

Ch 10. Externalities

- **Externalities :** One type of market failure

- The uncompensated impact of one person's actions on the well-being of a bystander

- Negative externality and Positive externality

- The market outcome is not efficient, because buyers and sellers in the market neglect the **external costs** or benefits of their action
 - Government policies can potentially improve the outcome.

- **Negative externalities**

- ex. Air pollution from a factory, Noise from your neighbor..

- The market equilibrium maximizes consumer + producer surplus.

- Supply curve shows private cost of sellers
 - Demand curve shows private value of buyers
 - With negative externality, the market equilibrium is greater than socially desirable amount.

- **Social cost = Private cost + External cost(=value of negative impact on bystanders)**

- One solution: tax sellers \$1/gallon, would shift S curve up \$1.

- **Internalizing the externality**

- Altering incentives
 - "market equilibrium = social optimal"

- **Positive externalities**

- Ex. Being vaccinated against COVID 19, R&D, College education
 - With Positive externality, the market equilibrium is less than social optimal.
 - Social value = Private value + External benefit
 - To internalize, provide subsidy

- **Public policies toward externalities**
- Command and control policies
 - Direct regulation
- Market based policies
 - Providing incentives (taxes or subsidies)
 - Tradable pollution permits
- Pigouvian taxes
 - English economist A. Pigou
 - Corrective taxes
- **Private solutions to Externalities**

The Coase Theorem

 - If private parties can bargain without cost over the allocation of resources, they can solve the problem of externalities on their own
- Why private solutions do not always work?
 - High transaction cost