

MARKET FAILURE I: EXTERNALITIES

Market failure: when the market fails to achieve an efficient outcome. It implies society's wellbeing is lower than the efficient level.

Sources of market failure:

- Externalities
- Public goods
- Imperfect competition
- Imperfect information

Implications for the role of the government:

- When the market equilibrium is efficient, any government intervention will reduce social wellbeing
- When there is market failure, government intervention can increase social wellbeing

Market failure is also relevant for organisations and business.

EXTERNALITIES

Externality: the uncompensated impact of one person's actions on the wellbeing of a bystander

Exist when:

1. A decision-maker's action causes costs or benefits to other members of society, and
2. These costs or benefits are not borne or received by the decision-maker

Externalities can be positive or negative and they may be derived from production or consumption activities.

Some examples are smoking, vaccination and education.

Key points:

- Spillover from action by decision-maker to another party
- Because decision-maker does not bear costs or receive benefits from the spillover, these consequences are not taken into account by decision-maker
- This causes decision-maker to take either too low or too high an action

COMPETITIVE MARKET EQUILIBRIUM AND SOCIALLY OPTIMUM OUTCOME

COMPETITIVE MARKET EQUILIBRIUM

Market outcome is when demand=supply

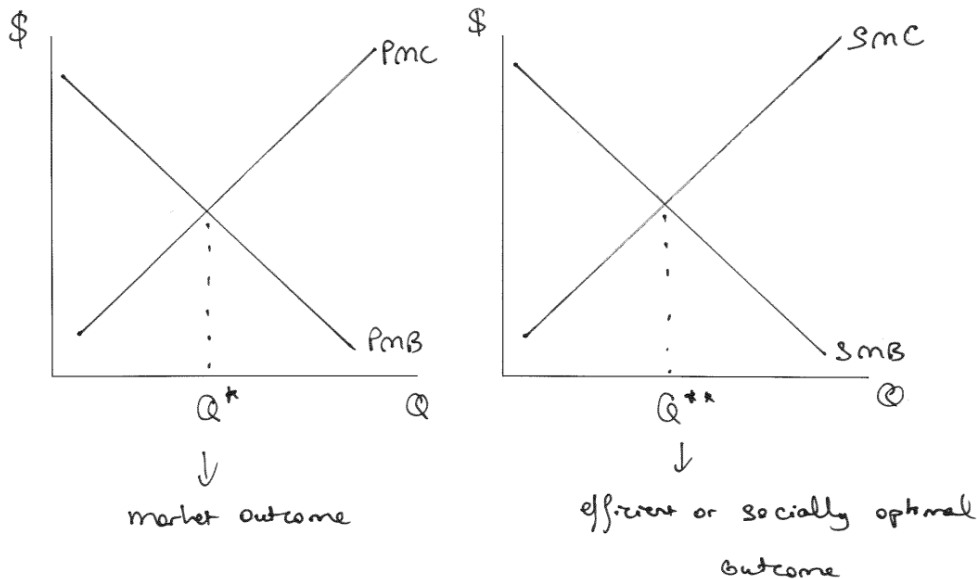
In the context of externalities, we say that:

- Demand= Private Marginal Benefit (PMB)
- Supply= Private Marginal Cost (PMC)

Decision-makers take into account PMC and PMB, so the **market outcome reflects private costs and benefits.**

EFFICIENT (SOCIALLY OPTIMAL) OUTCOME

To maximize total surplus, choose the quantity of output such that Social Marginal Benefit (SMB) = Social Marginal Cost (SMC)



MARKET FAILURE DUE TO EXTERNALITIES

- No market failure if $PMB=SMB$ and $PMC=SMC$. That is, the market equilibrium is efficient.
- Market failure if an externality exists.
 - Private decision-makers will not take into account the full social costs and/or benefits of their actions
 - $PMB \neq SMB$ and/or $PMC \neq SMC$
 - Quantity of output traded in the competitive market will not be efficient

