



# Economics and Public Finance Tutorial 3

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## Topics for discussion:

- Characteristics of goods: rivalry and exclusion,
- Production versus Provision,
- Pure public goods versus private goods,
- Externalities and mixed goods.



# Bibliography

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- Readings:
  - ***Slides Lecture T5 and T6***
  - Stiglitz (3rd. Ed.) Chap. 6, Public Goods and Publicly Provided Private Goods.  
Chap. 9, Externalities and the Environment p. 215-217; 223-225.



# Topics for discussion - 1

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Comment the following statement:

"The ability to exclude individuals from consumption of goods has a technological dimension, but also legal. The rationale to exclude has an economic dimension. "



## Topics for discussion - 2

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Consider a market with normal supply and demand of goods (not completely rigid nor infinitely elastic) characterized by a negative externality.

Explain, illustrating graphically:

- i) the market equilibrium;
- ii) the efficient solution;
- iii) a public policy to achieve the optimal solution.



## Topics for discussion - 3

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Explain why is there government support for scientific research and certain types of performing arts (e.g. theatre) and there is no support for the production of cement or beer production.



## Topics for discussion - 4

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Analyze the economic effects of:

- a) private production and public provision of parking spaces in a congested city.
- b) public production and private provision of emergency services in hospitals.



## Topics for discussion - 5

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Consider  $A$  and  $B$ , with marginal willingness to pay for a good  $X$  given, respectively, by  $DMP_A$  and  $DMP_B$  which can be represented by linear functions ( $A$  has the highest marginal willingness to pay) and the marginal production cost of that good is constant.

**a)** Plot in separate charts: *i)* The aggregate demand function for the good  $X$  if it is a private good; *ii)* The aggregate demand function for the good  $X$  if it is a public good.

**b)** Characterise the final solution in each case.



## Topics for discussion- 6

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Give an example of public intervention in the context of public goods, negative externalities and positive externalities.

Justify your choices by explaining, in each case, the economic rationale for this intervention.





# Multiple Choice - 1

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A Parish Council (freguesia) leased to a private firm the management of social facilities (day care). Since users do not bear any cost, this is a case of:

- a) Public provision and public production.
- b) Private provision and private production.
- c) Public provision and private production.
- d) Private provision and public production.



## Multiple Choice - 2

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A **pure public good** is a good:

- a) where there is no rivalry in consumption and there is no exclusion.
- b) where there is no exclusion but there is some rivalry in consumption.
- c) where there is no rivalry in consumption and exclusion if possible is not desirable.
- d) where there is no exclusion and there is rivalry in consumption.



## Multiple Choice - 3

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If a private good is provided at a zero price:

- a) There will be consumption up to the point where marginal benefits equal the marginal cost.
- b) There will be excessive consumption until marginal benefits become null.
- c) It becomes a public good because everyone can consume the amount they want and no one is excluded.
- d) all consume the same amount of the good.



## Multiple Choice - 4

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- Which statement is false in view of the nature of public goods and private goods:
  - a) In the markets of private goods agents adjust quantities to the market price.
  - b) In the presence of public goods agents consume the same amount at different tax prices.
  - c) In the markets of private goods agents reveal their preferences, but this does not happen for public goods.
  - d) Regarding public goods it is never possible to exclude agents from consumption.



## Multiple Choice - 5

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The inefficiency associated with the private provision of a public good is all the greater:

- a) The greater is the elasticity of demand
- b) the smaller is the price of goods
- c) The smaller is the elasticity of supply
- d) The greater is the degree of rivalry in consumption



## Multiple Choice - 6

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The private provision of a pure public good is always inefficient because:

- a) exclusion is not possible.
- b) The rationing of consumption does not translate into social benefits.
- c) The public provision is more efficient.
- d) The private sector is more efficient than the public sector