EE401 Political Economy

Chapter 8 Welfare Economics and Government Failure

i. Market Failure and Government Wisdom

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Welfare economics and government failure

1. The assumptions of welfare economics
2. Potential Pareto improvement or Kaldor-Hicks Efficiency
3. Efficiency vs. Equity
4. Market failure and government wisdom
5. Government failure

1. Theorems of welfare economics

- A school of economics which uses microeconomics to evaluate '**aggregate welfare**'.
- Aims to derive social welfare functions so as to investigate the possible allocations of resources.
- Two fundamental theorem: competitive market is associated with "*Pareto efficiency*".
  - Influenced by the ***'Invisible Hand'*** logic of Adam Smith.

1.1 Related assumptions

- Perfect competition rests on the following assumptions:
  - All firms are small—“price-takers”.
  - Homogeneous products.
  - No barriers to entry and exit.
  - Perfect and symmetric information.
  - Low or no transaction costs.

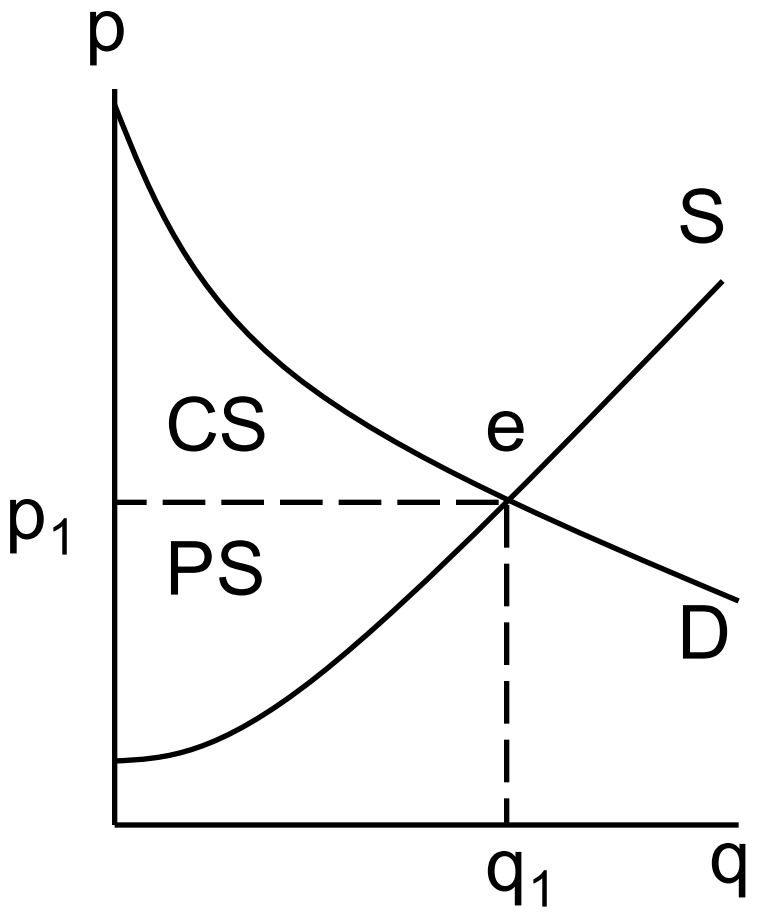
- But does perfect competition really exist?
  - Benchmark to analyze other markets.

1.2 Perfect competition and welfare

- Equilibrium in perfect competitive market
  - Social welfare (W) is the sum of consumer surplus (CS) and producer surplus (PS).

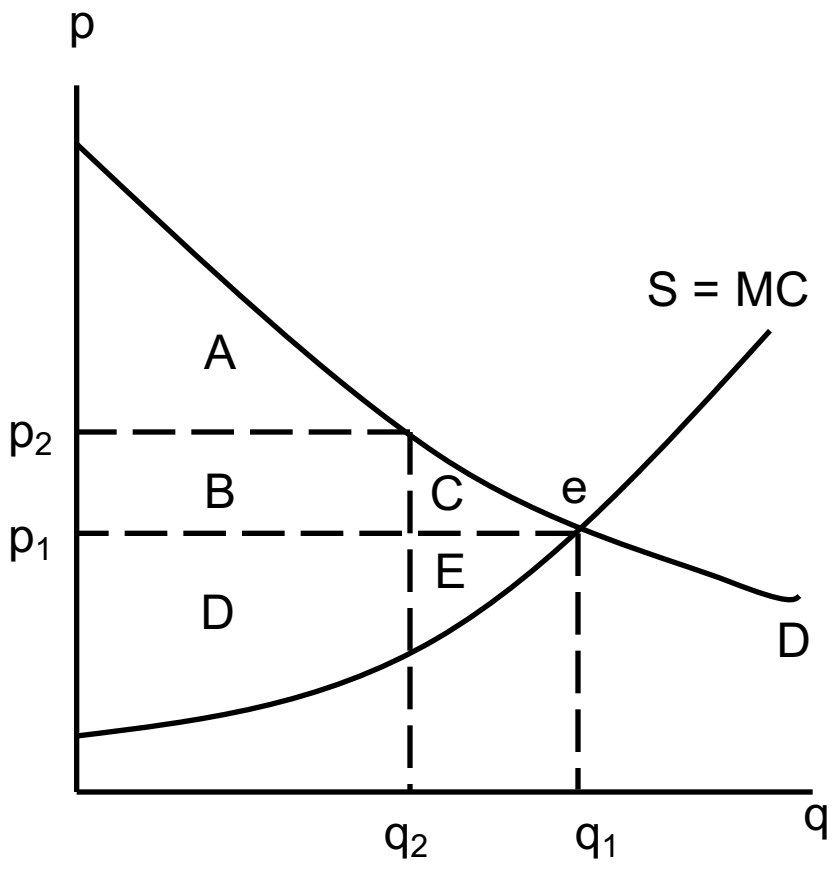
$$W = CS + PS$$

Competitive markets ***maximize*** social welfare.



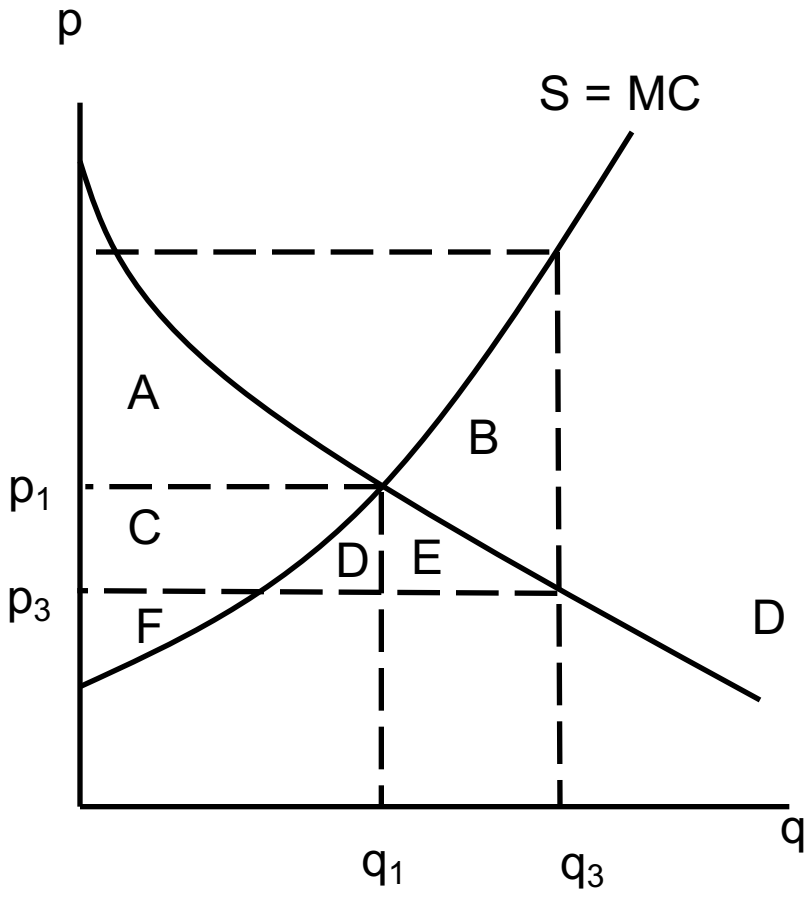
1.2 Perfect competition and welfare

- Perfect Competition
  - CS = A+B+C
  - PS = D+E
- Quantity below competitive equilibrium
  - CS = A
  - PS = B+D
    - B = CS transferred to producers.
  - DWL = …….
- At q_2, $p_2 > MC$



1.2 Perfect competition and welfare

- Perfect Competition
  - CS = A
  - PS = C + F
- Quantity above competitive equilibrium
  - CS = A+C+D+E
  - PS = F-D-E-B
    - C+D+E is transferred to consumers.
  - DWL = ……
- At q_3, $p_3 < MC$



1.3 Pareto efficiency

- **Pareto efficiency**
  - An allocation is ***Pareto efficient*** if improvement of one person cannot be made without harming anyone else.
- **Two theorems of welfare economics**
  i. Perfect competition leads to Pareto efficient allocation.
     - An allocation where 1 person gets all the goods and others have none is also Pareto efficient.
  ii. Any Pareto-efficient allocation can be obtained by competition, given an appropriate endowment.

1.3 Pareto efficiency

- **Pareto efficiency and real life:**
  - The assumptions needed in order for 'perfect competition' to work, are rarely seen.
  - ***Any policy change that does not create negative impacts at all?***
    - Otherwise, the Pareto criterion requires that **gainers** from a policy explicitly **compensate the losers** in any change.

      ➔ Pareto efficiency hardly occurs.
    - Advocating Pareto efficiency is a **'value judgment'** and might be **political** (***resisting change*** *and* ***maintaining status quo***).

2. Kaldor-Hicks Efficiency

- Example: decision on building an airport

	Benefits	Costs
Passengers	$100 m	
Airline company	$120 m	
Local residents		$20 m
Environment		$30 m
Total benefit	$220 m	
Total cost		$50 m

  - Building an airport is *not pareto efficient* unless the losers are compensated

2. Kaldor-Hicks Efficiency

- **Kaldor-Hicks efficiency or potential Pareto improvement**
  - Building an airport is efficient because of **"net gains"**
  - If *gainers* in a policy *get more than the losers*, the policy can be adopted with **potential** of compensation.
  - Actual compensation is a political question.

3. Efficiency vs. Equity

- **Efficiency as a policy**
  - To say that government should pursue Pareto efficiency is ***a value judgment***.
  - Society usually has other goals.


Equality
doesn't mean
Equity

3. Efficiency vs. Equity

- **Equity**
  - Society chooses to *favor particular social groups* over others.
    - What is the criterion of **judgment**?
    - **Utilitarianism**: the highest utility for the largest number (Jeremy Bentham).
  - In the real world, **political mechanism** is used to make such judgment.
    - Wealth and income redistribution by political means.

3. Efficiency vs. Equity

- **Efficiency versus equity**
  - Efficiency and equity may be in conflict.
  - Pareto efficiency may result in unequal distribution of income.
  - Society may prefer **equal *but* inefficient allocation**.
    - E.g. Redistributive taxes
- **Economists prefer efficiency!**
  - Efficiency is a **scientific** question.
  - Equity involves ***value judgment***.

4. Market failure and government wisdom

- Assumptions for efficient markets:
  1. Goods or services are **private**.
  2. All value or utility of the good is *reflected in the demand* function.
  3. All production costs are *reflected in the supply* function.
  4. Markets are **competitive** (price-takers).

4. Market failure and government wisdom

- Market Failure: any of the four assumptions are not fulfilled.
  - Externalities;
  - Public goods;
  - Imperfect competition;
  - Asymmetric information;
  - High transaction costs;
  - Macroeconomic instability (?)

4. Market failure and government wisdom

- Government wisdom
  - Market failure results in inefficient outcomes and ***justifies government intervention***.
    - Government knows all the necessary information and the solutions.
    - **A general will** represents **social interest** above group interests.
    - ***Benign political agents.***