# **European Security Economics**

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- Is security a public or a private good, • or something else entirely?
- If security is a public good, is the state the primary provider?
- Who bears responsibility for the provision of security?

**Summary:** When defining the absence of a threat as an economic good, it is necessary to define this good using the standard economic typology: is security a private, public, club or common good? We argue in this Policy Briefing that security provision can display characteristics belonging to any of these types of goods. In recent years, we can observe a change from more publicly oriented security provision to privately provided security. That does not, however, take away the responsibility of the state to provide a basic level of security. In addition to that, it is the responsibility of the state to coordinate internationally to deliver international security.

## **POLICY BRIEFING**

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### Who Bears **Responsibility for the Provision of Security:** The State or You?

### Introduction

While security can be defined as the absence of threats to safety, its defining characteristics have important implications for the type of measures necessary to reduce it. In particular, using the broadest definition of security (including food security, absence of infectious diseases, etc.) raises the question of the provision of security as a good. Classical security (military or violent threats) was typically considered to be a good provided by the state, but technological progress and changing demands for security provision have moved security towards something purchased by private individuals as well.

In this Policy Briefing, we look at the definition of security and its categorization as either a private or public good. This research is based in particular on Engerer (2011), but it is part of a larger debate both within and beyond the EUSECON project.

### What types of goods actually exist?

Generally, economists use two characteristics to define goods: rivalry and excludability. Rivalry means that only one (or few) individuals are able to consume a particular good and thereby make it impossible for others to consume the same good. Examples of rival goods are food or consumer goods. Examples of nonrival goods include national defence and highways. Excludability refers to whether or not it is feasible to exclude specific individuals from using a particular

	Excludable	Non-excludable
Rival	Private good (cars, food)	Common good (water, fisheries)
Non-Rival	Club good (cable TV, software)	Public good (parks, national defence)

Table 1 An economists' typology for goods

good. Typical examples of non-excludable goods include fresh air and the services provided by lighthouses. Excludable goods include most privately owned goods, such as cars or housing. The combination of these two characteristics provides four types of goods, as shown in table 1. The four categories are private goods (excludable and rival), common goods (non-excludable and rival), club goods (excludable and non-rival) and public goods (nonexcludable and non-rival). However, these are obviously the most extreme cases and in reality, not all goods follow this division exactly. In addition, goods can change their characteristics through e.g. technological progress. Before cable broadcasting, television used to be a public good and now it is a club good, for example.

In theory, the supply of private goods is always optimal, thanks to the free market. Public goods, on the other hand, cannot be provided by the free

market (as a result of the non-excludability) and thus the state plays a role by either providing the good itself or by purchasing the good on the free market. However, since the state does not know the true preferences of the potential beneficiaries, it cannot calculate the actual price that society is willing to pay for a good. As a result, for public goods, an optimal supply at a market-based price is not an equilibrium that evolves spontaneously.

Club goods share the public good's characteristic of being non-rival and thus benefiting from reduced costs per user when their numbers increase. At the same time, unlike public goods, these goods are excludable and each user can thus be made to pay for their share of the good. This reduces the risk of free-riding, something that affects public goods. Many clubs (tennis or football clubs, for example) actually require

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a minimum number of users in order to be able to provide the product usefully. After all, if all costs of a tennis club were to fall to a single individual, the costs would probably be overwhelming.

Finally, common goods are both non-excludable and rival. This is often illustrated with natural resources, such as fishing stocks. As a result of the nonexcludability, individuals will in the short term overexploit the fishing stock, leading to the 'tragedy of the commons' (Olson, 1965). One solution for this problem is a regulatory agency that has the power to regulate the usage of this common resource.

### What sort of good is security?

'Security' – or to be more precise, the commodity, measures and techniques to enhance the feeling of being secure – can have the characteristics of a public good or a private good, as well as a club good or common good. The distinction is important as in some cases, one would expect an optimal supply of the good to occur naturally (private goods), whereas in other cases, government intervention may be warranted to guarantee sufficient supply (public goods).

### Security has features of private and public goods, as well as public and common goods

The problem is that security is not monolithic. In fact, the provision of security services can have any of the features described above. The services of private protection firms, used to protect either someone's house or a person themselves are typically private goods. On the other hand, if neighbours work together and jointly organize a guard service for their houses, this would give the protection service the features of a club good. National defence (military) and lighthouses (civilian) are typical public goods that provide security to individuals in a non-excludable and non-rival way. Finally, when interpreting security as a tangible good, rather than an intangible one (the 'feeling of being secure') and if there are constraints to resource abundance, security can even be a common good. The provision of policing services, for example, is available for all citizens (non-excludable), but a given number of police officers can only provide services to a given number of individuals. That way, policing services can thus be thought of as a common good, in which there is rivalry between citizens to be able to use this particular good.

### Security as a public good

In order to narrow down the broad concept of security, Baldwin (1997) formulates seven questions that need to be answered: Security for whom? Security for which values? How much security? From what threats? By what means? At what cost? In what time period? The answers to these questions are pertinent in deciding whether one sees security as a public good, and the subsequent implications for its provision. Some of these questions require very different answers depending on how one sees security. A vital question is to what degree the state can be expected to provide security. After all, private actors should not automatically expect that the state should fulfil each demand for security, since not all individuals' demands may be in the public interest. At the same time, it should be noted that even when the provision of a good is deemed a public task, the state may still purchase this (security) good on the free market as a private good using public financing. With time, technological change may affect the balance between public and private security provision.

### Regional security as a public good has both coordination and capacity concerns

Another important concept for the public provision of security is territoriality. That is, the provision of a specific public good by a certain territory can have spillover effects (positive or negative) across borders. As a result, even though the measures may be local or national public goods, their international nonexcludability may lead to underprovision of the good if particular governments feel that the provision of the good is not their responsibility. Such a situation would call for international coordination so that all benefiting countries share the burden of good provision. The sectors most likely to be affected by these problems were identified by Sandler (2007) as health, environment, knowledge, governance, peace, security and infrastructure and he provides examples of national, regional and trans-regional goods for these sectors.

A further incentive for the common provision of some of these public goods that are not purely national is found in the way many security measures work. Traditional analysis argues that the available amount of goods is equal to the sum of the separate parts, but in the case of security, this is not necessarily the case. Indeed, security may be considered as a 'weakest link' technology, in which the strength of the security is only as good as that of the weakest contributor. Typical examples for this would be dykes to prevent flooding or border controls. In this case, it is not necessarily the size of the group of beneficiaries of a particular policy, but the heterogeneity of that group that matters to the coordination of goods provision (Sandler 2007). Finally, when there is a threshold in security, goods only becomes productive if the cumulative quantity provided by all members meets a minimum threshold (e.g. equipment to put out a large fire), which would require pooling of resources. Thus, the maintenance of regional security as a public good needs both coordination and appropriate capacity.

### Who is responsible for security provision?

Security cannot be provided only through private or only through public channels. The strength of security provision is fully dependent on the combination of different methods in order to provide an optimal set of policies. For example, public safety can be provided by

local police forces. However, that does not mean that individuals should not use private security provisions (installing locks on their houses, paying for guarded parking) to complement publically provided services. When a political decision is made to have the police force focus on, for example, the protection of politicians rather than private individuals, those individuals may want to gather with their neighbours to use a club good to enhance security by hiring a security firm to protect their houses.

This mixture of public, private and club goods is able to provide goods at a level that satisfies the needs of everyone. This way, an individual that has an inherently larger demand for security (due to risk EUSECON POLICY BRIEFING 5 OCTOBER 2011 | 3 aversion or because they have more to lose) is able to privately purchase goods that make them feel safer without burdening those individuals who do not feel they require the additional service. These examples show that 'security' is an ever-changing concept that needs to be redefined over time. This is partly due to technology shifts, which have led to private security firms playing a much larger role now than they did before (Krahmann 2008). Furthermore, the transfer of some responsibilities concerning security from the public to the private sector is in line with changing preferences in western industrial societies regarding the role of the state.

### **Policy recommendations**

In this briefing, we give an overview of the debate on the typology of security. While security is traditionally viewed as a public good provided by the government, the role of private providers is increasing. This shift is a result of technological progress, making exclusion from some services feasible, as well as changing preferences within society. While at the local or individual level this movement is pronounced, international security is still largely seen as a public good in which international coordination is necessary to guarantee sufficient provision. This analysis gives a useful overview of the features of security provision, but to give recommendations at the micro-level is beyond the scope of this paper. A deeper understanding of security provision can only be obtained through the analysis of concrete security commodities or security measures. It is important to remember that the preferred mixture of public, private and club goods is like to depend on a society's development stage.

#### Credits

This EUSECON Policy Briefing was authored by Olaf J. de Groot and Hella Engerer from the German Institute for Economic Research. The views expressed in this briefing are the authors' alone.

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