

**University
of Basel**

In association with:



Equilibrium models

What is an equilibrium?

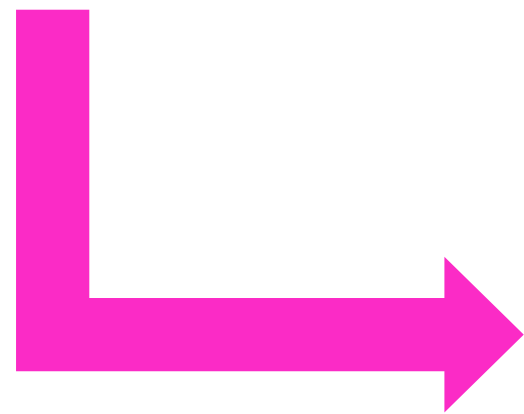
A 'stable' state, nobody wants to deviate

- Demand and supply are in balance
(i.e. market equilibrium)
- Input and output are in balance
(i.e. conservation constraints)
- Nash equilibria
- The resulting optimum of a min/maximization

Example

Cost function:

$c(q)$

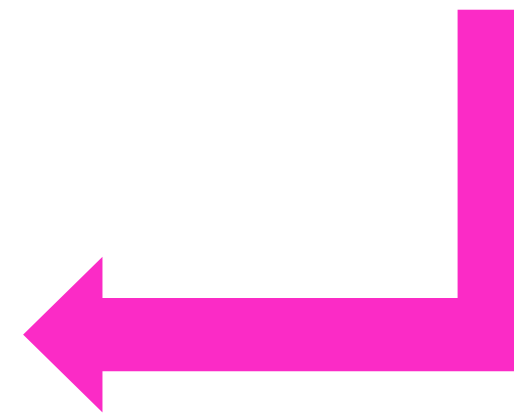


Equilibrium

$$c'(q) = p$$

Market Price:

p



2 types of equations

Zero-profit conditions

Output costs \geq revenue
and activity variables
Output ≥ 0

Costs \geq demand benefit
and activity variables
Demand ≥ 0

Market clearing
Supply \geq demand
and price variables
Price ≥ 0