

Lecture 13: Externalities Case Study Answers

PPPA 6007

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Leape on London's congestion charge

1. Describe the externality at issue

The externality here are the costs one driver's choice to drive imposes on others. These include, but are not limited to, pollution from driving and congestion. In particular, drivers take into account the costs of traffic they experience; this is the private cost of driving. They may not take into account the additional congestion their driving generates for others. These are the external costs of driving.

2. Explain whether the externality is positive or negative

In this case, drivers exert a negative externality on others. One individual's decision to drive imposes costs on all other drivers (and those who breath air, too).

3. What policy does the government use to try to deal with the issue of the externality?

This article details a fee that drivers must pay to drive in Central London.

4. Describe the benefits and costs of this policy for consumers

- Benefits

- Traffic speeds in Central London increase
- Decreased pollution in Central London
- Potentially fewer accidents
- Because the revenues are returned to the transit agency, better public transit service

- Costs

- For those switching to buses, potentially longer travel times
- Potentially greater traffic on roads just outside the cordon.

- Note that the direct cost of congestion charge is a transfer from drivers to others. We do not consider this a "cost" of the program. (Page 171: "The charge payments made by drivers are not included, as they represent a transfer rather than a resource cost.")

Malone and Hinman on Vaccination

1. Describe the externality at issue

If you take a vaccine, it has a private benefit (you don't get sick) and an external benefit (others may not get sick). This second part is the externality – the benefit you give to others by not spreading disease.

2. Explain whether the externality is positive or negative

This benefit that you give to others from getting a vaccine – it's positive.

3. What policy does the government use to try to deal with the issue of the externality?

The government undertakes a number of measures to address this positive externality

- it subsidizes the cost of vaccines
- it makes vaccines mandatory for public school attendance
- it protects vaccine makers from lawsuits over adverse vaccine consequences
- it has set up a fund to cover adverse consequences of vaccines

4. Describe the benefits and costs of this policy for consumers

- Benefits
 - Private benefit of lowered risk of illness from communicable disease
 - Receipt of external benefit of lowered risk of illness from communicable disease
- Costs
 - Very small, but real, potential harm from vaccines. These set of laws limit your ability to seek restitution.
 - Infringement on bodily autonomy