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Market failure

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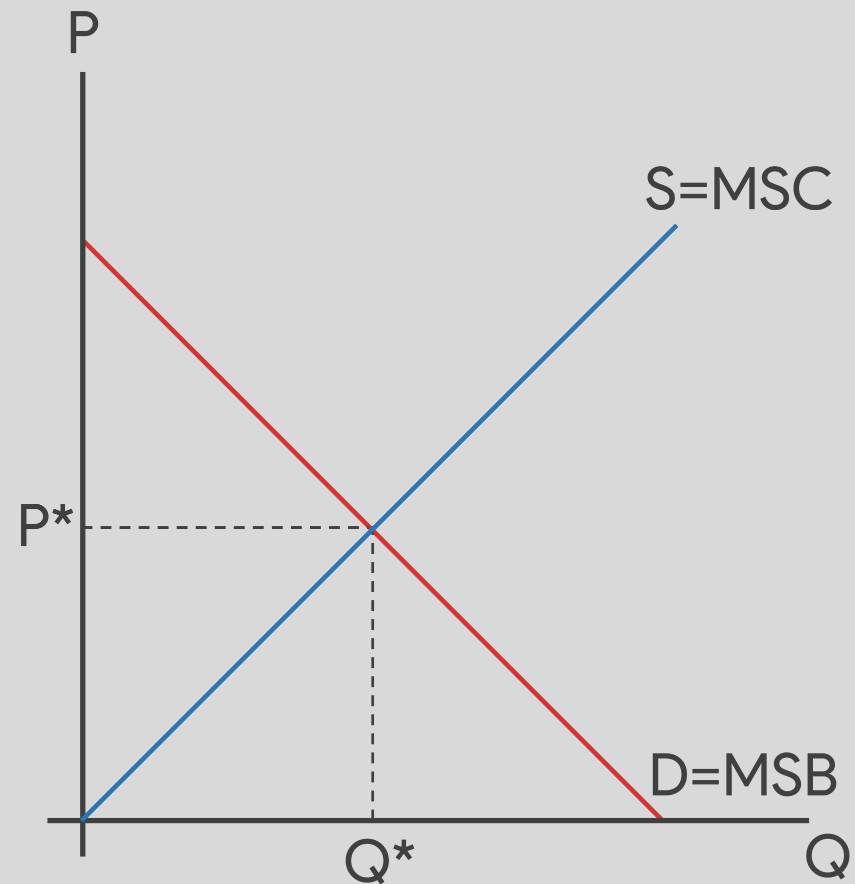
Reading list

Mankiw Ch 10, 11, 15, 22

Market failure

is when market (price mechanism) cannot allocate resource efficiently or when price does not reflect true cost and benefit.

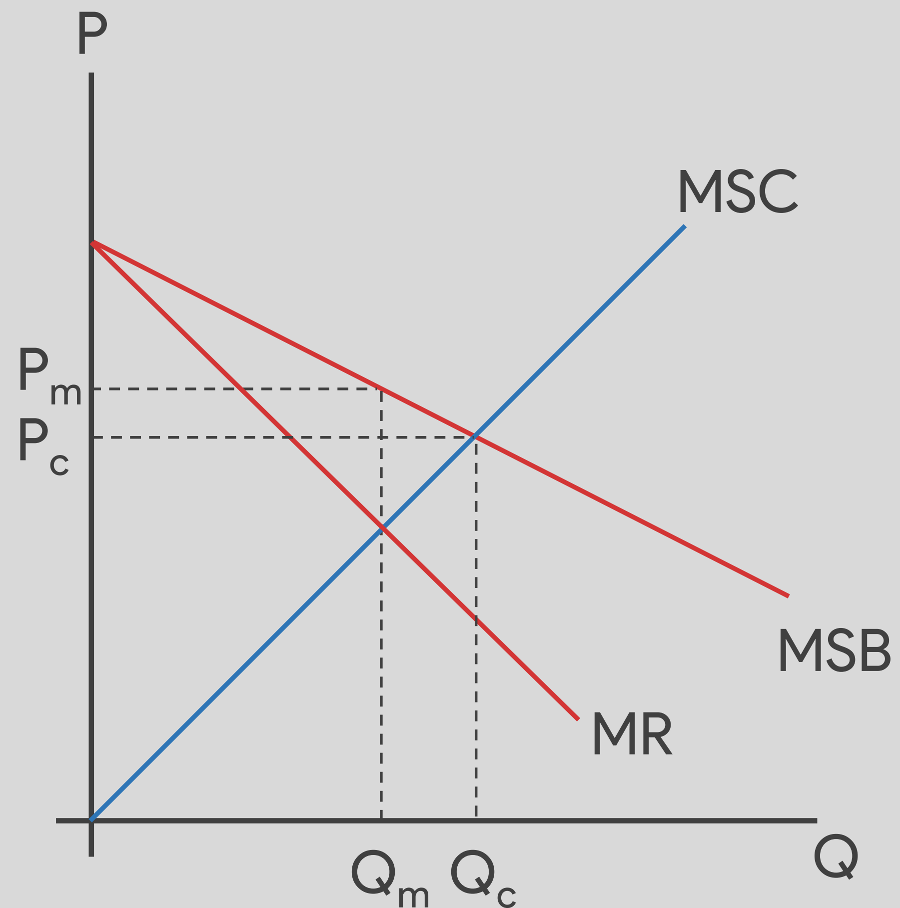
- Marginal Social benefit (MSB)
- Marginal Social Cost (MSC)
- Surplus



Non-competitive market

Optimal price and quantity cannot be attained.

- Deadweight loss



Market power

There are several methods to measure market power or industry concentration.

- **Lerner's Degree of Monopoly Power**

$$L = \frac{P - MC}{P}$$

Example: Supposed that there is a monopoly producing water supply with marginal cost at 30 baht per gallon, the monopolist set the selling price at 50 baht per gallon. Calculate the Lerner index for this market.

Market power

- Herfindahl-Hirschman Index (HHI)

$$HHI = \sum_{i}^{N} s_i^2$$

Example: There are 2 countries with 3 sugar companies. The first country all 3 companies has equal market share. On the other hand, 3 companies in the second country share 80/10/10. Utilize the HHI to identify different concentration level.

2.1 Definition

Externalities

is a side effect occurred along the consumption or production process which leads to price distortion, when price does not cover to cost or benefit.

- Negative externalities
- Positive externalities

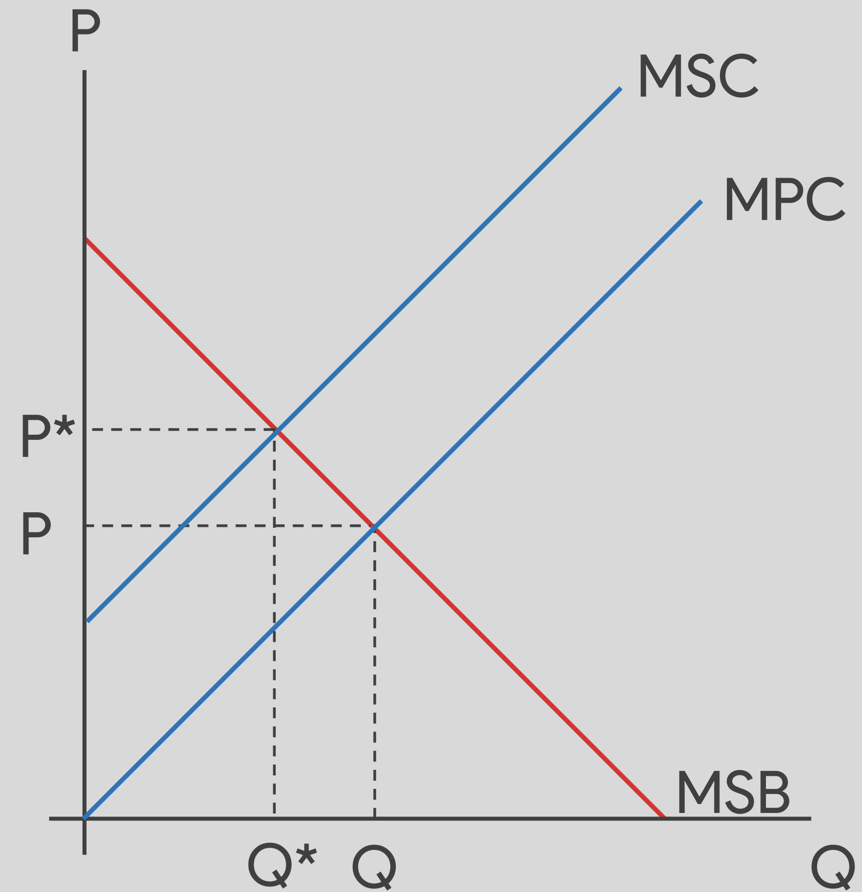
2.2 Negative externalities

Negative externalities is a negative side effect that distort optimal price and quantity. (Too many goods or services are produced or the price set is too low)

- Examples?

2.2 Negative externalities

- Deadweight loss



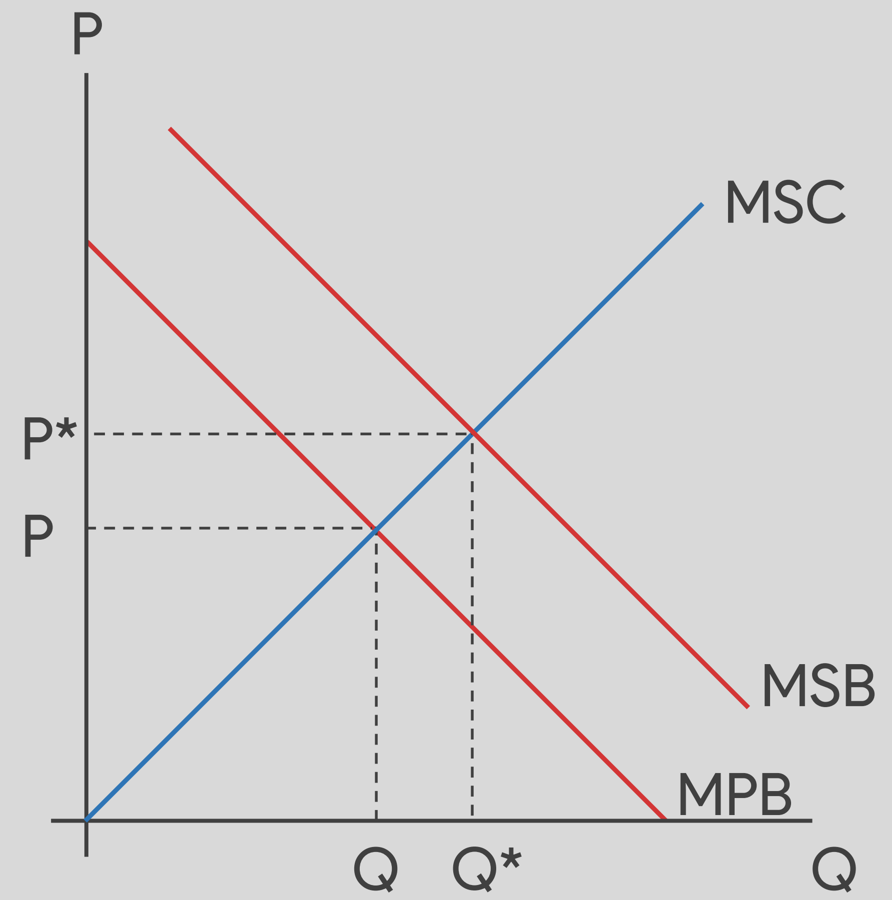
2.3 Positive externalities

Positive externalities is a positive side effect that distort optimal price and quantity. (Goods or services are produced too little or the price set is too high)

- Examples?

2.3 Positive externalities

- Deadweight loss



2.4 Conclusion

How to mitigate externalities

- Polluter Pay Principle (PPP)
- Carbon credit
- Setting up an organization that campaign against externalities such as Thai Health Promotion Foundation.

3.1 Definition

Public Goods

Goods can be defined with following criteria

- Excludability – can a good be exclusive by price, that prevent those who do not pay to consume?

- Rivalry in consumption – does consuming a good raise social marginal cost?

Public goods are those with none of the above characteristics.

3.1 Definition

Public Goods

		Rivalry in consumption ✓	Rivalry in consumption ✗
Excludability	✓	**Private goods** - Ice-cream - Clothing - Congested toll	**Club goods** - Hugh cinema - Streaming services - Uncongested toll
	✗	**Common resources** - Ocean fish - Forest - Congested road	**Public goods** - Lighthouse - Military service - Uncongested road

3.2 Problem it causes

Public Goods

- Some pure public goods are considered necessary for a society but there will be no private firm producing them because they are not profitable.

- Consumers can avoid paying a price to consume these public goods. (Free rider)

3.3 Conclusion

How to mitigate public goods problem

- Collective decision making

- Management in a smaller community tends to have lower monitoring cost.

4.1 Definition

Asymmetric information

is a situation when two or more economic agents do not share information equally, leading to an inefficient decision or un-ability to pricing optimally.

- Adverse selection
- Moral hazard

4.2 Adverse selection

◉ **Health insurance market**

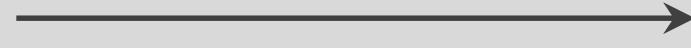
Result

4.2 Adverse selection

- **Second-hand car market**

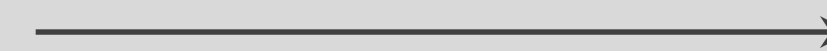
Result

High quality



Shop

Buy with moderate price



Low quality

4.3 Moral hazard

A principal-agent problem that occurs when principal cannot monitor agent's behavior after signing a kind of contract.

- Employers and employees
- Insurer and the insured
- Corrupted political representatives.

4.4 Conclusion

How to mitigate asymmetric information problem

- Enforce law that protects consumers from low quality product.

- Legally standardize some occupation that requires proficiency such as doctor, lawyer, engineer.

- Create incentive or disincentive such as paying extra premium for insurance claimed and vice versa.

- Microeconomics in this course is called Neo-Classical Economics. It is still considered a mainstream economics, relying on assumptions that fit for mathematical concept of optimization

- Central idea lies upon marginal approach. (marginal revolution)

- It is believed that market price is one of the most efficient method to allocate resources in any society.

- Extreme assumptions, especially economic human ‘rationality’, are Achilles’ heel for this approach.

◉ Market failure is very common in real life. A government is expected, most of the time, to relieve or resolve it.

◉ But in reality, a government can also fail to do so. Simple put market loopholes aside to a government does not simply solve the problem. Public Choice Theory raises a very important issue: what if a government does not have any incentive to do so?

◉ Therefore, there are many more approaches that can provide even more reliable explanation in some specific circumstances that the mainstream economics cannot, such as Institution economics, Marxism, Keynesian economics.