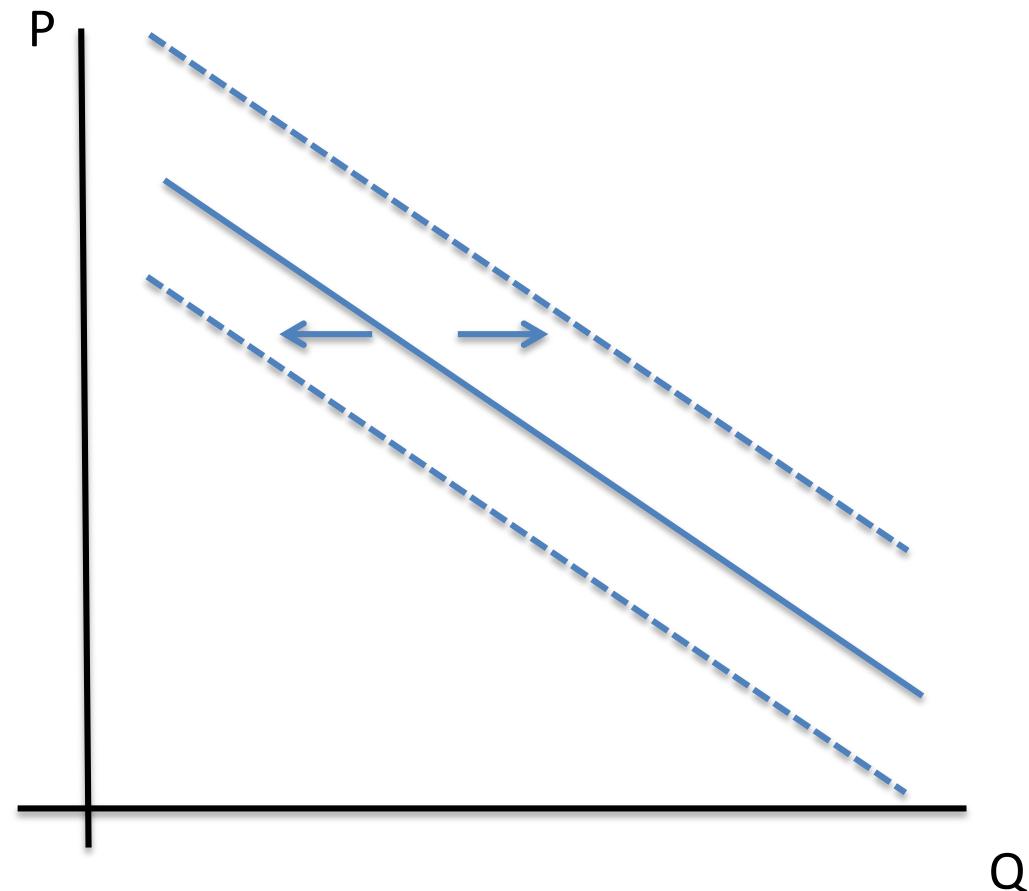
- ✓ A steeper slope means demand is getting increasingly less reactive to price;
- ✓ A flatter slope means demand is getting increasingly more reactive to price.



WHAT DRIVES DEMAND?

Movements matter

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



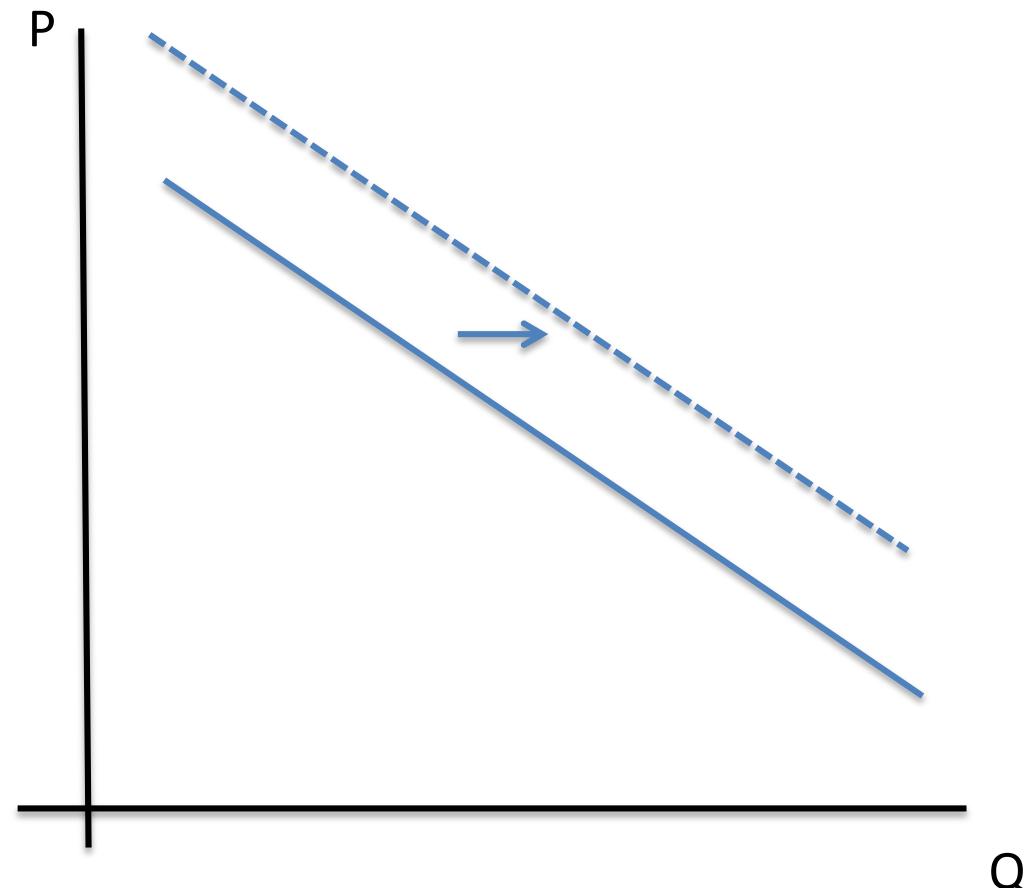
WHAT DRIVES DEMAND?

Movements matter

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

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

- ✓ The price of substitutes increased;
- ✓ The price of complements decreased;
- ✓ Tastes and preferences are going up;
- ✓ The good's price is expected to increase;
- ✓ Or a combination of the above.



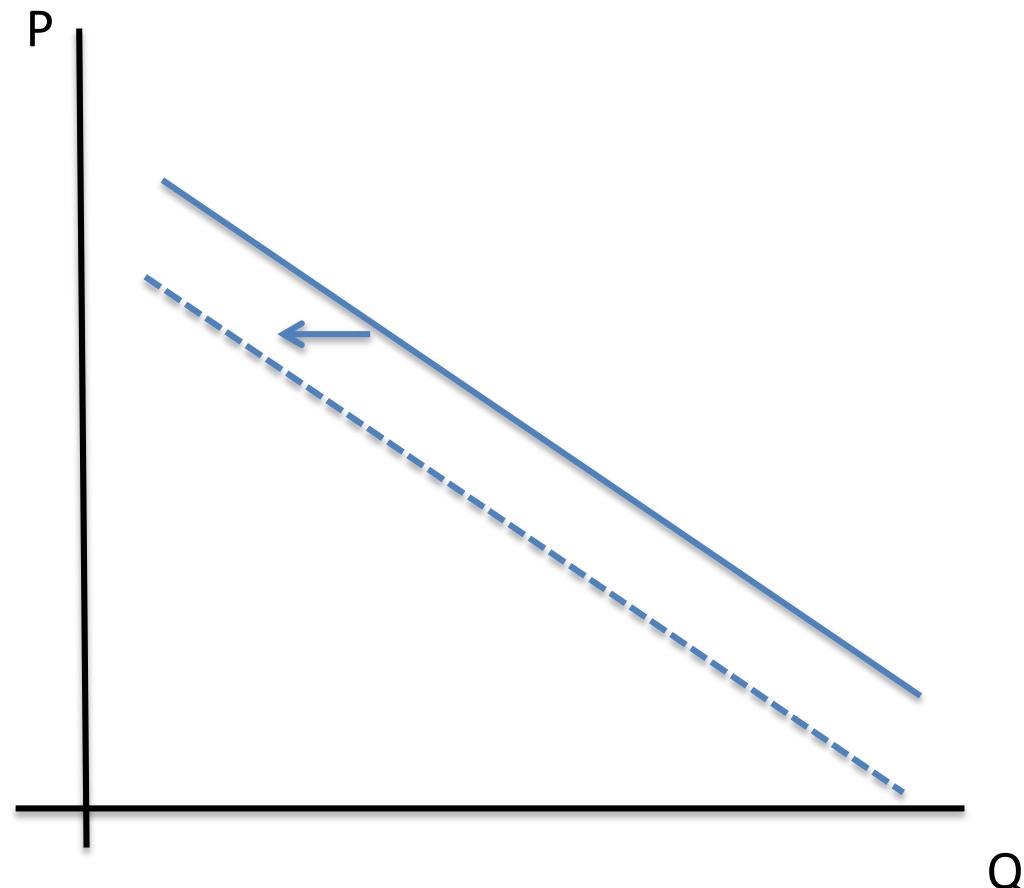
WHAT DRIVES DEMAND?

Movements matter

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

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

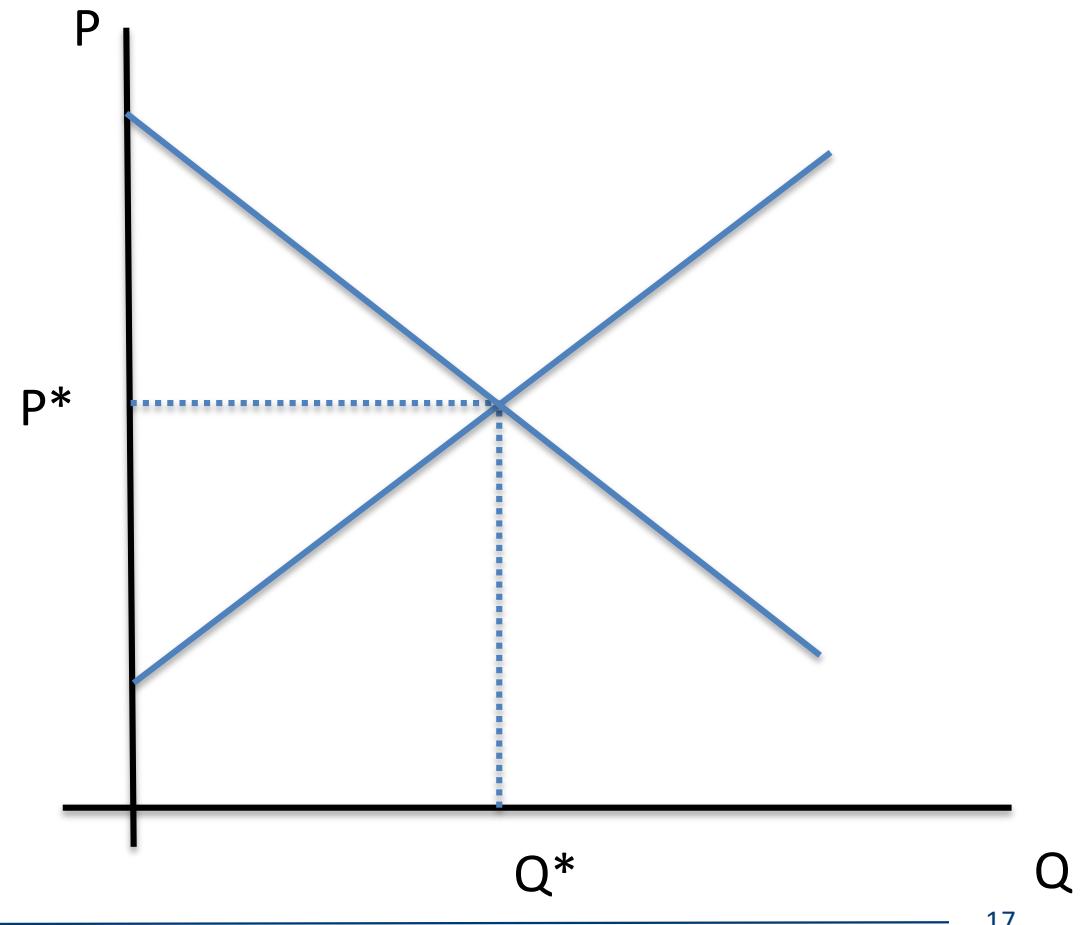
- ✓ The price of substitutes decreased;
- ✓ The price of complements increased;
- ✓ Tastes and preferences are going down;
- ✓ The good's price is expected to decrease;
- ✓ Or a combination of the above.



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