Externalities

1 What are externalities?

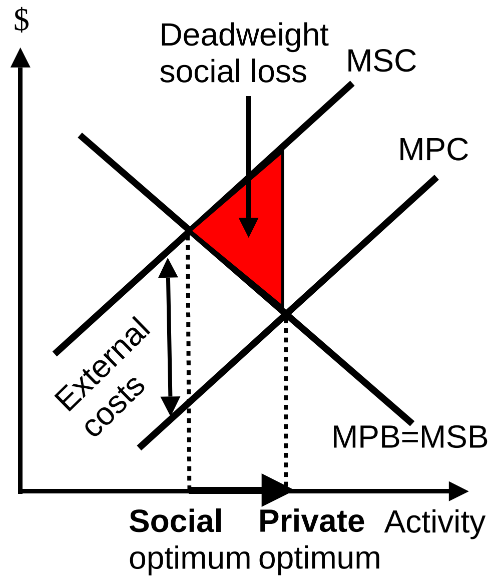
Economic activities can have **impacts** on other economic agents. These impacts cause a **divergence between social and private costs or benefits**.

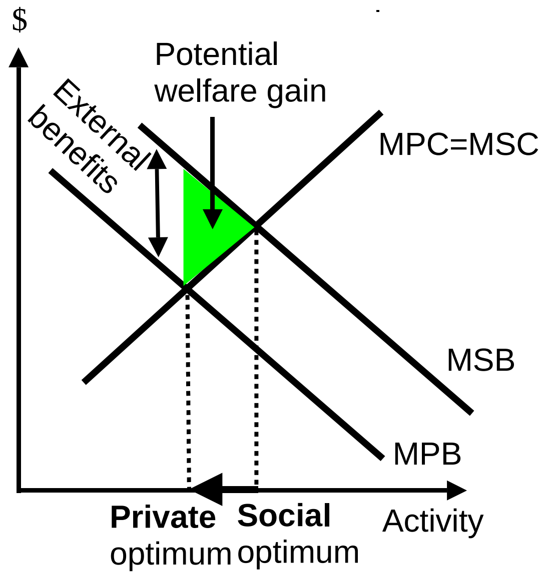
2 Types of externalities (E)

21 **Positive** E (ex.: School education) or **negative** E (ex.: Pollution)	22 E caused by **production** (ex.:Pollution) or by **consumption** (ex.: Vaccinations)

3 Examples

31 Negative E by production (example: Pollution)	32 Positive E by consumption (ex.: Vaccinations)





Result: **Overproduction** because producers do not take into account external costs (MPC**<**MSC)	**Result:** **Underproduction** because producers do not take into account external benefits (MPB**<**MSB)

Abbreviations

MPC = Marginal private costs
MSC = Marginal social costs
MPB = Marginal private benefits
MSB = Marginal social benefits

4 How to get the socially optimal level where MSB = MSC?

41 By taxes (negative E) or by subsidies (positive E)
42 By regulations in order to limit negative E and support positive E
43 By introducing tradable licenses (in the case of negative E)
44 By creating property rights (→ 5 Coase Theorem)

5 Coase Theorem

If there are well-defined property rights and if costs of negotiations (so-called transaction costs) are low, the private market will lead to a socially optimal level of activity where MSB = MSC.