Microeconomics 1

Class #1: *Introduction to microeconomic reasoning*
The market

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Economics

The Theory of Economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking which helps its possessor to draw correct conclusions

John Maynard Keynes

Economics

- economics = a science of choice
- **microeconomics** and macroeconomics

- microeconomics:
    - consumer choice (demand-side of the economy)
    - producer choice (supply-side of the economy)
    - *government (public choice)*

Economic modelling

- economics is concerned with modelling social phenomena

- an economic model is a simplified representation of reality

- exogenous variable = a variable determined outside of the model

- endogenous variable = a variable for which values are determined by factors within the model

The market

- the market = a mechanism that brings together buyers (demanders) and sellers (suppliers) of particular goods and services

- product markets and factor markets

- rational choice: each market participant tries to choose the best available alternative

- equilibrium: market price adjusts until quantity demanded equals quantity supplied

Experiment

- the market consists of buyers and sellers of a certain good

- what drives them to make transactions? *invisible hand of the market*

- experimental economics

- double oral auction (V. Smith, 2002 Nobel Prize)

Experiment - instructions

- buyers and sellers have the possibility to make offers to buy or sell a good for a certain price and will wait for the response of the second group

- when consensus is reached, a transaction takes place

- buyers: 5 groups (A, B, C, D, E)

- sellers: 5 groups (F, G, H, I, J)

- goal: maximize profits!

- 5 rounds

Experiment – instructions contd.

| A buyer	Subsequent units	Max. price for a given, subsequent unit	Transaction price Round 1	Profits Round 1	Transaction price Round 2	Profits Round 2	Transaction price Round 3	Profits Round 3	Transaction price Round 4	Profits Round 4	Transaction price Round 5	Profits Round 5
	1	100										
	2	80										
	3	60										
	4	40										
Total profits	5	20										
⇩	Sum of Profits		---	Σ=	---	Σ=	---	Σ=	---	Σ=	---	Σ=

Profits = transaction price – max. price
Max. price concerns only a single, subsequent unit of the good, e.g. price X next to quantity of 4 signifies that the price for the 4th unit of the good (3 units have already been bought/sold) amounts to X.

F seller	Subsequent units	Min. price for a given, subsequent unit	Transaction price Round 1	Profits Round 1	Transaction price Round 2	Profits Round 2	Transaction price Round 3	Profits Round 3	Transaction price Round 4	Profits Round 4	Transaction price Round 5	Profits Round 5
	1	10										
	2	20										
	3	30										
	4	40										
Total profits	5	50										
⇩	Sum of Profits		---	Σ=	---	Σ=	---	Σ=	---	Σ=	---	Σ=

Profits = transaction price – min. price
Min. price concerns only a single, subsequent unit of the good, e.g. price X next to quantity of 4 signifies that the price for the 4th unit of the good (3 units have already been bought/sold) amounts to X.
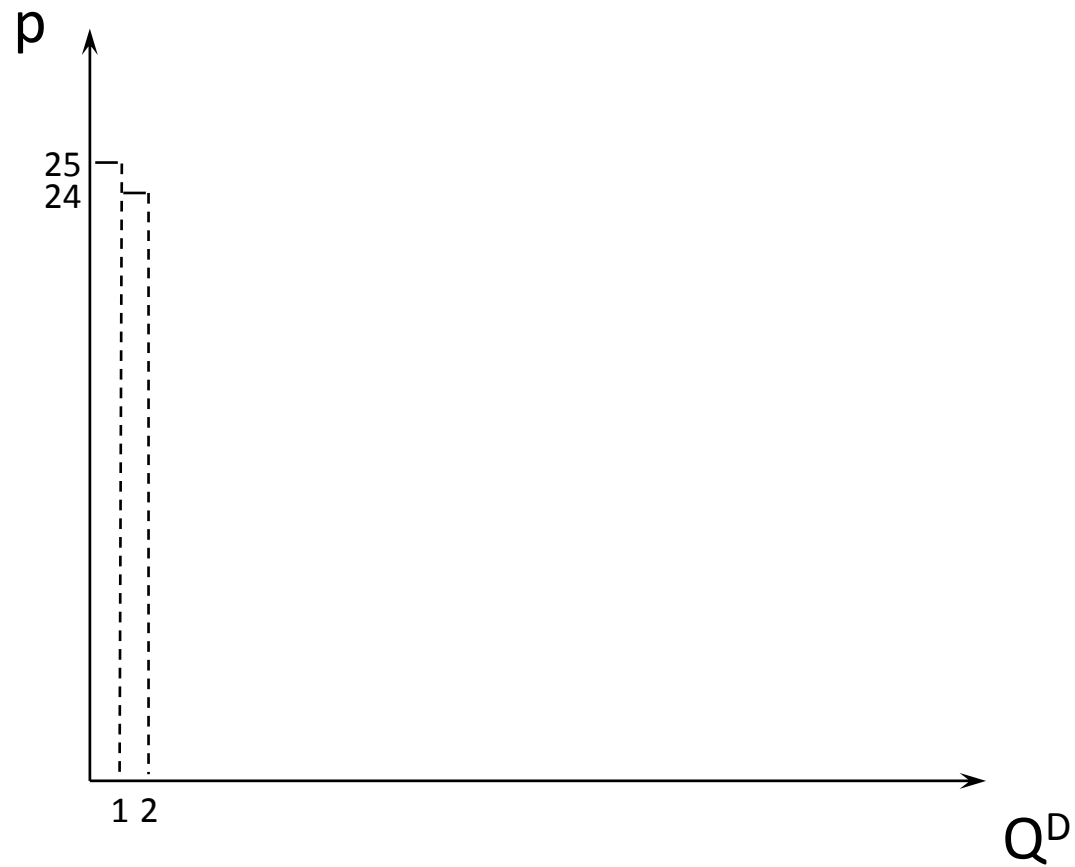
Experiment – instructions contd.

- offer:

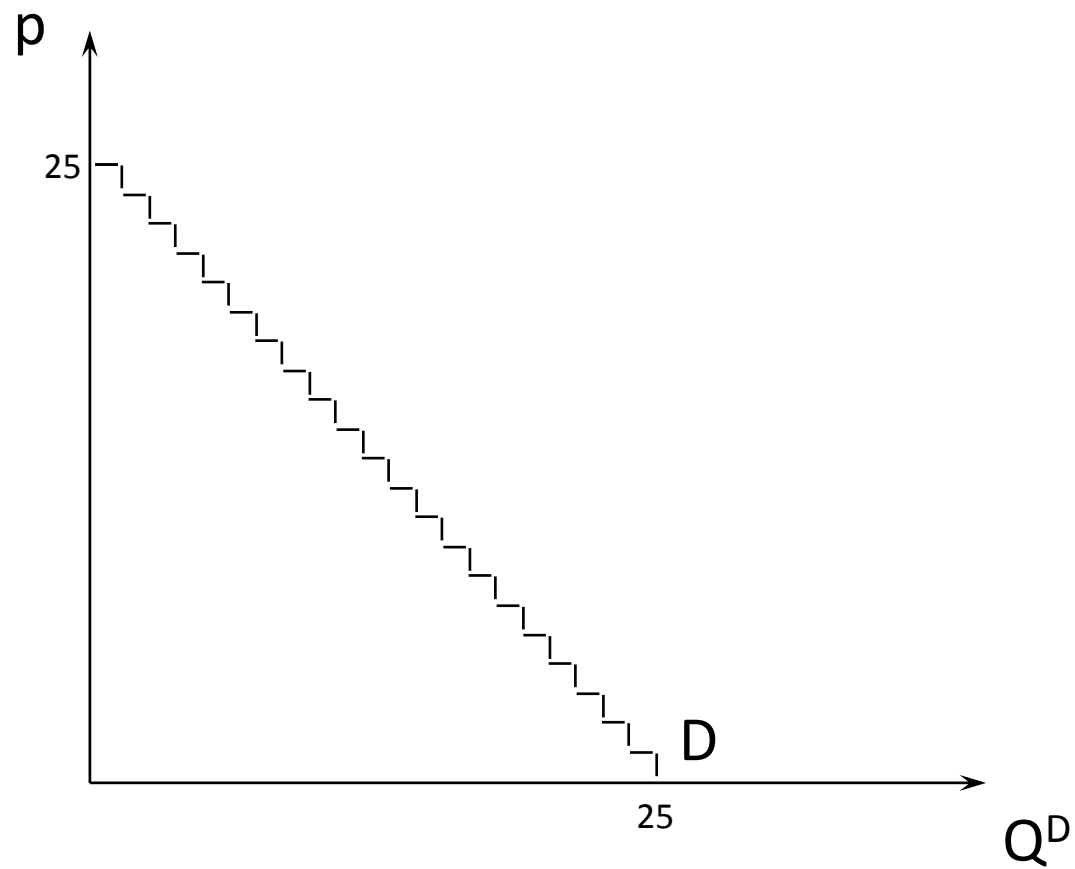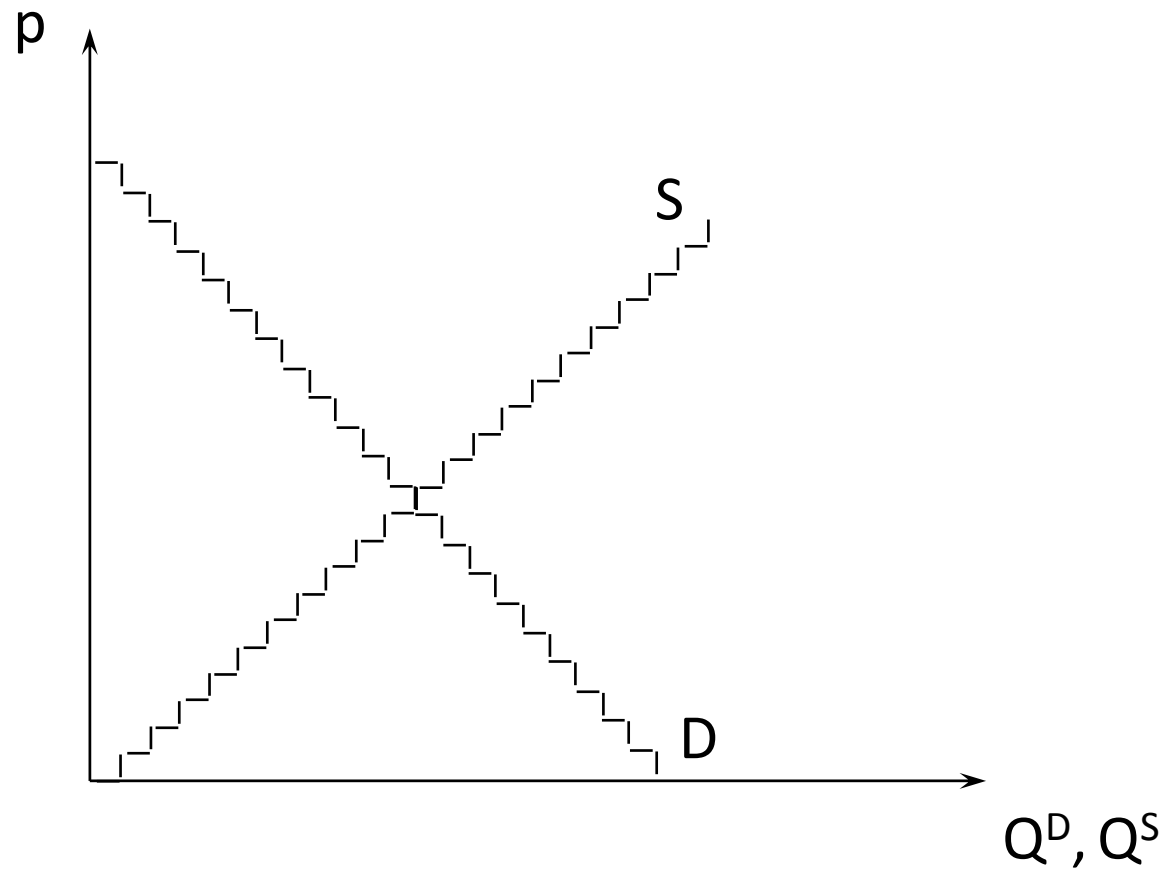*buyer/seller [letter] buys/sells [quantity] for [unit price]*

Experiment – conclusions
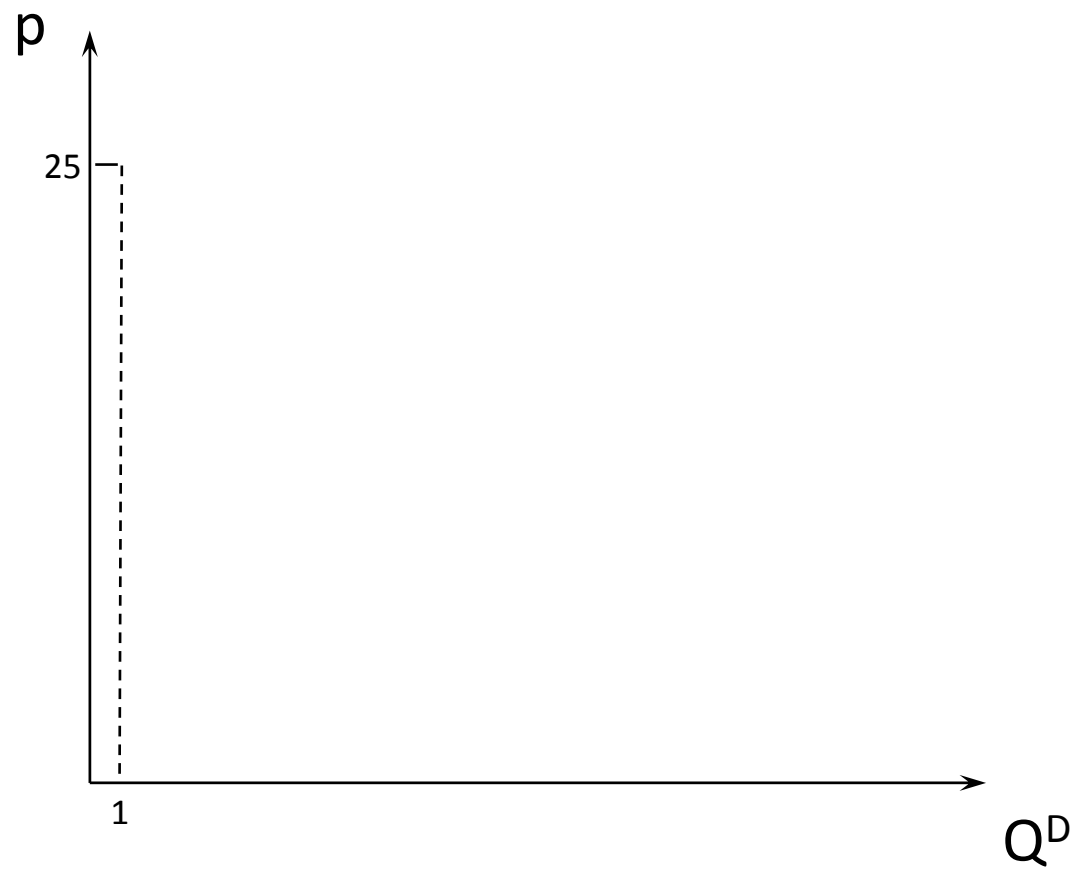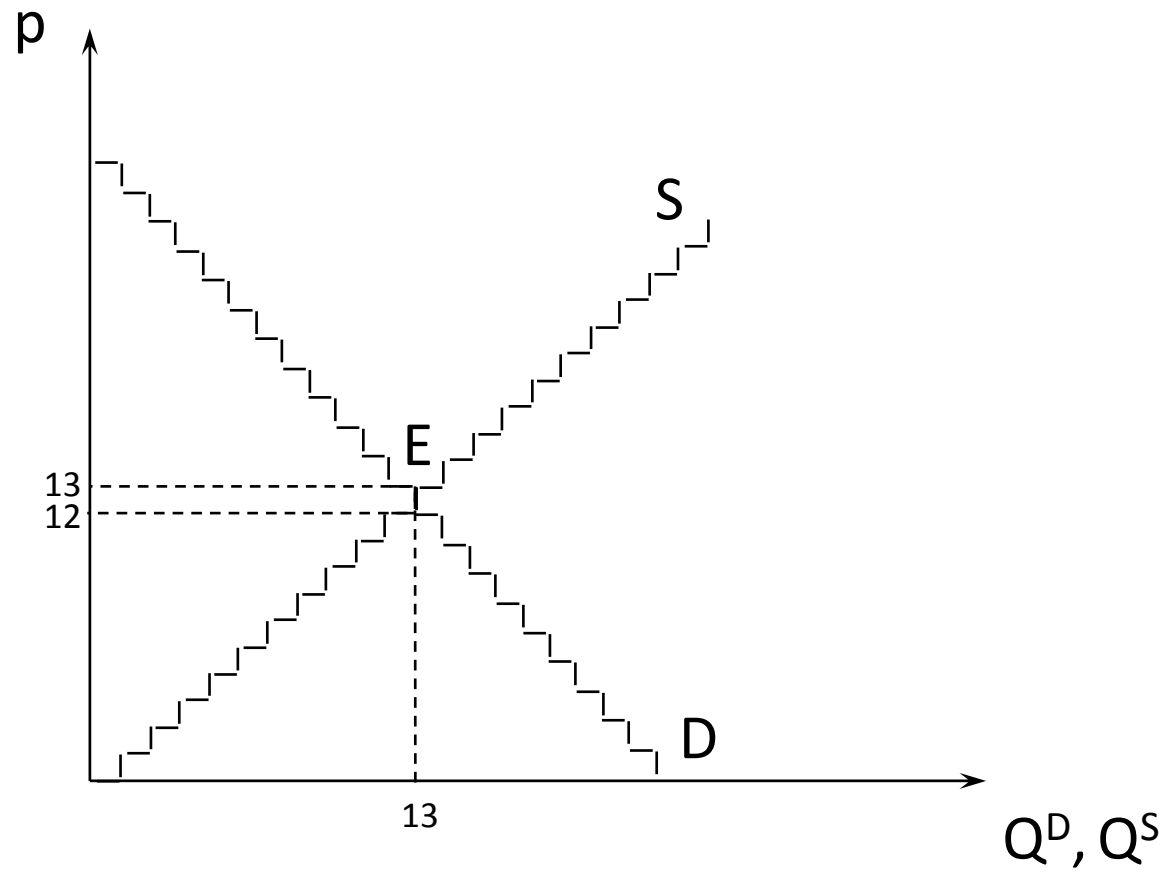
Experiment – conclusions contd.
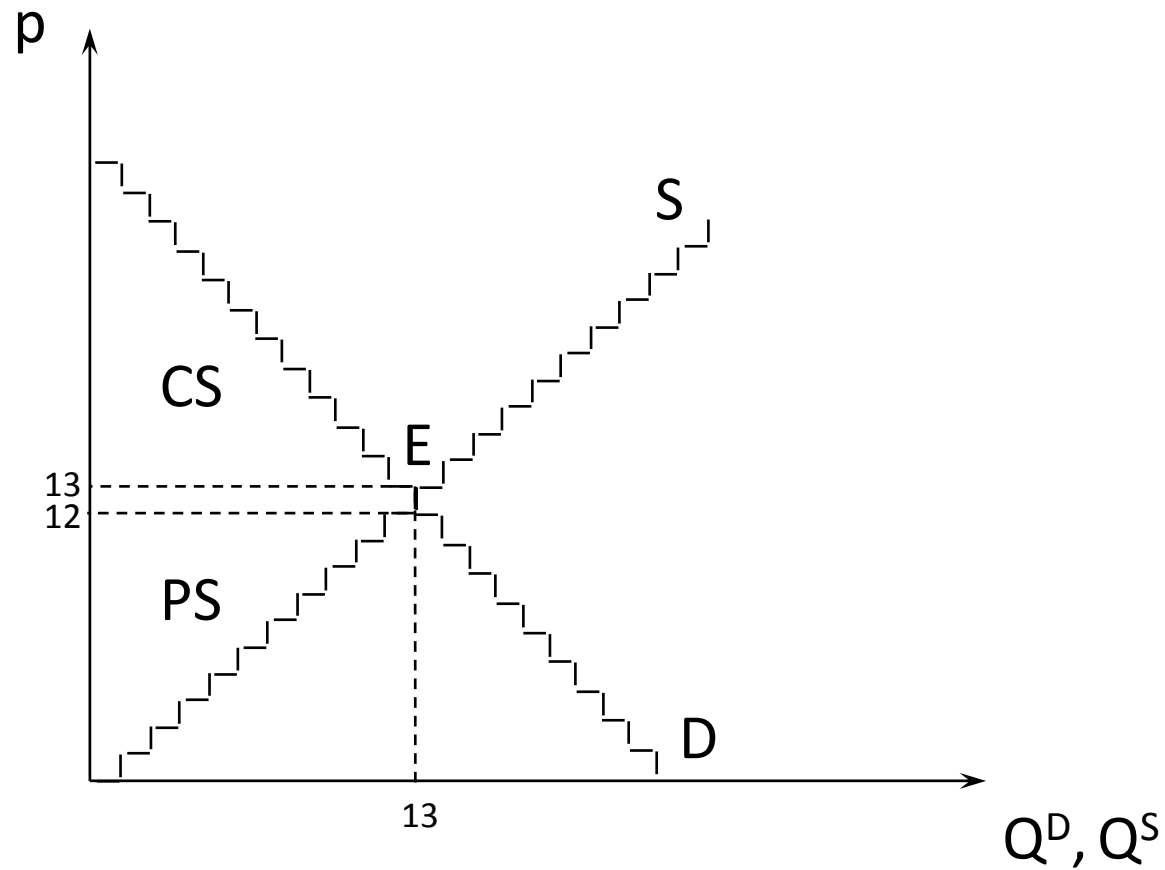
Experiment – conclusions contd.

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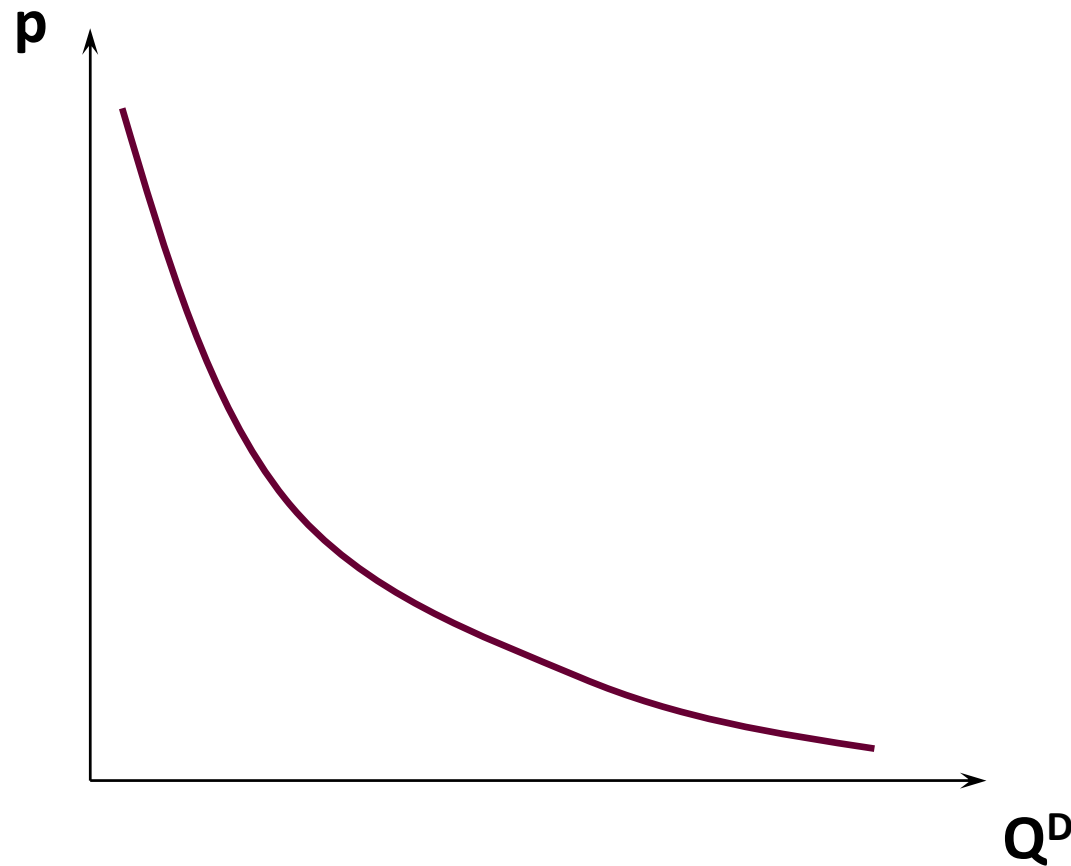
Experiment – conclusions contd.

Example: Apartment market

- demand $Q^D(p)$ [inverse demand $p(Q^D)$]:

  - there is one person willing to pay the highest rent of 2000 zł/month for an apartment close to the University,
    i.e. $p(Q^D=1) = 2000$, $Q^D(p=2000) = 1$, WTP = 2000

  - there is a second person with WTP = 1900 zł/month,
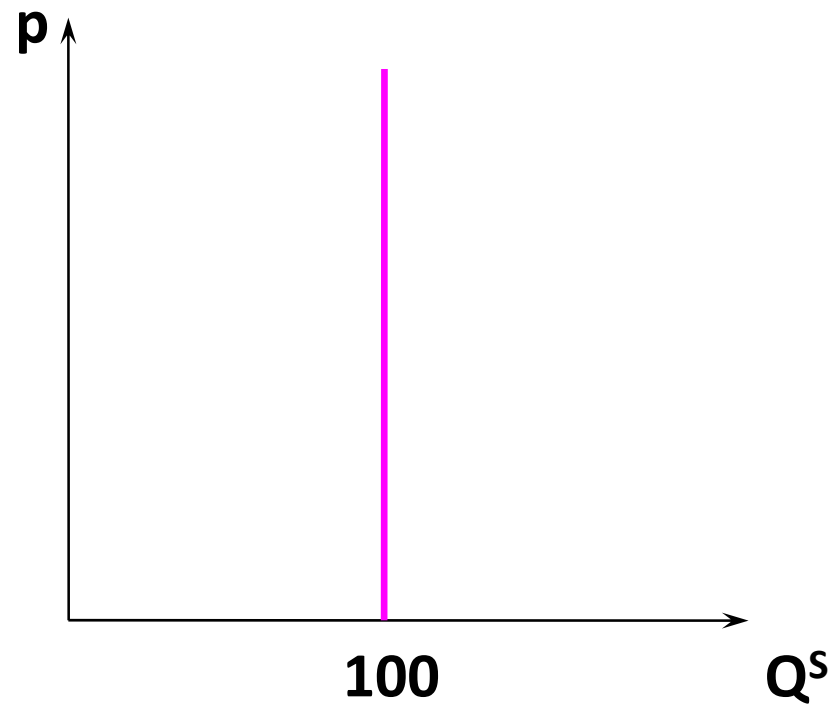   i.e. $p(Q^D=2) = 1900$, $Q^D(p=1900) = 2$

  - and so forth…

Example: Apartment market

- demand curve:

Example: Apartment market

- supply $Q^S(p)$ [inverse supply $p(Q^S)$]:

  - building apartments takes time so in the short-run supply is constant ($Q^S = 100$)

  - supply curve:

Example: Apartment market

- **market equilibrium:**

  - "low" rental price $\Rightarrow$ quantity demanded of close apartments exceeds quantity available $\Rightarrow$ *price will rise*

  - "high" rental price $\Rightarrow$ quantity demanded less than quantity available $\Rightarrow$ *price will fall*

  - quantity demanded = quantity available $\Rightarrow$ *price will neither rise nor fall*
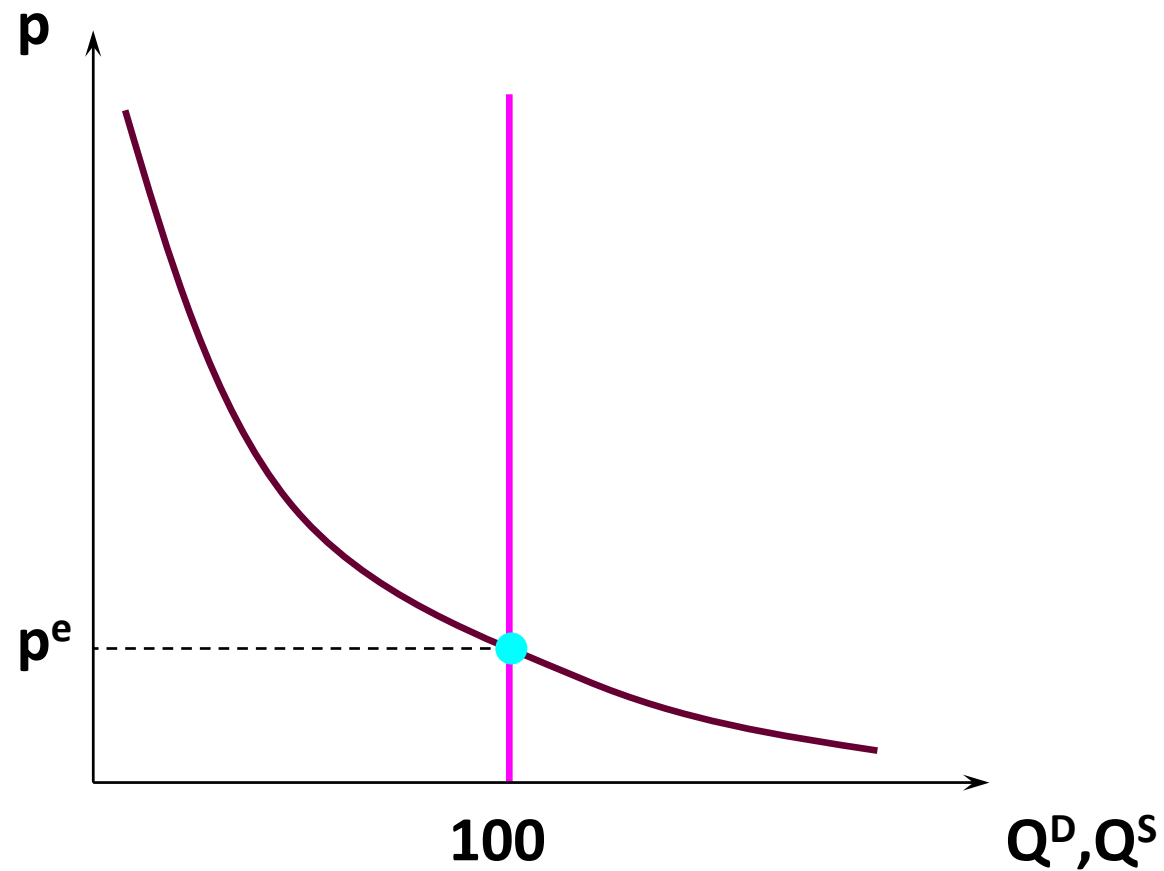
  - so the market is at a (competitive) equilibrium

Example: Apartment market
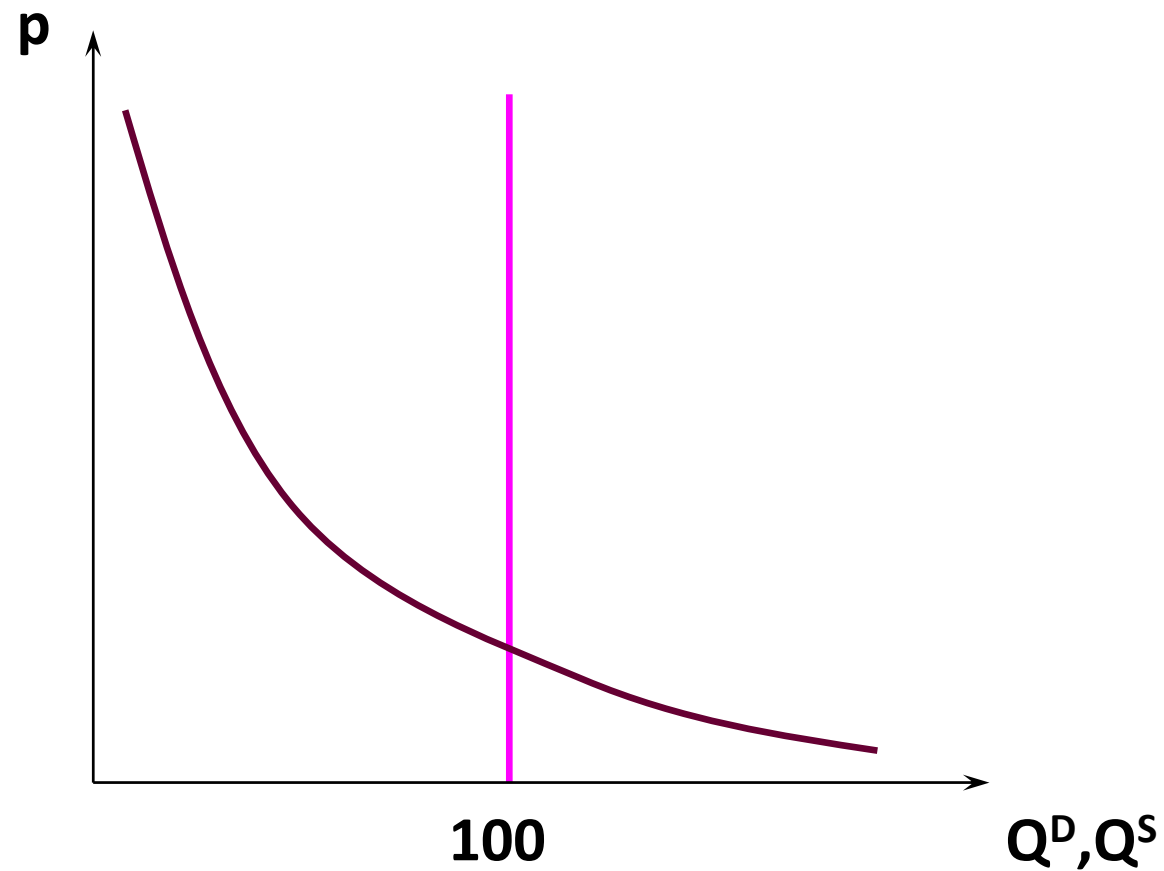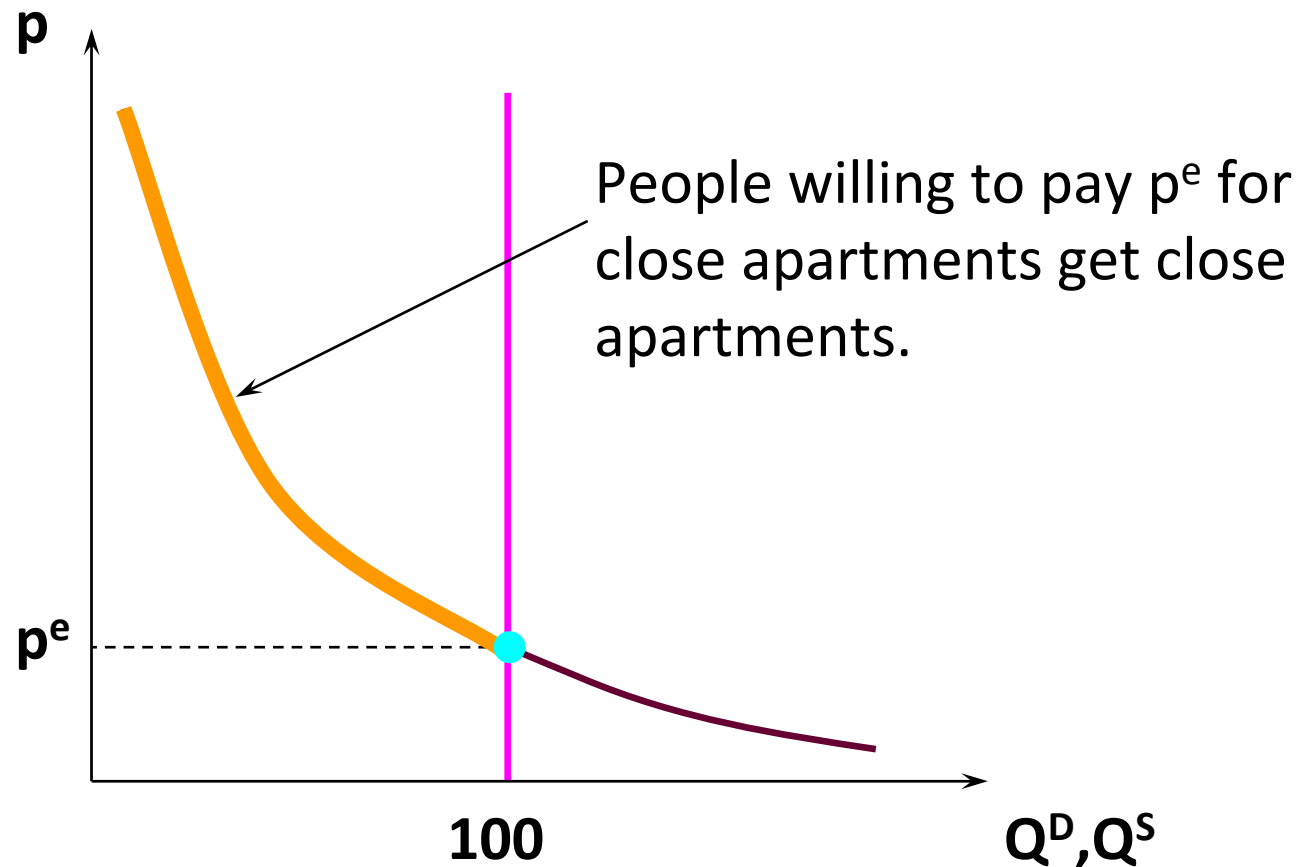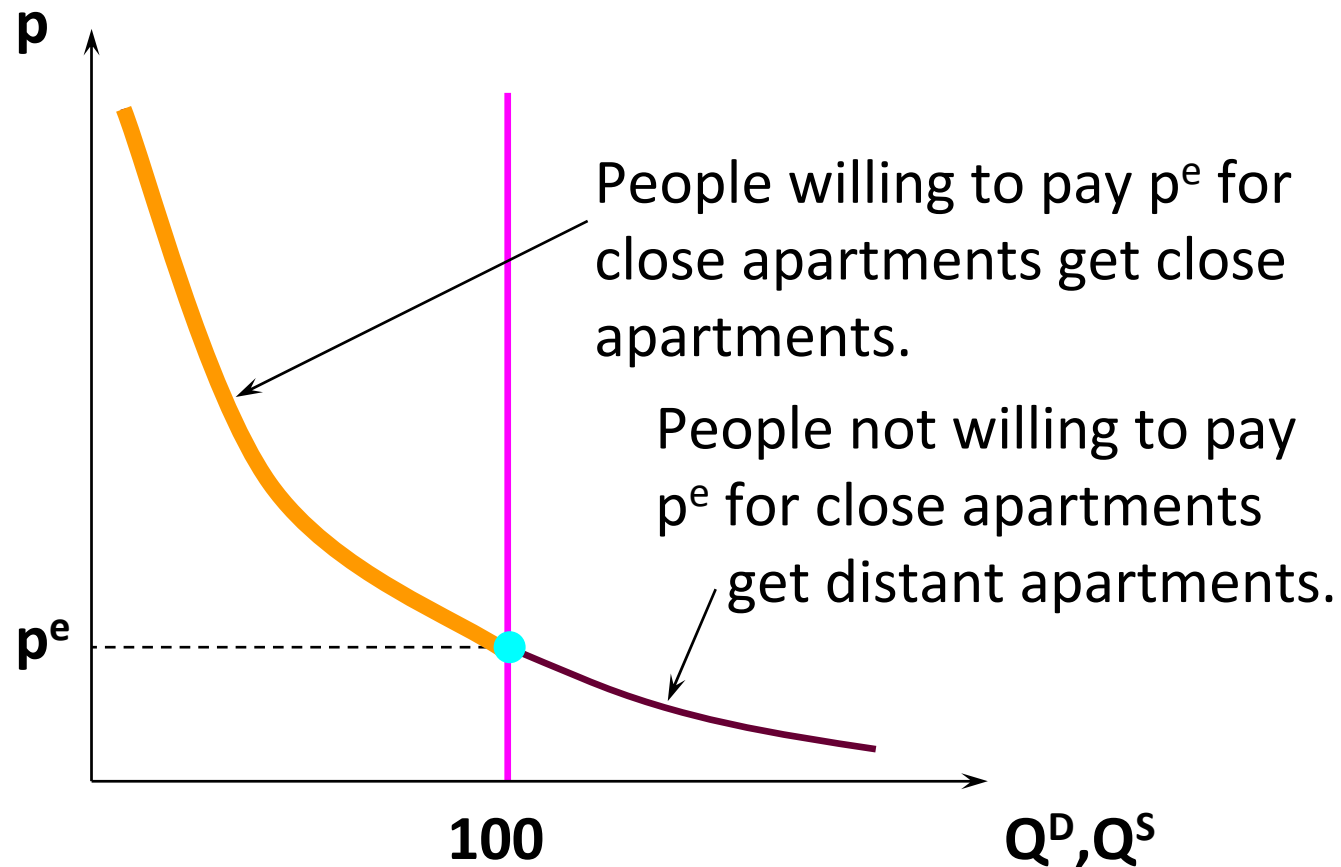
- market equilibrium:

Example: Apartment market

- market equilibrium:

Example: Apartment market

People willing to pay p^e for close apartments get close apartments.

Example: Apartment market

People willing to pay p^e for close apartments get close apartments.

People not willing to pay p^e for close apartments get distant apartments.

p^e

100

Q^D, Q^S

Example: Apartment market

- **Q:** Who rents the close apartments?
- **A:** Those most willing to pay.

- **Q:** Who rents the distant apartments?
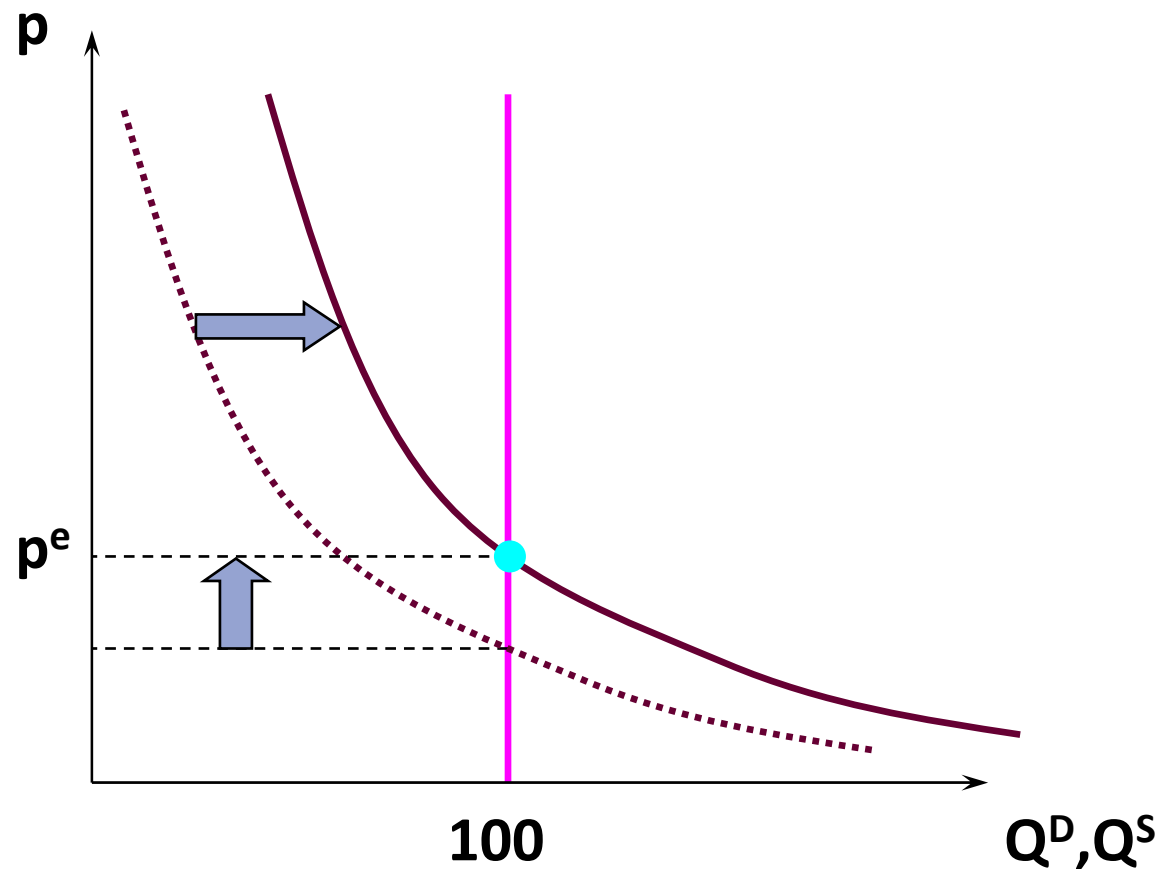- **A:** Those least willing to pay.

- so the (competitive) market allocation is by WTP

Example: Apartment market

- comparative statics:

  - exogenous variables:

    - *price of distant apartments*
    - *number of close apartments available*
    - *consumer income*

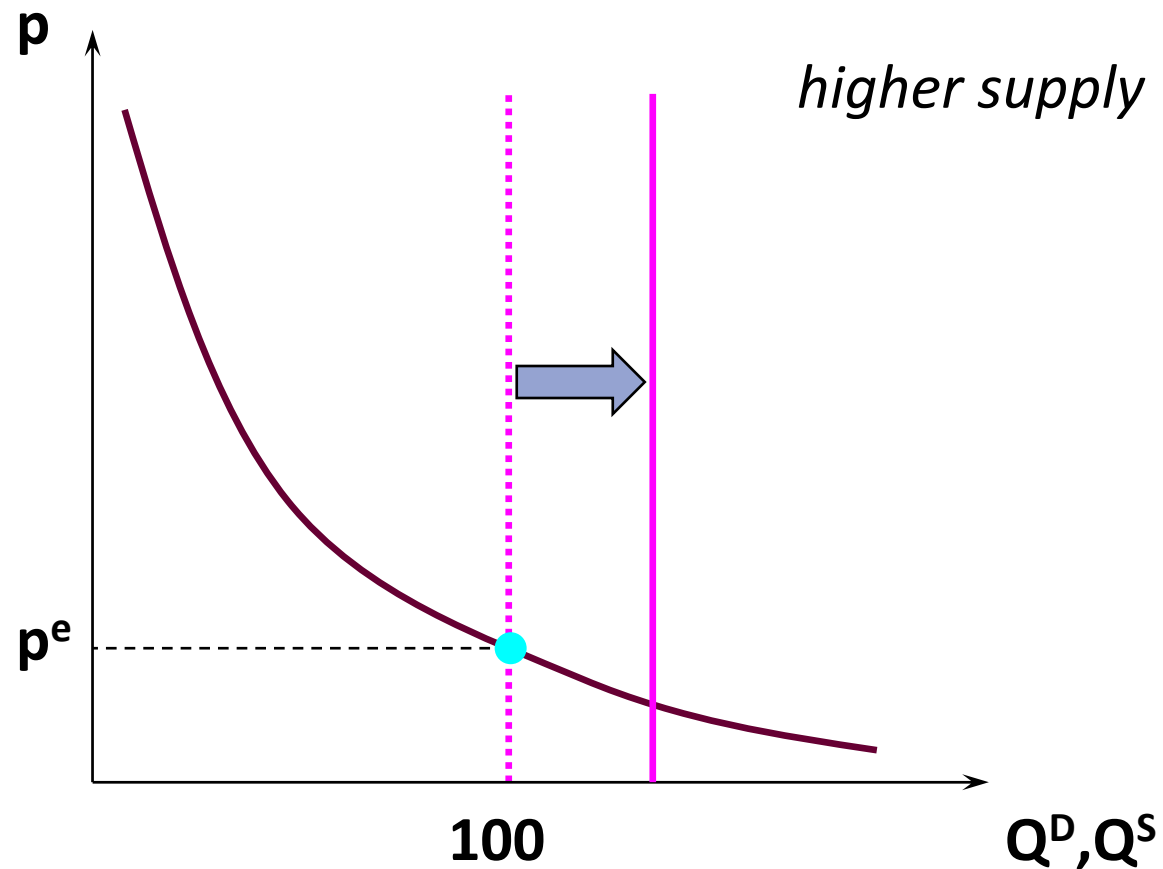 - what happens when one of the above changes?

Example: Apartment market
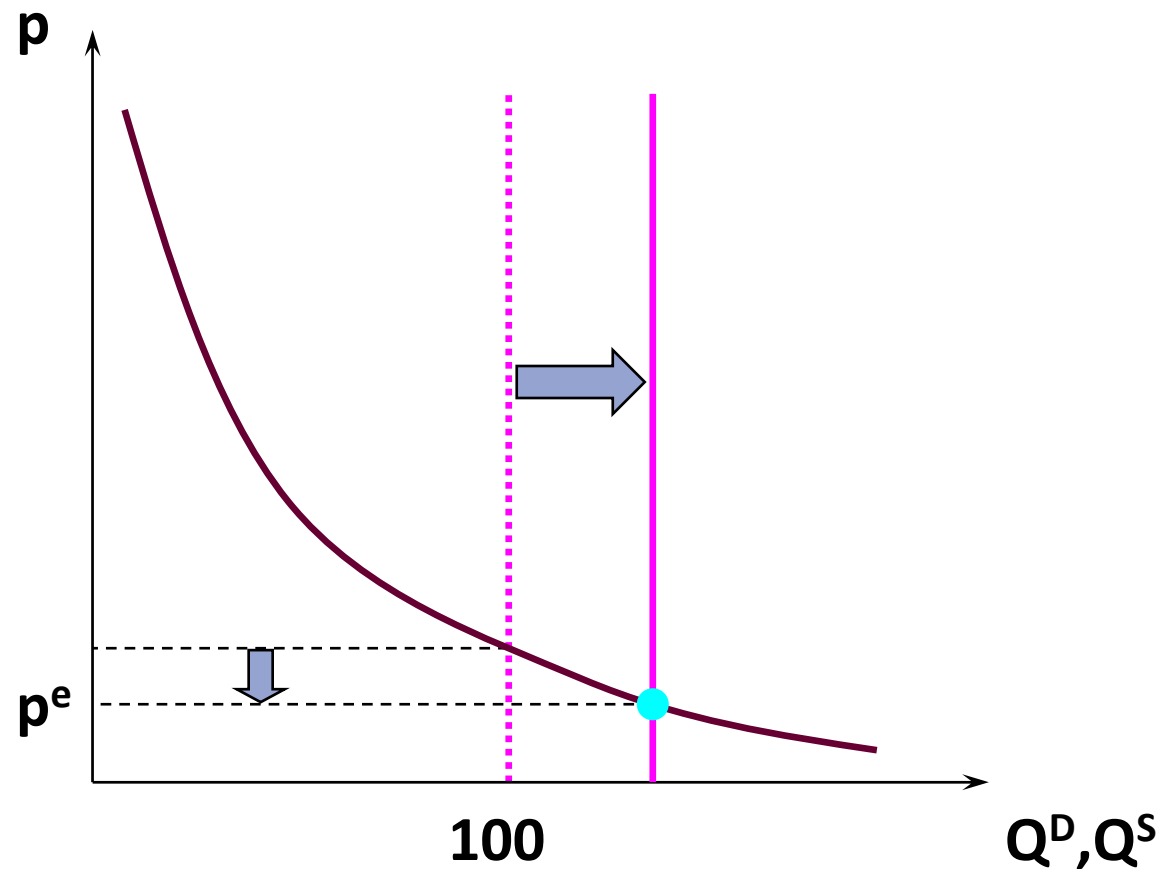
- price of distant apartments increases

Example: Apartment market

- number of close apartments increases

higher supply

Example: Apartment market

- number of close apartments increases

Example: Apartment market

- consumer income increases