Economic Freedom

- Economic freedom refers to the degree to which private individuals are able to carry out voluntary exchange without government involvement.
- The United States is only about the 10th freest economy in the world.
- Economic freedom is linked to standards of living.

Market Failures

- Market failure – the invisible hand pushes in such a way that individual decisions do not lead to socially desirable outcomes.

Externalities

- Private costs and benefits are costs and benefits that are borne solely by the individuals involved in the transaction.
- An externality is a cost or benefit that accrues to someone who is not the buyer (demander) or the seller (supplier).
- If externalities exist, it means that those involved in the demand and supply in the market are not considering all the costs and benefits when making their market decisions.
- As a result, the market fails to yield optimal results.

Market Failure

- A market failure occurs when the market outcome is not the socially efficient outcome. Some action by the government is sometimes necessary to ensure that the market does work well.
- Action is also necessary as a result of rent seeking: the use of resources to transfer wealth from one group to another without increasing production or total wealth.

Externalities

- Externalities are the effect of a decision on a third party that is not taken into account by the decision-maker.
- Externalities can be either positive or negative.
Externalities*

- **Negative externalities** occur when the effects of a decision not taken into account by the decision-maker are detrimental to others.

- **Positive externalities** occur when the effects of a decision not taken into account by the decision-maker is beneficial to others.

A Negative Externality Example

- When there is a negative externality, marginal social cost is greater than marginal private cost.
  - A steel plant benefits the owner of the plant and the buyers of steel.
  - The plant’s neighbors are made worse off by the pollution caused by the plant.

A Negative Externality Example

- **Marginal social cost** includes all the marginal costs borne by society.
  - It is the marginal private costs of production plus the cost of the negative externalities associated with that production.

A Negative Externality Example

- When there are negative externalities, the competitive price is too low and equilibrium quantity too high to maximize social welfare.

A Negative Externality*

- Marginal social cost = Marginal social benefit
- Marginal social cost from externality
- Marginal private cost
- Cost
- Quantity
- $S_1$, $S = \text{Marginal social cost} \quad D = \text{Marginal social benefit}$
More on Externalities

• A positive externality may result when some of the benefits of an activity are received by consumers or firms not directly involved in the activity.
• A negative externality may result when some of the costs of an activity are not borne by consumers or firms not directly involved in the activity.

Social Cost

• Social cost: the total social cost of a transaction is the private cost plus the external cost.
• If all of the costs of a transaction are borne by the participants in the transaction, the private costs and the social costs are the same.

Externalities and Market Failure

• When there is a divergence between social costs and private costs, the result is either too much or too little production and consumption.
• In either case, resources are not being used in their highest-valued activity and market failure can occur.

Negative Externalities

With a negative externality, the supply curve does not reflect the true cost of the good. As a result, the supply that is provided is greater than it would be if suppliers had to pay all the costs (including the external cost). $S_p$ is the supply provided, whereas $S_s$ is the supply as it would be if the suppliers had to pay the external cost.

A Positive Externality Example

• Private trades can benefit third parties not involved in the trade.
  – A person who is working and taking night classes benefits himself directly, and his co-workers indirectly.

A Positive Externality Example

• Marginal social benefit equals the marginal private benefit of consuming a good plus the positive externalities resulting from consuming that good.
A Positive Externality

Positive Externalities

- With a positive externality, the demand curve does not reflect all the benefits of the good. As a result, the demand that is given in $D_P$ is less than it would be if demanders received all the benefits (including the external one). $D_S$ is the demand as it would be if the demanders received the external benefit.

Pollution Tax

- One class of solutions to the externality problems involve **internalizing the costs and benefits**, so that the market can work better.

- **Pollution Tax**: if a firm is creating a negative externality in the form of pollution, create a tax on the polluting firm equal to the cost of cleaning up the pollution.

Regulation Through Taxation*

- Another approach is **command**—rather than imposing a tax or offering a subsidy, the government simply requires or commands the activity.
  - For a **negative externality** like pollution, the government simply requires the company to stop polluting.
  - For a **positive externality**, like inoculation, the government requires certain classes of citizens to be inoculated.
Marketable Pollution Permits

- Another approach to pollution is the introduction of **marketable pollution permits**.
  - The government sells the permits, which in total allow the amount of pollution that the government believes to be acceptable.
  - Demanders, typically firms, purchase the permits, allowing them to pollute up to the amount specified by the permits they own.
  - If a firm is able to employ a cleaner technology, then it can enjoy additional revenues by selling its pollution rights to someone else.

Subsidy for Inoculations

![Subsidy for Inoculations](image)

Market for Pollution Permits

![Market for Pollution Permits](image)