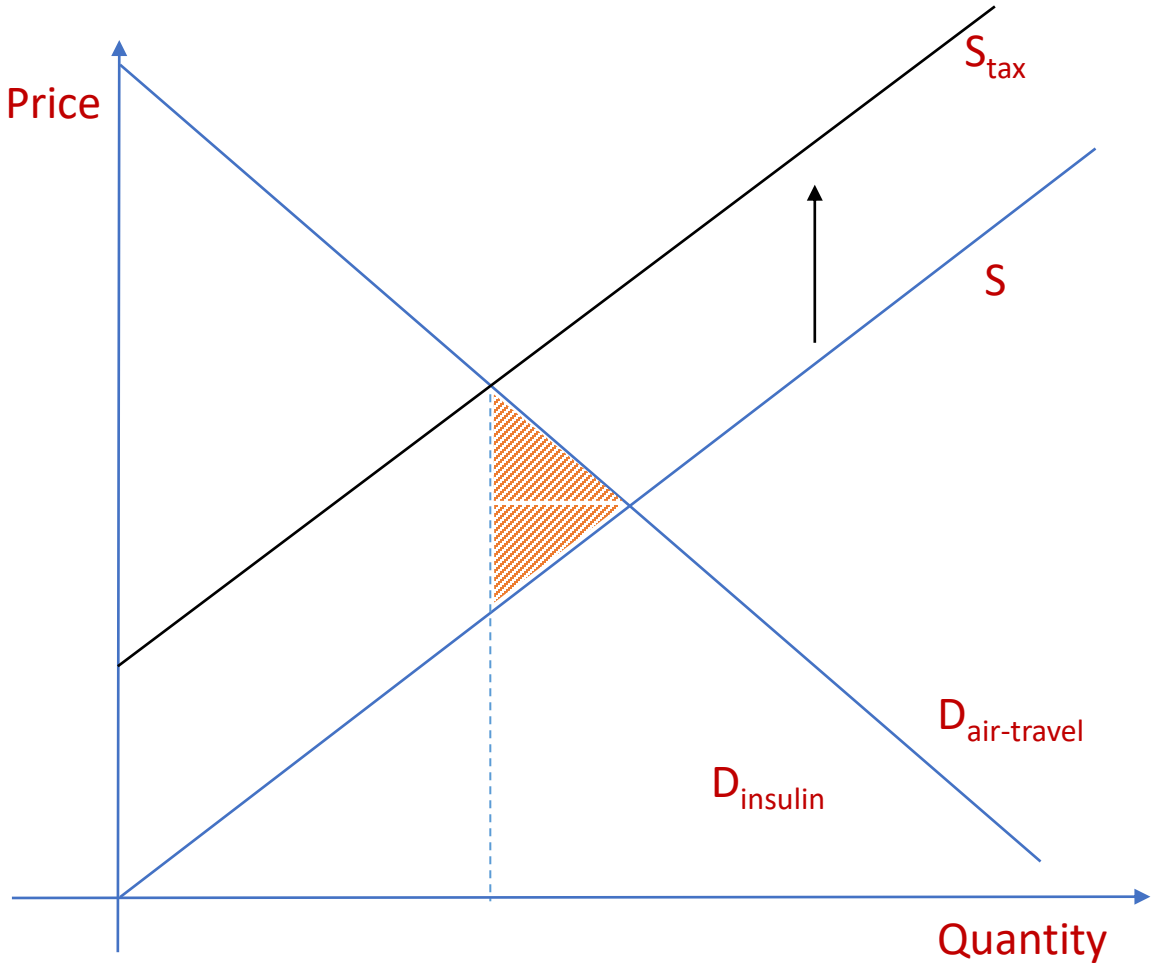
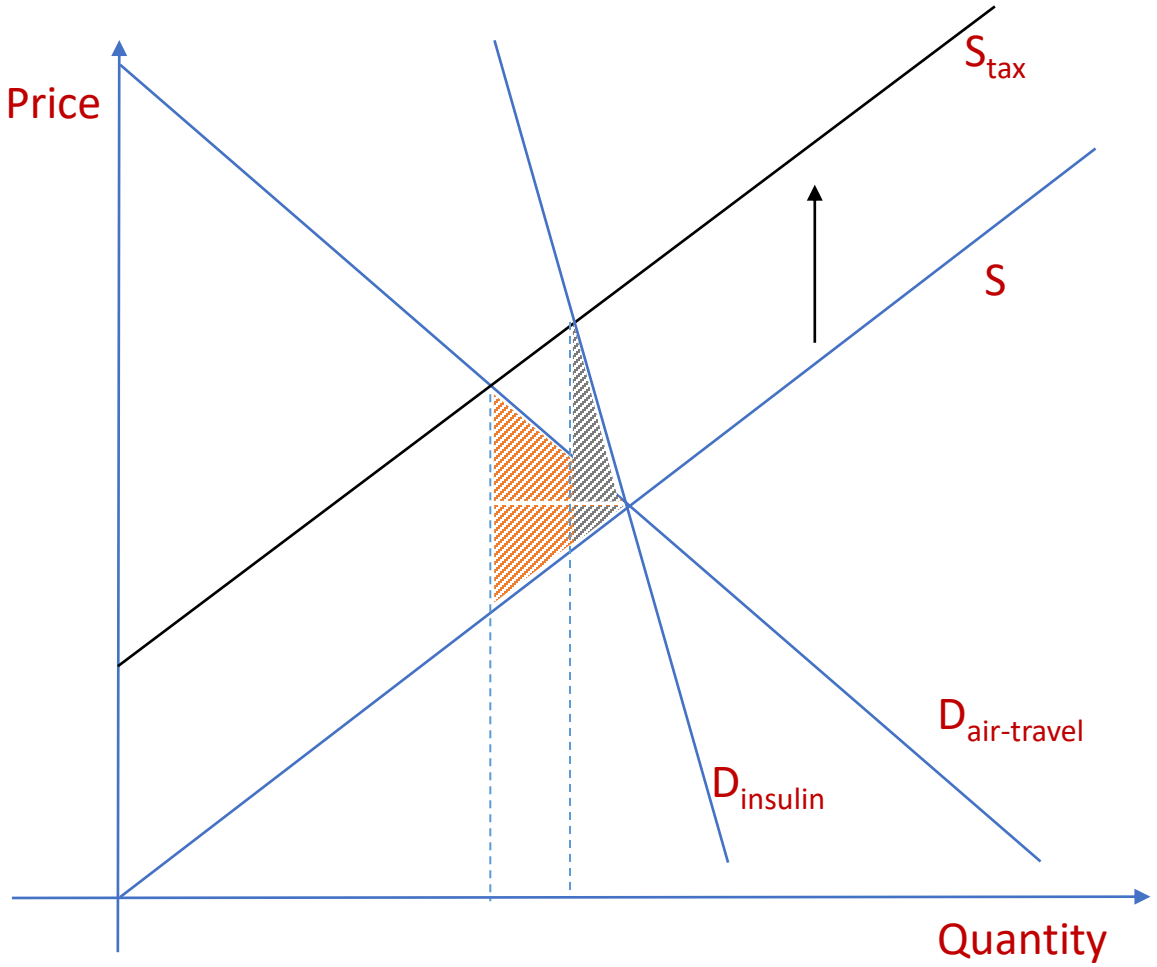
Deadweight Loss (DWL) review



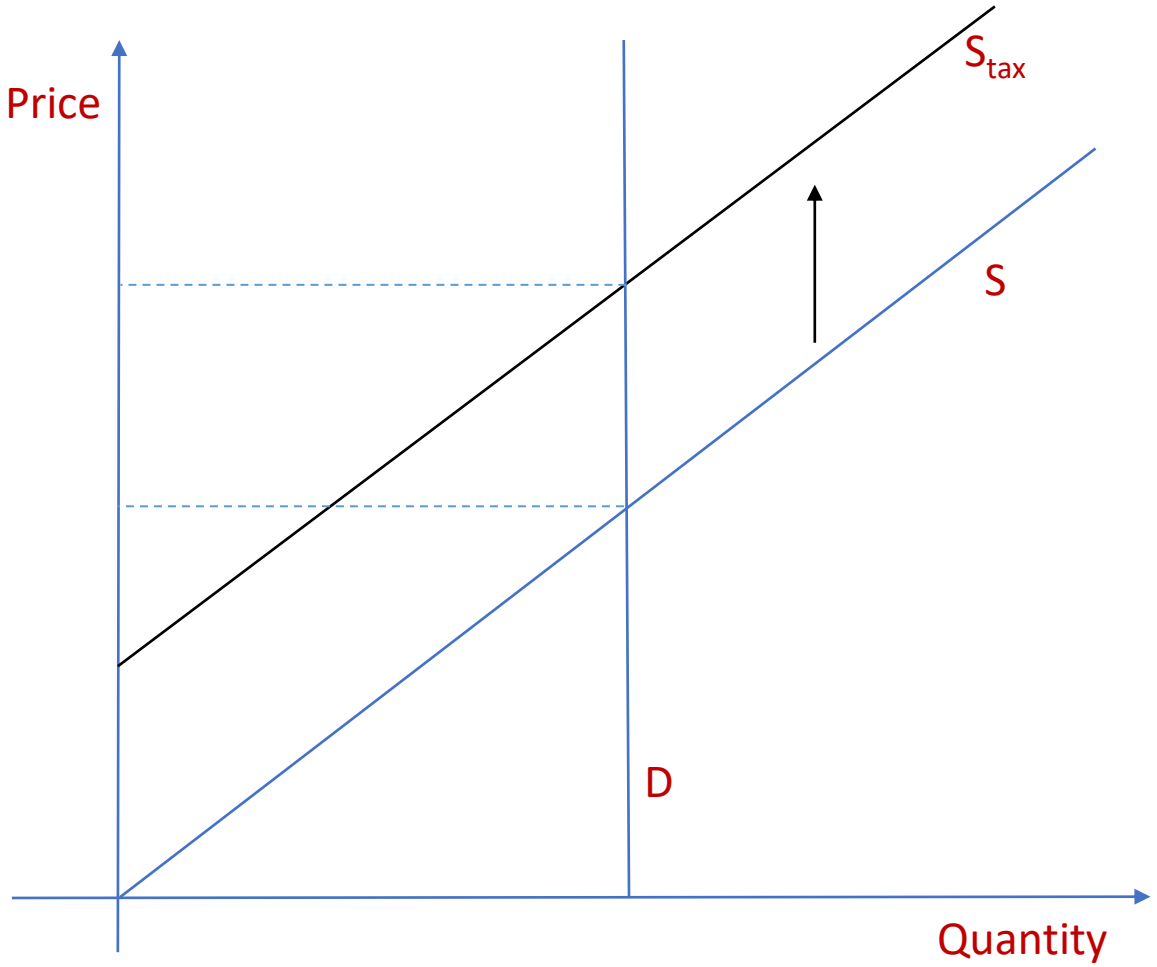
- Free markets (without externalities) maximize net surplus
- Govt intervention can create deadweight loss

Deadweight Loss (DWL) review



- Price elasticity of demand and supply curves determine the magnitude of the loss
- E.g., in Worksheet 4.3: taxing insulin vs air travel

Deadweight Loss (DWL) review



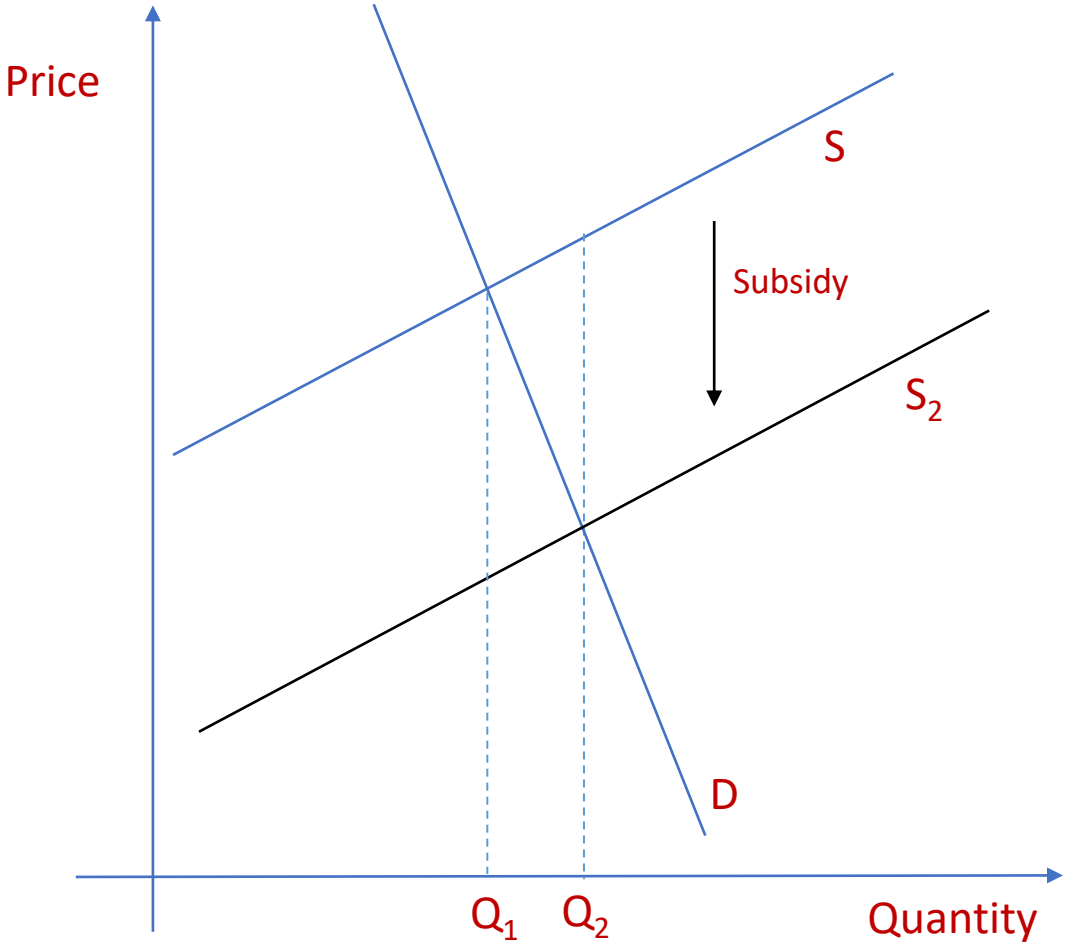
- If perfectly price-inelastic demand, no loss in net surplus!
- Loss to consumer in higher prices exactly offset by gains in government revenue.

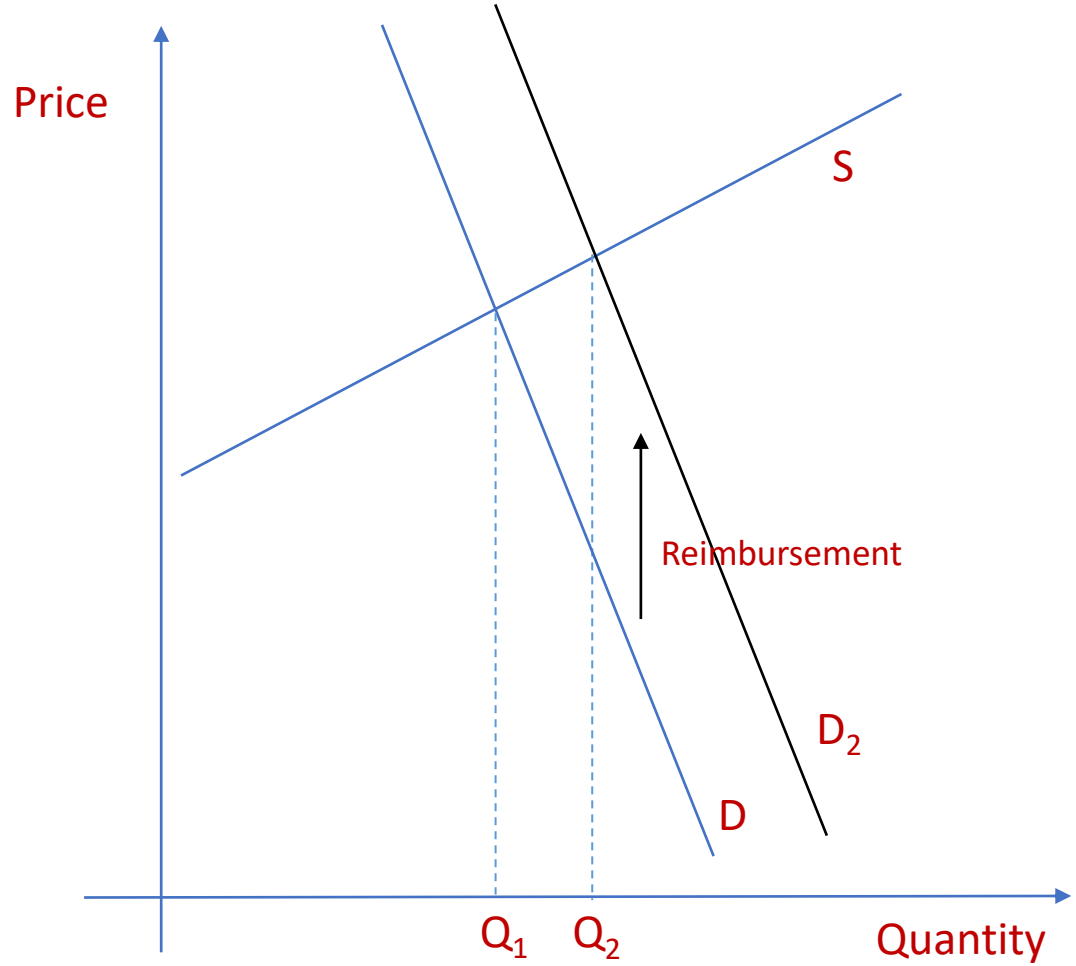
Homework 4.1: How to increase transit usage?

Subsidizing suppliers

VS

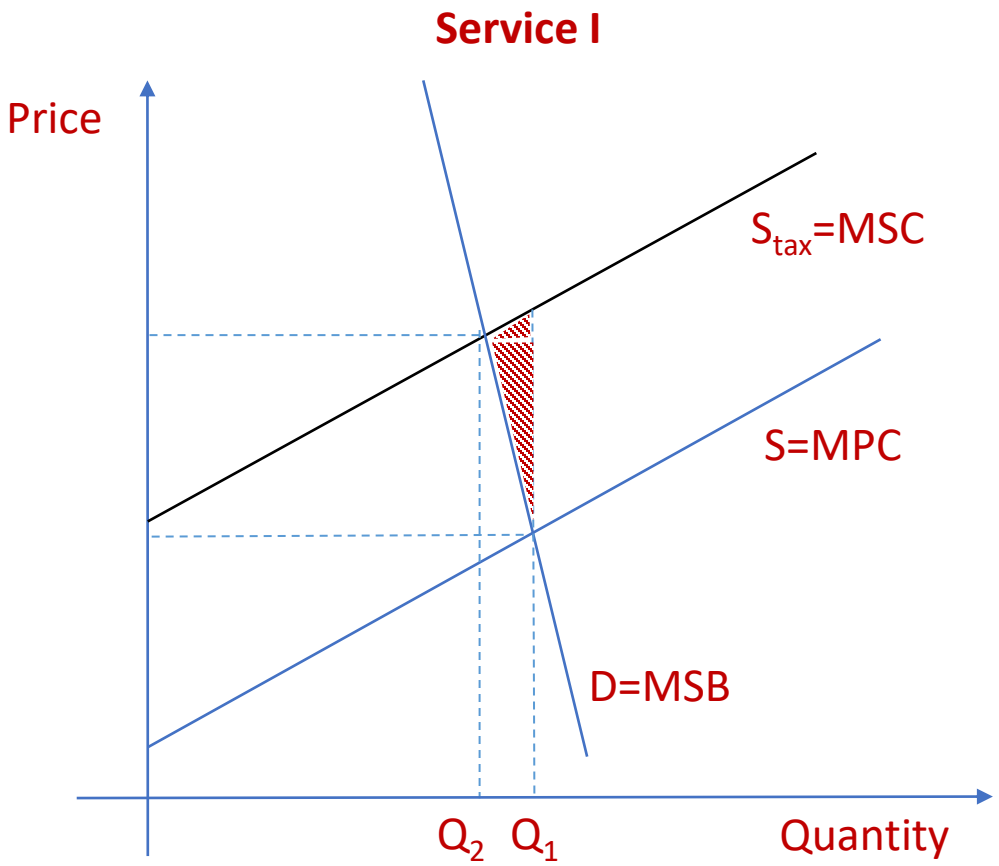
Reimbursing demanders

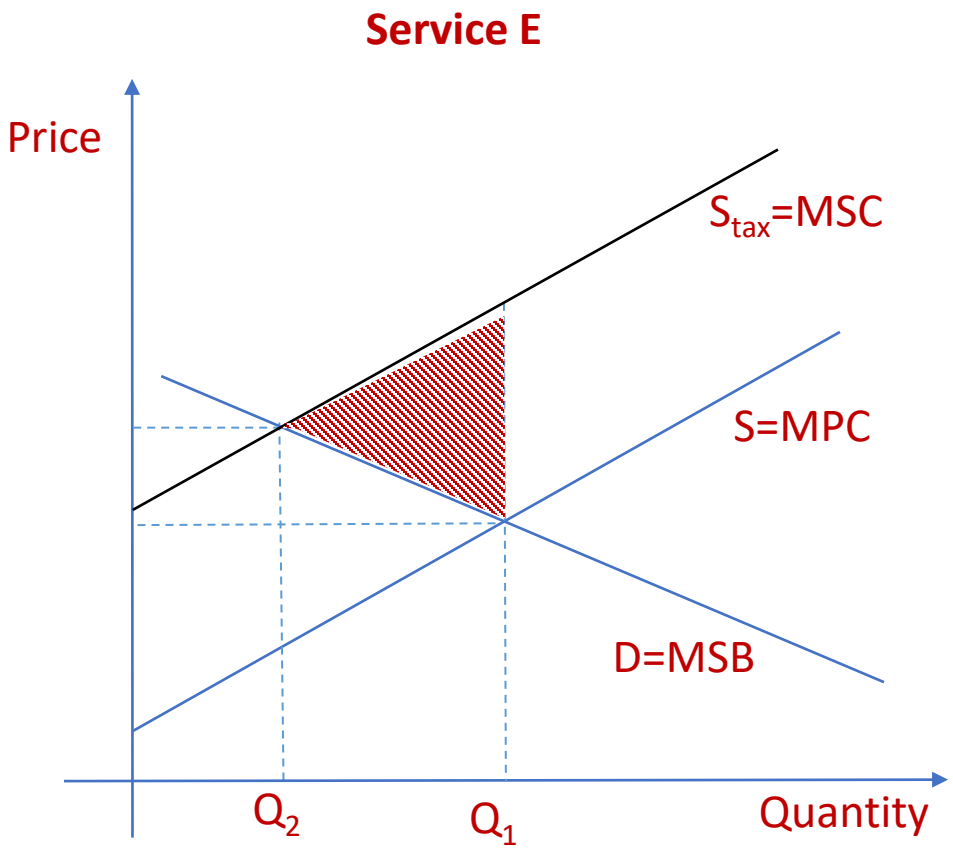




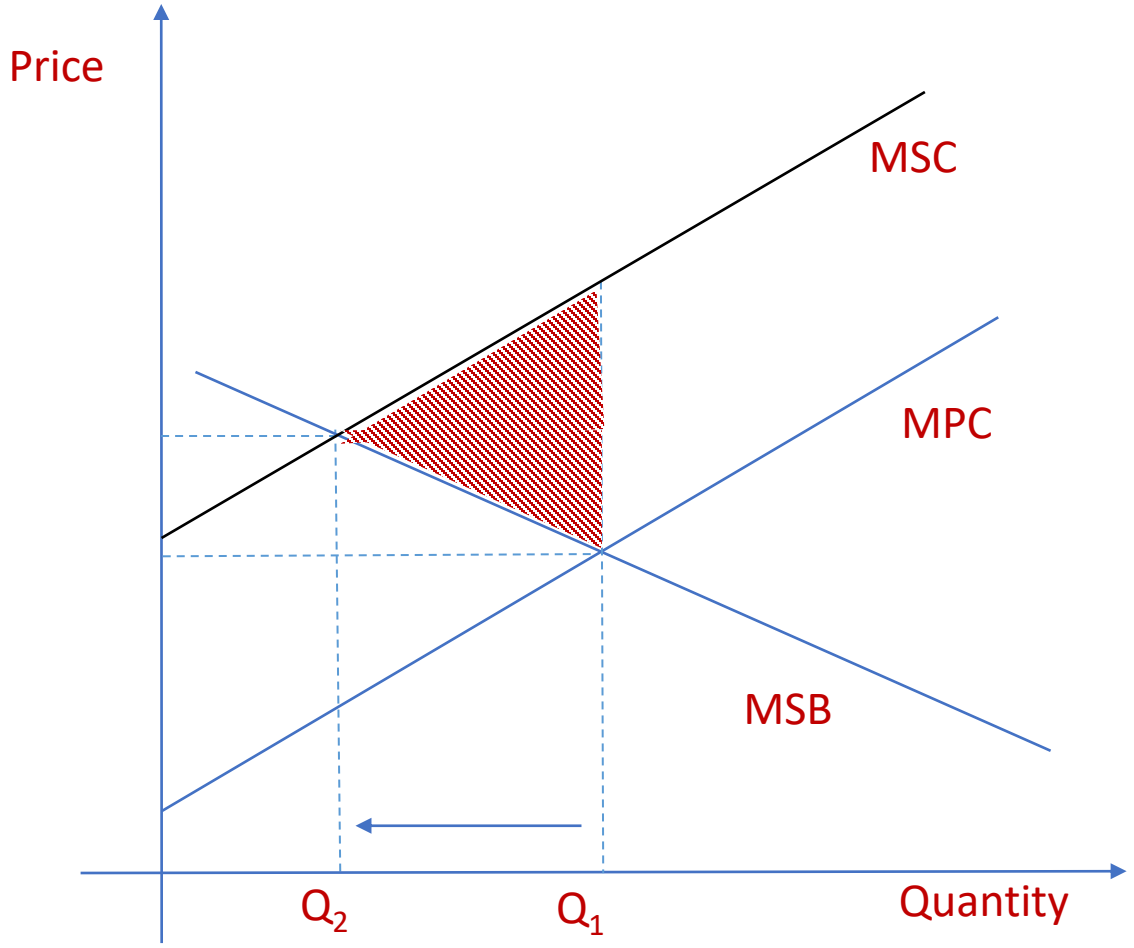
Homework 4.2: How to minimize DWL?

Price-inelastic demand VS Price-elastic demand



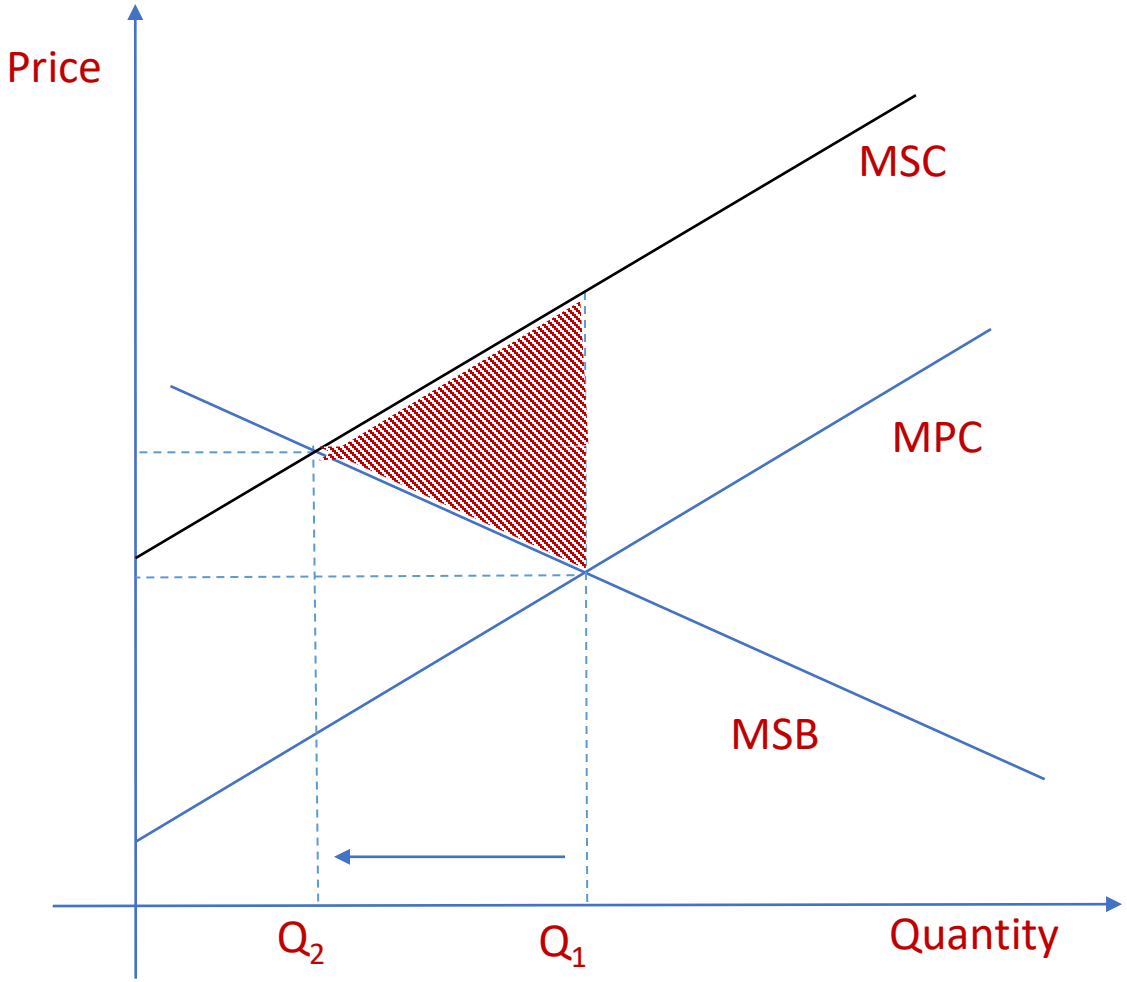


Optimal Pollution



- Is not zero (in short run)!
- We tolerate some pollution because the MC of reducing pollution any further is lower than the MB from it.

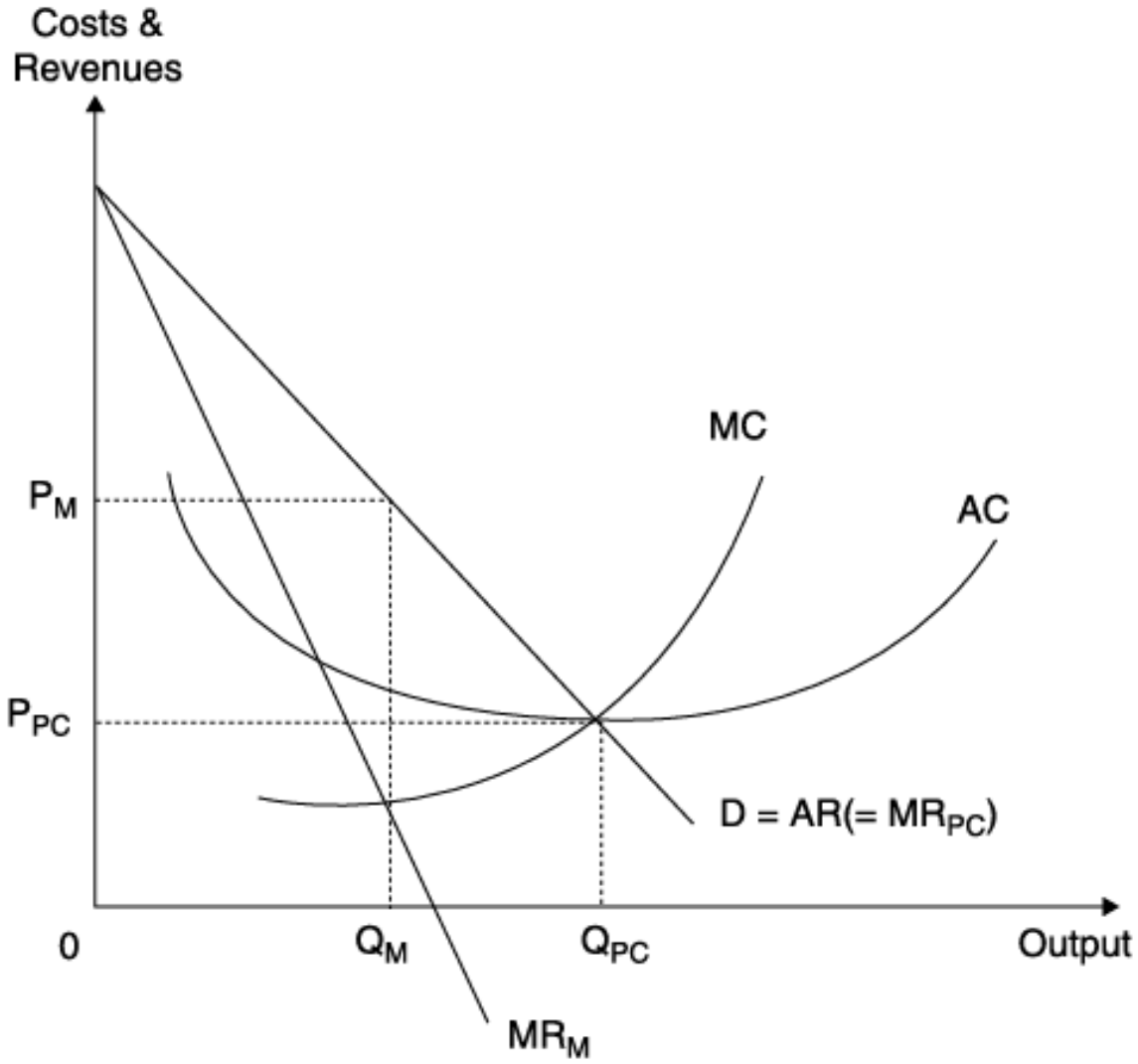
Limits to Government Actions



- Not all externalities require government action
  - e.g., owning a loud dog
- Misinformed interventions can generate additional deadweight loss.
  - e.g., what is the right tax or subsidy?

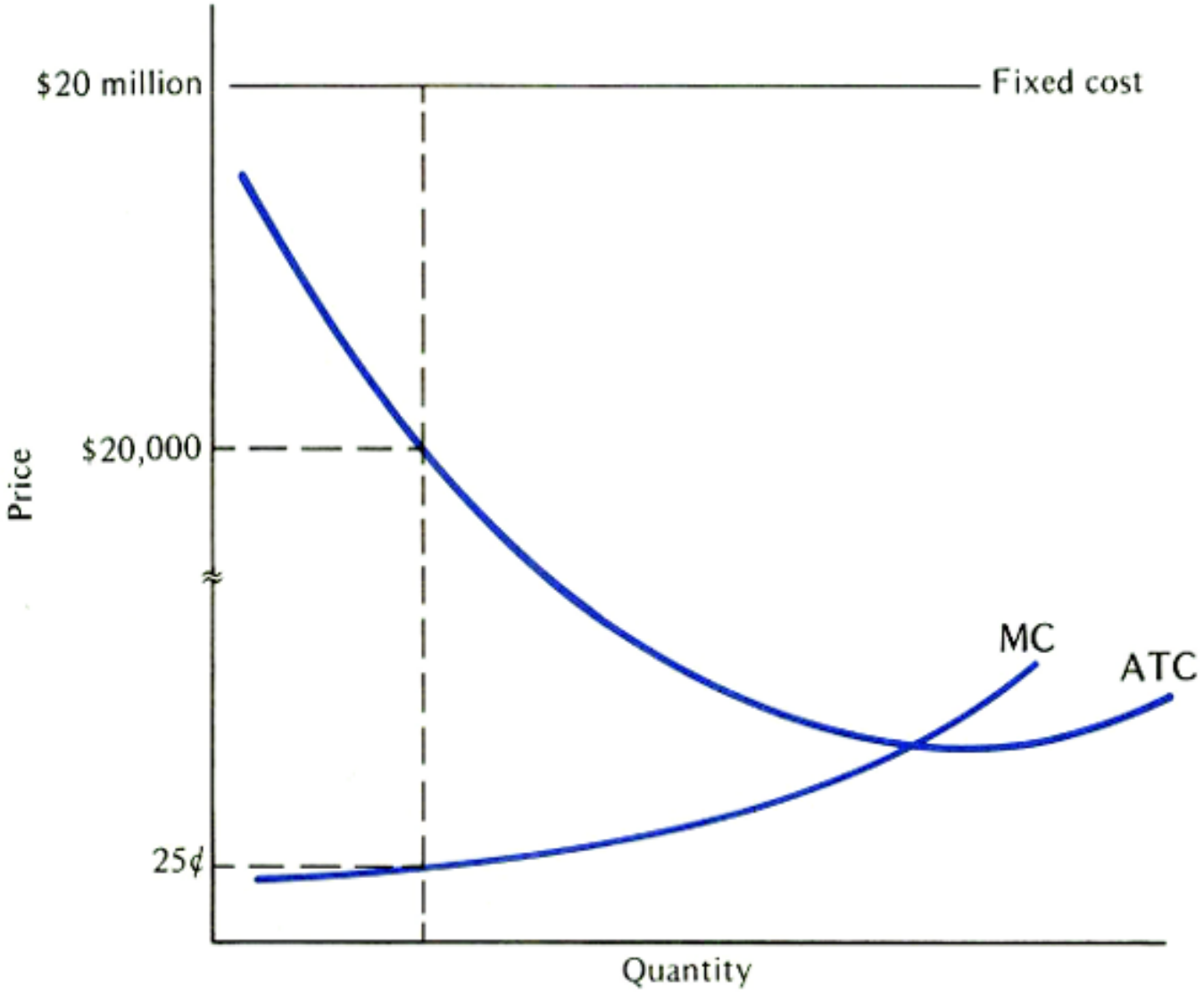
Rationale for government regulation

- Correct externalities
- Market failures due to lack of competition
- Information asymmetry and service quality
- To provide a transport service where none existed before



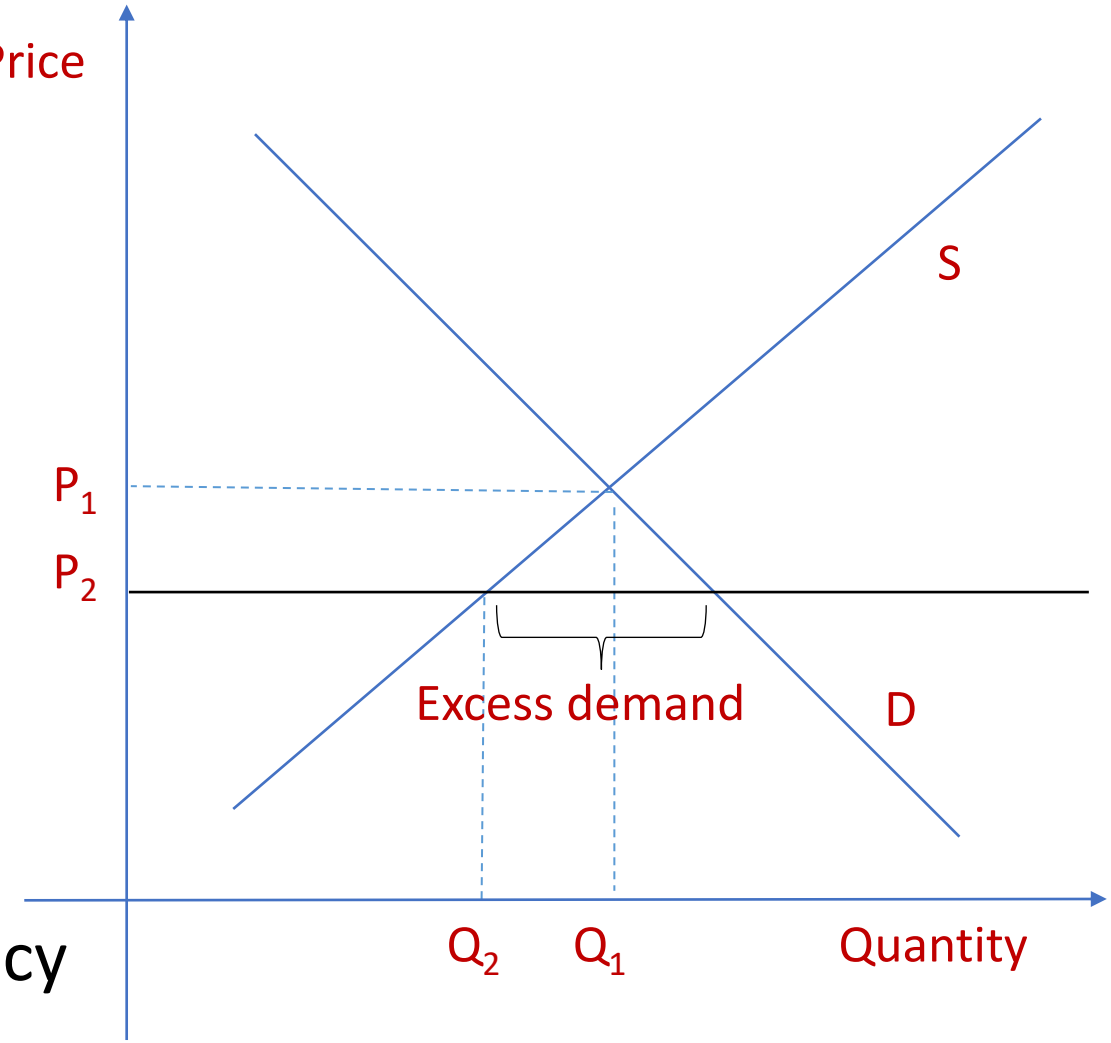
Natural monopolies

- More efficient than competitive markets
- Presence of competitors results in –ve profits for all (and no service provided in the long run)
- e.g., subways



Forms of government regulation

- Limit market entry
- Set the price
- Specify the maximum increase in price allowed
- Taxes and subsidies
- Quality controls and minimum frequency



Drawbacks of regulation

- Limits free enterprise
  - Entrepreneurs may be better able/motivated to meet demand for services.
- Costly ‘second-best solution’
  - Ideally, markets regulate themselves
  - Regulations, if not constantly updated to keep up with evolving markets, get outdated
- Information asymmetry
  - Operator knows more than regulators and may not share key information
- Who regulates the regulator?

Public Goods

- One person's consumption or use of the service does not diminish the amount that others can consume.

- E.g., street lights and roads
  - Once someone erects a road, everyone is able to use it whether they have contributed to its construction or not.

- Opportunity to free ride on other people’s willingness to pay for public goods.

Public Goods

- 50 Extra Credits to everyone for free!

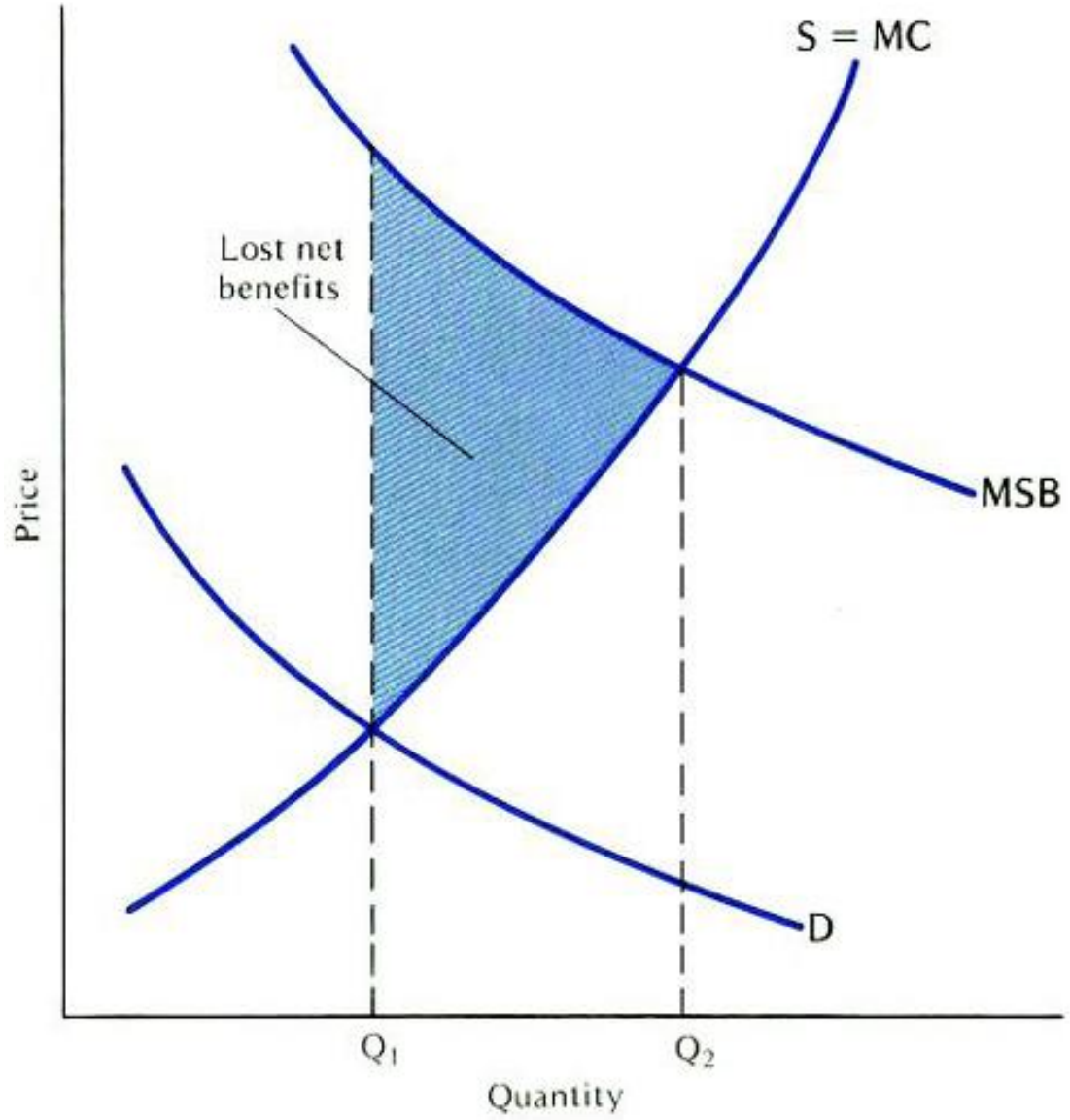
- You can invest some amount of it on a venture that might benefit the entire class:
  - The total investment will be doubled and allocated evenly across everyone in the class, regardless of whether or not you invested.

- So, if everyone invests 25 EC, then you get to take away:
  - The 25 EC that you didn't invest
  - + the return on your investment = (25 x 2 x N) / N = 50 EC

- If you invest 50 EC and everyone else invests 0 EC, then you take away:
  - Only the return on your investment = (50 x 2 x 1) / N = (100/N) EC

Public Goods

- Free rider problem
  - Large social benefits but small demand (for paying for it)
- Very large positive externalities
- No/limited competition among buyers (opposite of monopoly).
  - Sellers have limited incentive to enter the market.
- Govts may need to take over and supply the public good directly.



Reasons for public ownership

- Large externalities
  - Public goods
  - Essential to the economy (if the particular industry suffered, the whole economy would)
- Eradicate wasteful competition
  - Without many of the problems associated with a monopoly market.
- Economies of scale, high fixed costs
  - But in the hands of a public monopoly

Reasons for privatization

Many of the same drawbacks as for regulations:

- Private entrepreneurs may be better able/motivated to meet demand for services.
  - May be better motivated to cut costs and identify opportunities to increase revenue
- Competition may be good
  - Gives consumers of services more viable choices.
- Govts cannot necessarily provide bigger budgets
- Who regulates the public sector?
  - Are public sector interests always aligned with those of voters?
  - Are voters well-informed?

Public-private partnerships

- Increasingly common
- Public ownership, privately operated
  - Competition can be introduced
- Private sector constructs and owns, and leases to public authority to use
  - E.g., railway tracks in the US and transit stations
  - Can bypass financial constraints of the public sector

Pricing of natural monopolies

- Regular monopoly pricing
  - MR=MC
- Average cost pricing
  - Produce as much as possible without making a loss
  - MB=ATC
- Marginal cost pricing
  - Maximize net benefit
  - MB = MC