



# Starting Policy Analysis: Market and Government Failures

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## Questions to ask

- Is your project (or policy) sustainable?
  - Financial feasibility:
    - Example: Is the subway project financially sustainable? Can the government provide a sufficient amount of subsidy?
  - Political feasibility
- Are there market failures that may justify public interventions?
- Are there government failures that require improvements?
  - Can the government failure be corrected directly?
  - Are there any policies that reduce the social costs of the government failures?





## Fundamental Theorem of Welfare Economics

#### Fundamental Theorem of Welfare Economics (First):

Competitive equilibrium for all goods and bads → Pareto optimum (No one can be made better off without making somebody worse off.)

#### Assumptions

- Prices exist for all goods and bads
- Both demanders and supplier are price takers
- Buyers and sellers have the same information in all markets

#### Prerequisite

- Meaningless if a competitive equilibrium does not exist.
- Consumers and producers are rational (optimizing given consistent preferences)

### Pareto optimality

Equity issues are ignored.





## Market failure

- Externality: missing markets, no prices for some goods and bads
- Public goods: collective consumption, nonexcludability
- Asymmetric information: One side of the market has more information than the other.
- Scale economy (Nonconvexity)
  - Monopoly: Networks (water, sewage, electricity, roads, railway, gas, etc.)
  - Small number of suppliers: Oligopoly
  - Large number of suppliers with product differentiation
    - Urban agglomeration economies
- Equity
  - Poverty, Crime
- Irrational behavior
  - Behavioral economics, Economic Psychology





## Government failure

- Example: Urban policy (Mass transit investment, Land use regulation, etc.)
  - A policy maker cannot fully understand complicated economic activities in a city
  - Political decision making is imperfect: Example) rigidity in land use regulation
  - Corruptions and distorted incentives of policy makers and government empoyees
- Market failure and government failure
  - Case-by case evaluation of social benefits and costs of policy intervention is necessary
  - Variety and complexity in policy design
    - Example: policies to deal with market failure caused by asymmetric information about housing quality
      - Quality regulation (building standards); Supply of quality information by private organization, e.g., consumer's union; Quality guarantee by producers; Product liability law





## **Second Best**

#### Unavoidable market distortions

- Prices often do not equal the Marginal Social Costs
  - Taxes, Medical insurance, Nursing-care insurance, Externalities,
    Government regulations, Monopoly power, Asymmetric information
- Policy examples: Income tax distortions might justify subsidies on child care; Health insurance might justify a subsidy on health check; Monopoly power distortion in urban production might justify a subsidy on intra-urban transportation
- How to design and evaluate second-best policies?
  - Must consider the impacts on the existing distortions
  - Harberger's measure of excess burden