

PUBLIC GOODS

Worksheet

What is a public good?

Task 1

Which two of the following qualities characterise a public good in the economic sense? Please briefly explain your answer.

- Nobody can be excluded from consuming the good.

- The good is – by definition – always financed and offered by the government.

- Several people can consume or use the good at the same time without interfering with each other.

- The good is worthless for most people and is therefore not privately offered.

Task 2

In analogy to the two examples provided, decide whether the twelve items listed in the table are public goods in the economic sense or not.

	Rivalry in consumption/use		Excludability from consumption/use		Is it a public good?		If not, what kind of good is it?
	yes	no	yes	no	yes	no	
Example 1: Football match in a stadium		X	X			X	Club good
Example 2: Construction of a dam to protect a whole village from the risk of flooding		X		X	X		
1. Lighthouse							
2. Public road network							
3. Street lighting							
4. Municipal park							
5. Open-source software							
6. World Wide Web							
7. Indoor public swimming pool							
8. Landscape preservation							
9. National defence							
10. Fish in international waters							
11. Pythagoras's Theorem							
12. International financial stability							

Market failure and possible solutions

Task 3

Which of the following statements best describes the problem arising from (pure) public goods? Please briefly explain your answer.

- Nobody wants to consume the good because others may also consume it at the same time.

- The prices charged by suppliers of a public good are too high because public goods are of public interest.

- Generally, there is an undersupply of public goods because nobody is willing to finance them.

- Generally, public goods are oversupplied because companies try to enhance their reputations by offering them.

Task 4

Fill in the gaps with the following three terms (use each only once): social norms, free riding, positive externality

When someone prefers to profit from other people's contributions instead of paying their own, this is referred to as _____. Anyone who supports a public good normally provides utility to other people as well, without being compensated for it. In economics, this effect is called a _____. In groups, members can be pressured (e.g. by threat of punishment) into contributing to a public good. The expectation that everyone should contribute and the associated pressure stem from prevalent _____.

Task 5

Which of the following statements are true from an economic point of view? Please briefly explain your answer.

- It always makes sense when a public good is financed by the government (e.g. through taxes).

- Public goods may cause market failure. In some cases, government financing can lead to a better (more efficient) situation.

- Some public goods are financed by private companies or persons.

Task 6

The following table contains four public goods. Please first read the questions and answers of the 'clean classroom' example. Then fill in the table for the three public goods 'public first-of-August fireworks', 'knowledge' and 'protection of elephants'.

Example: Clean classroom

What benefit (positive externality) does this public good generate?	A clean work environment.
Who benefits?	Students using the classroom.
What steps can be taken to alleviate an undersupply problem in this example?	<p>A system of punishments and/or rewards within the class can induce everyone to contribute to keeping the classroom clean.</p> <p>However, if the room is used by several classes, identifying 'free riders' and thus maintaining the punishment/reward system is not really feasible. In this case, the services of school or publicly funded cleaning staff would be required.</p>

1. Public first-of-August fireworks

What benefit (positive externality) does this public good generate?	
Who benefits?	
What steps can be taken to alleviate an undersupply problem in this example?	

2. Knowledge

What benefit (positive externality) does this public good generate?	
Who benefits?	
What steps can be taken to alleviate an undersupply problem in this example?	

3. Protection of elephants

What benefit (positive externality) does this public good generate?	
Who benefits?	
What steps can be taken to alleviate an undersupply problem in this example?	

State-provided vs. public

Task 7

By no means is every good provided by the state (or a state institution) a public good in the economic sense. Public transport is a case in point.

- a. In two to three sentences, explain why a train journey is not a public good from an economic perspective.

- b. In three to four sentences, explain why it is nevertheless meaningful for the state to provide this service.
