

Lecture 14: Public Goods

December 10, 2024

Overview

1. Administrative Notes
2. Ripped from headlines
3. Public goods
 - 3.1 Lecture
 - 3.2 Group discussions
4. My evaluation

Course Administration

1. Remaining office hours
 - December 12, 2:30 to 3:30
 - December 16, 10:30 to 12:30, 8:00 to 9:00
2. Final exam(s)
 - December 17, 3:00 to 5:00, COR 207
 - December 17, 5:20 to 7:20, MPA 305
3. No final problem set – but be prepared for public goods questions
4. Review December 11, 6 to 8 pm – MPA 305 and zoom
5. Will send out notice that all grades are posted before exam with time to review
6. Evaluations
 - Please do online evaluation before 12/11
 - Thanks to 11 afternoon and 7 evening students who have completed
 - TA evaluation [here](#) and by email
 - My evaluation: on paper at end of class
7. Any other questions or outstanding issues?

PS 11: Examples of Entry and Exit in Response to Market Conditions

Toys R Us Out of Business in 2018

- Profitability tanks
- Competition from Amazon and Walmart
- Competition from online sellers and digital toys
- Opportunity cost of real estate portfolio exceeds value as store

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Minneapolis Threatens Uber and Lyft with Higher Costs

- Minneapolis wants to pay rideshare drivers more
- This increases costs for Uber and Lyft
- Incumbent companies threaten to leave
- New firms threaten to enter!
- Threat of entry by new firms suggest profits may be possible

Externality Examples

- Answers posted
- We define externalities relative to a transaction or action
 - Vaccines are not an externality – what is?

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- We define externalities relative to a transaction or action
 - Vaccines are not an externality – what is?
 - Congestion is the externality due to what action?

How What You're Learning is Policy-Relevant

Ripped from Headlines presentation(s)

Afternoon

Done!

Evening, individual presentation

Finder	Presenter
Kate B.	Abimbola O.

Today: Public Goods

1. Defining public goods
2. Underprovision of public goods
3. Two public goods solutions
4. Discussion of space and public goods

1. Defining Public Goods

So far: Private Goods

Majority of class focuses on private goods. Private goods have 2 key features:

Rival

- If I consume, you can't consume it
- Example?

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Perfectly competitive private market provides efficient level of private goods

In Contrast: Public Goods

Non-Rival

- My consumption does not hinder your consumption

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Non-excludable

- Producer can't exclude individuals from consumption

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Public good examples?

In Contrast: Public Goods

Non-Rival

- My consumption does not hinder your consumption

Non-excludable

- Producer can't exclude individuals from consumption

Public good examples?

- fireworks
- national defense
- clean air
- what else?

2. Underprovision of Public Goods

Defining Free Riders

- A free rider is someone who fails to pay for goods or services consumed
- Possible when the nature of the good allows this
- Not possible for private goods

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- Examples
 - When have you been a free rider?
 - When have been the victim of free-riders?

The Problem with Free Riders

If goods are non-rival and non-excludable

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- e.g., you clean your apartment and your roommates enjoy

→ because of the positive externality, you'll clean less than optimal amount

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When goods are non-excludable, markets underproduce

3. Solutions to Public Goods Problems

Two Possible Solutions

1. Government pays
2. Assign ownership

Solution 1: Government Pays

- Government provision
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2. Existence of public good \nRightarrow government should fund
 - apply cost benefit rule

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2. Existence of public good \nRightarrow government should fund
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3. Government funding \nRightarrow government provision
 - example?

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- Firms can make money providing excludable non-rival goods
- These are “club goods”
- Streaming services also provide club goods

Solution 2: Assign Ownership Rights

Tragedy of the commons

- Idea dates back to Aristotle
- Intuition: that which is not owned is overconsumed
- Applications
 - overgrazing in common field
 - overfishing in ocean
- Occurs when goods are rival and non-excludable

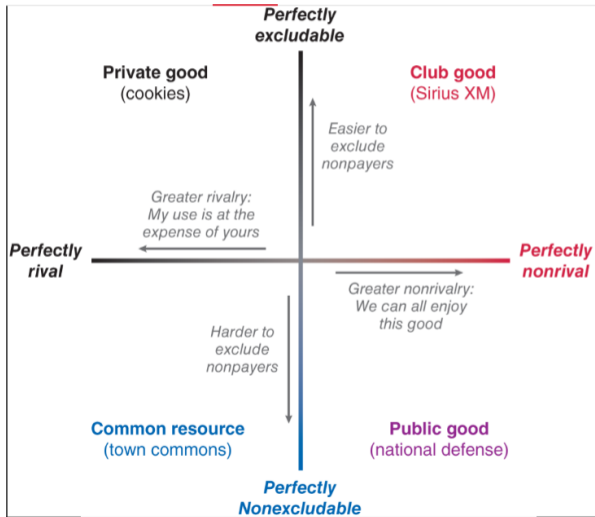
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Solve problem by
assigning ownership rights

Public Goods Exist Along a Continuum



Name a good in each quadrant

Public Goods Recap: Which is More of a Public Good?

Public transit

Clean air

Public Goods Recap: Which is More of a Public Good?

Public transit

- Rival?
 - yes, at some point
- Excludable?
 - yes

Clean air

- Rival?
 - no
- Excludable?
 - no

4. Space and Public Goods

Space Case: Two Discussion Questions

1. Why is space debris a problem?

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2. Does Astroscale help us avoid a tragedy of the commons?

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1. Why is space debris a problem?
2. Does Astroscale help us avoid a tragedy of the commons?

Addendum: Do you think Astroscale will be successful?

In Sum: Public Goods Are Tricky to Provide

- Public goods are non-rival and non-excludable
- They may or may not be publicly provided goods
- We expect the market to underprovide public goods

Please do my evaluation!

See You At the Final

- See you Dec. 17
- No homework from today
- We will post all grades before final

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I will

- post these lecture notes on my webpage
- post link to lecture recording on Blackboard
- anything else?

Thank you for a great
semester!