



# 13. Market failures analysis



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- market failure as a problem of the system
- failure of the elements of the system  
(externalities, public goods, asymmetric information)

# The term „market failure“

Market failure:

*Whatever display of inefficient function of the market*

- market fails as a system: a natural tendency to the inefficiency – *imperfect competition*
- elements of the system fail: - *externalities, public goods, asymmetric information*



# The system failure

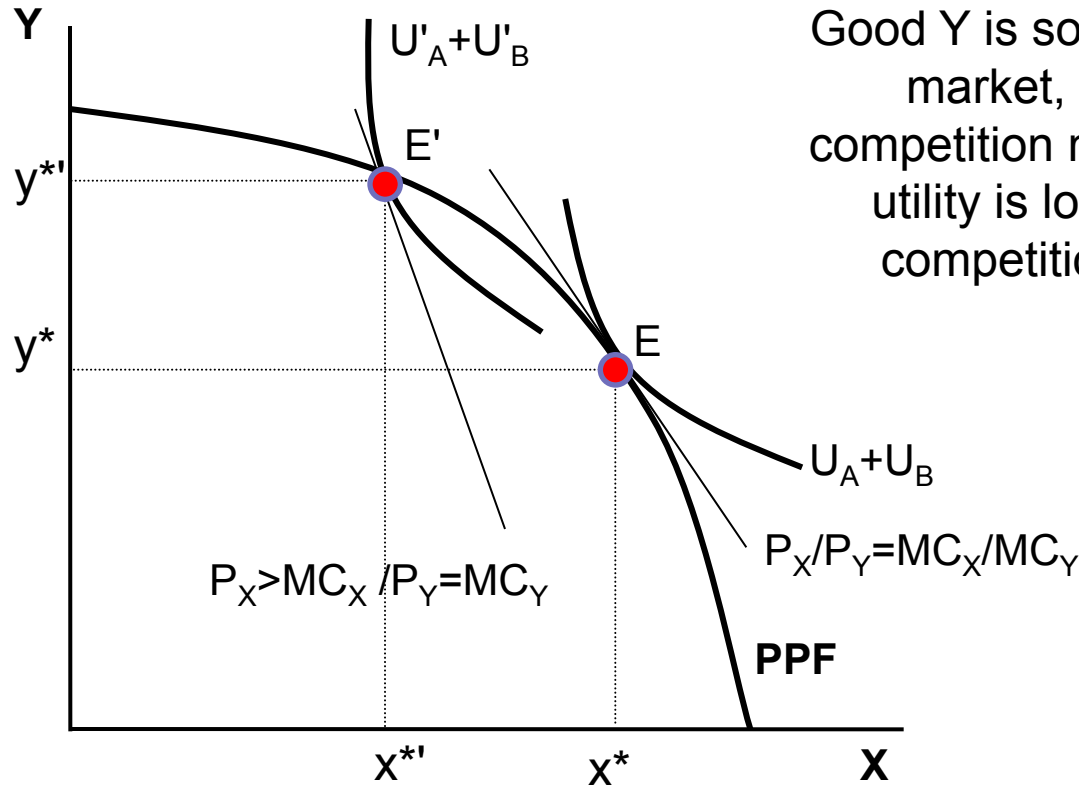
# System failure

- natural tendency of perfect competition markets to the imperfect competition
- natural aim of firms to strengthen their market positions
- perfect → imperfect competition

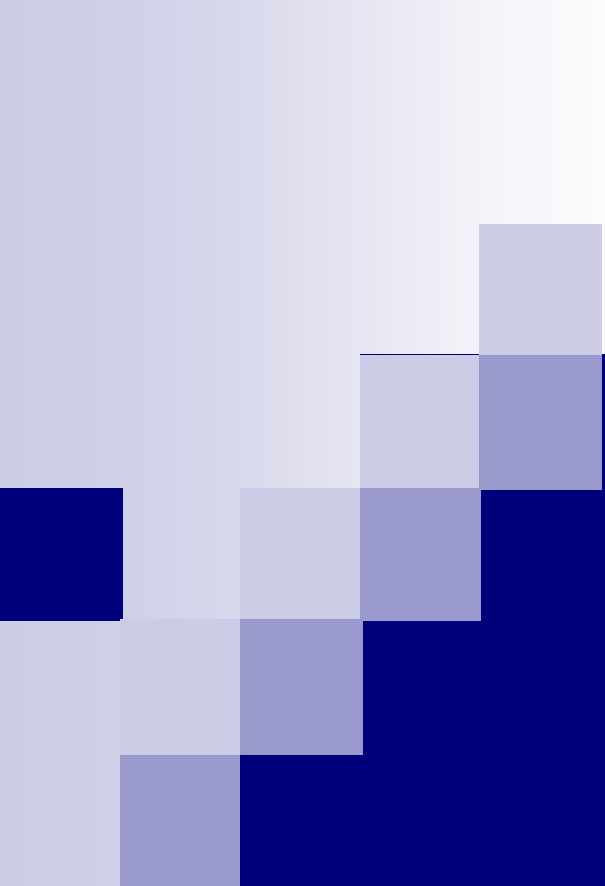
# System failure

- Imperfect competition is allocative and productive inefficient
- productive inefficiency – equilibrium output not produced with minimal AC
- allocative inefficiency – existence of DWL
- economy with imperfect competition markets is not able to reach the maximal level of total utility

# Consequence of imperfect competition



Good Y is sold on the perfect competition market, good X on the imperfect competition market – the economy's total utility is lower than upon the perfect competition markets of both goods



# The failure of system elements



# Externalities

EXTERNALITY = negative or positive effect resulting from the action of the specific subject to the other subject

- *negative externality* – the originator causes negative effects (costs) to someone else
  - *positive externality* – the originator causes positive effects (utilities) to someone else – the originator does not get paid for the utilities
- (!!!) – the existence of externalities itself is not the economical problem – the problem is the result of the externalities existence*

# Negative externality

- there is produced over-optimal volume of goods with negative externality – costs on the externality elimination are not calculated within the price of goods
- how to include these costs?
- possible solution: tax on consumption of goods with negative externality

# Positive externality

- there is a sub-optimal production of goods with positive externality – the external utilities are not included in the demand for such a good
- possible solution: subsidies to the producers of goods with positive externalities

# The existence of public goods

PUBLIC GOOD must fulfill following conditions:

- *its consumption is non-rivalrous* – if one consumer consumes the good, the volume of the good would not decrease (i.e. the use of roads)
- *its consumption is non-excludable* – there is no effective way to exclude non-paying consumers out of consumption (i.e. the use of mass transport)

**(!!!) *public good* ≠ *publicly provided good***

# Public good and inefficiency

- firms would not be generally interested in production of public goods, because:
- consumers would like to consume the goods, but not all would like to pay for them (stow-away problem)
- possible solution: providing of public goods by the public sector – public sector disposes relatively effective instruments



# Asymteric information

1. Principal-agent relationship
2. Adverse selection

# Principal – agent

- principal delegates competences on the agent (deputy)
- agent has generally better info, so:
- agent may increase his/her utility of the principal s accord
- i.e.: stockholders (principals) delegate their competences on the management (agents) to manage the corporation
- management – better info = possibility to increase its utility of the stockholders accord
- is there any loss of the utility? or is there only a utility redistribution?

# Adverse selection

- existence of imperfect info may lead to the low quality good markets
- example: market of used cars...
- ... if everyone expects low quality cars, subject which would offer a high quality car does not get an adequate price (consumers expect low quality cars – low price)... the result is:
- noone would like to offer a high quality car – all used cars on the market have the low quality



# Solution of market failures

- the matter of attitude
- some economists (and politicians) would prefer the state interventions, but...
- some economists (and politicians) would prefer the free market – main argument:
- state interventions would not increase the total utility, but only redistribute it (see Rothbard)

# Coase theorem

- accent on the enforcement of owner s rights
- Coase says: upon zero transaction costs the most efficient solution of externalities is the enforcement of owner s rights...
- ... in other words – enforcement of owner s rights is efficient up to the level of transaction costs
- ... if transaction costs on owner s rights  $>$  the costs resulting from the negative externality (or sacrificed utility from the positive externality), it is more efficient to solve the externalities via the state