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European internal security as a public good

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This introduction argues for a new research agenda on European internal security cooperation from the perspective of public goods. We set out our case in three parts. First, we identify new empirical puzzles and demonstrate significant explanatory gaps in the existing internal security literature which public goods theory could help address. Second, we outline the building blocks of a public goods approach and provide an overview of its application, both existing and potentially, in various areas of regional security and European integration. Third, we present three complementary ways of using public goods theory to analyse internal security in the European Union, with the aim of spurring new research questions while accepting some limitations of this theoretical approach.

Keywords: EU security; internal security; justice and home affairs; transnational threats; public goods; collective action

Security cooperation is increasingly concerned with ‘unconventional’, ‘asymmetric’, and ‘transnational’ threats. It is now commonplace to hear that the end of the Cold War and the terrorist attacks of 11 September 2001, combined with the effects of globalisation and environmental degradation, herald a new era of vulnerability based on ever-increasing economic and socio-technical interconnections. In Europe, the European Union (EU) has moved to the forefront of attempts to address these vulnerabilities as cooperative initiatives on internal and ‘transnational’ security proliferate. National leaders, for instance, are quick to signal their intentions to increase cooperation – especially when prompted to respond to events like terrorist attacks, infrastructure failures, or refugee crises – on a range of internal security issues. This has led to a raft of initiatives and successive treaty revisions expanding EU competences and created a situation where internal security-related agreements now make up a considerable share of overall EU outputs.

Despite heightened rhetoric and a flurry of initiatives, however, outcomes do not seem to match intentions. New initiatives become bogged down in protracted negotiations, policy follow-through is sometimes limited, and implementation ‘on the ground’ suffers from ambivalence or even active resistance. Some member states even ponder whether it is all worth it; several have secured ‘opt outs’ on internal security cooperation with little prospect these will be reversed. Put another way, the rhetoric versus reality gap oft-cited in studies of EU external security cooperation has emerged in the area of internal security cooperation too. In this area of cooperation,

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the focus of this special issue, the apparent flurry of cooperative initiatives may actually serve to obscure variation in outcomes.

The dearth of adequate analytical tools to take stock and to explain the varied patterns of internal security cooperation in the EU motivates this article and the special issue contributions that follow. As will be argued in this introduction, many scholars have been attracted to the area of EU internal security cooperation, with some focusing on latest developments (Brown 2011, Wolff *et al.* 2012) and others providing detailed explanations for specific issues (e.g. Niemann 2008). Fewer scholars have aimed to develop or test more general theoretical frameworks (Ette *et al.* 2010, Monar 2010) in relation to this dynamically growing policy field.

To reveal the fundamental dynamics of, and problems confronting, internal security cooperation in the EU, we propose to examine those challenges through the lens of public goods theory. EU cooperation on internal security can be characterised as a combined effort to produce some type of ‘public good’ – generated by individual contributions and available to the collective entity. The same can be said in terms of cooperation to avoid a ‘public bad’ – a situation requiring actors to each act if it is to be avoided. These dynamics are analogous to EU cooperation, in which member states must take actions to produce joint benefits, such as reduction in terrorism, organised crime, or extra capacity to combat infrastructure failures. The public goods framework – as we sketch out below and as the contributions to this special issue attest – offers a rich set of tools for assessing goals, identifying incentive structures, analyzing cooperation problems and specifying institutional solutions surrounding EU internal security cooperation. In our view, this theoretical approach can spur additional research into an under-theorised field and lead to a quicker accumulation of insights into European cooperation dynamics in internal security.

We set out our case in three parts. First, we identify new empirical puzzles and demonstrate significant explanatory gaps in the existing internal security literature which public goods theory could help address. Second, we outline the building blocks of a public goods approach and provide an overview of its application, both existing and potentially, in various areas of regional security and European integration. Third, we present three complementary ways of using public goods theory to analyse internal security in the EU, with the aim of spurring new research questions while acknowledging some limitations of this theoretical approach.

New trends versus existing literature on EU internal security cooperation

After two decades of rather surprising progress, starting with the inclusion of Justice and Home Affairs (JHA) competencies in the Maastricht Treaty (1992) and continuing through the Lisbon Treaty’s move of JHA policies towards the Community Method (2009), cooperation on internal security matters in the EU seems to have entered a new phase. Council agreements in this area may still represent a significant share of the EU’s outputs, but they have declined from their 2007 peak, despite the substantial transformation of decision-making structures brought about by the Lisbon Treaty. Looking closely at specific initiatives, such as heightened cooperation in organised crime (see Sperling 2013) or civil protection (see Rhinard *et al.* 2013), action appears to have stalled under concerns regarding the allocation of competences and the nature of implementation mechanisms. Implementation at the European level (policy follow-through) and the national level

(adaptation of national laws) continues to be plagued by a lack of credibility (Bures 2011, Brown 2011). The realisation is also reflected in the growing political discourse on the 'added value' of European security cooperation (Coolsaet 2010), suggesting that normative integration objectives have given way to more narrow cost-benefit calculations. In short, we face an empirical trend that requires further explanation, as it belies commonly (if not always openly) held assumptions about the slow, but inevitable progress towards the EU as a 'protective Union' (Boin *et al.* 2006).

Scholars have grappled with explaining EU cooperation in internal security since its earliest days, with many taking an interest-based approach to explain why European states, traditionally highly protective of core functions in the area of security (Hoffmann 1966), would find it in their interests to cooperate (Waever 1995). Some answers to this question point to structural shifts towards a post-Westphalian state system in Europe, which undermine absolute value measurements of sovereignty and makes cooperation more likely (Sperling *et al.* 2009). Other studies reference the impact of external 'shocks' in prompting member states to engage in cooperation they might not otherwise consider (Boin *et al.* 2006). For many of these approaches, the classic, functionalist concept of 'spillover' occupies a central role in explaining generally why internal security cooperation appears to advance steadily (Monar 2001).¹

While this line of reasoning remains analytically important, we would argue that the concept of spillover lacks precision especially in the case of internal security. Our argument goes beyond the standard critique of (neo)functionalist theories of integration – namely that one cannot blithely assume regular spillover in 'low politics' and a clash of national interests in areas of 'high politics' – since the line between low and high politics is increasingly blurred in modern policy-making. This is especially the case in internal security with the arrival of 'new' security issues such as environmental degradation, extreme natural disasters and infrastructure breakdowns. Simplistic arguments that security cooperation touching upon the core of statehood is likely to encounter resistance from sovereignty-sensitive states, while true, are not nuanced enough to reveal variation in different issue areas and conflict at different levels of cooperation. As we show below, public goods theory adds a fine-grained element to existing functionalist perspectives, one which stresses how high degrees of interdependence, shared perceptions of vulnerability and even shared interests can nevertheless explain ambivalent incentives for cooperation.

Other approaches used to explain internal security cooperation focus on ideational and non-functionalist factors to explore patterns of interaction. For example, scholars of securitisation have traced how the perception of new transnational security threats has been constructed via discursive practices (Huysmans 2006). At the EU level, this discourse has been used to create a new basis of political legitimacy by 'protecting EU citizens' (Boin *et al.* 2006; Kaunert 2010). However, most scholars on EU internal security present this development in a highly critical light, as it tends to empower executives and security elites vis-a-vis their domestic counterparts. While certainly worthwhile, these normative concerns have driven analysts to focus on the 'excessive' aspects of security policy making (Bigo 2010) and an assumption that cooperation is growing out of control, which partially conflicts with the aforementioned empirical trends.

We believe that a public goods approach can help overcome the sharp contrast between functionalist and critical accounts of EU security cooperation. On the one

hand, it allows scholars to separate functionalist arguments for security cooperation from arguments about the inevitability of further EU integration. For instance, some security goods may be better produced among a subset of member states or require only light institutional structures in Brussels. On the other hand, a public goods approach can disentangle various costs and trade-offs in security cooperation that go beyond the familiar, normative critique of democratic accountability. This concerns, for example, the possible unintended effects of sanctioning mechanisms created to facilitate cooperation agreements.

Perhaps the highest level of theoretical sophistication has been achieved by institutionalist accounts of EU internal security cooperation. Following the familiar distinction between rational, sociological and historical variants of institutionalism, scholars have explored the (1) entrepreneurial strategies of EU institutions (Kaunert, 2007) and EU agencies (Groenleer 2009); (2) socialisation in committees (Aus 2006), transnational policy networks (Hollis 2010), epistemic communities (Cross 2007) and security communities (Ekengren 2006); and (3) effects of path dependency and critical junctures (Argomaniz 2009). In all three cases, analytical focus is placed on explaining the inherent dynamics of integration beyond functional pressures – be it the effects of incomplete contracting in the case of rational institutionalism, the ‘logic of appropriateness’ leading to cooperation in the case of sociological institutionalism, or positive feedback loops in the case of historical institutionalism.

One institutionalist approach that has attracted particular attention in studies on EU internal security draws rational interests into its analytical framework by showing how security policymakers and professionals exploit EU decision structures to empower their own authority and positions (Ette *et al.* 2010). This ‘executive empowerment’ strategy can be used to entrench domestically unpopular policies and leads to biased interest mobilisation at the EU level (Wagner 2011). Although intriguing, this approach also assumes a gradual and general trend towards more internal security cooperation.

As the policy field matures and displays increasingly complex cooperation dynamics, arguments explaining institutional effects on cooperation require more detailed specification. This goes for institutional effects that encourage cooperation as well as discourage cooperation. On the former issue, for example, one needs to delve deeper into the institutional incentives for cooperation beyond the thesis of ‘executive empowerment’ alone, especially after the Lisbon Treaty introduced new actors and oversight mechanisms in this area. On the latter issue, poor inter-institutional relations in the EU can be a significant cooperation obstacle, but such frictions cannot be explained by bureaucratic interests alone. Other problems, such as lack of assurance and burden-sharing mechanisms, also need to be considered. As we outline below, a public goods approach offers a sophisticated toolbox of concepts and tools to do precisely that. The approach explores the inherent cooperation dynamics of different security goods, which can and need to be combined with analyses that focus on institutional incentives for cooperation.

Finally, the increasingly popular concept of ‘security governance’ (Kirchner and Sperling 2007, Ehrhart and Kahl 2010), which cuts across interest-based, ideational, or institutional accounts of the EU security cooperation, needs to be fleshed out further. The analytical lens of security governance illuminates how cooperation works in ‘reality’ rather in political bureaucratic ways. However, the governance approach tends to emphasise descriptive mapping over theoretical explanation or is

used in extremely varied forms owing to tendencies to focus on either governance or security, respectively (Christou *et al.* 2010). Public goods theory may help to provide a link between different kinds of security goods and different forms, networks, or levels of cooperation, be it flexible integration among a subset of EU member states (see Gaisbauer 2013), joint public-private provision of new security goods (see Krahmann 2013), or transnational cooperation networks beyond the EU.

Public goods and the logic of collective (security) action

Public goods theory offers a rich set of conceptual and analytical tools to explain cooperation goals, patterns and outcomes in the area of internal security cooperation. Although the notion of public goods can be applied to the EU integration process as a whole (Marks 2012), we do not pursue such fundamental arguments. Moreover, limitations of space prevent us from delving into the finer points of public goods research, which extends back more than 50 years and has spawned entire subdisciplines of political science (e.g. public choice). However, part of the beauty of a public goods approach is that it can be used productively at various levels of sophistication. Further below, we discuss a corresponding variety of uses in EU integration research. Here, we outline the basic set of ideas that can explore and explain cooperation patterns generally, but which have not been widely applied in the context of EU internal security.

Put briefly, public goods theory concerns three related sets of questions: (1) whether a good can be made exclusive to those who produce it and whether the number of consumers using that good matters, (2) whether each individual contribution matters equally to the production of that good and (3) whether group size or institutional factors change incentives for producing that good. After providing a short overview of these questions, this section then briefly surveys applications of public goods theory to security questions in Europe and beyond.

Basic building blocks

Public goods theory starts with the distinction between private goods, which can be efficiently produced by markets, and public goods, which require other forms of production (typically through political or collective action). The basic problem is that such goods need to be produced by a collectivity (e.g. a group of individuals, households or, in our case, states). Once that benefit (e.g. the good) is provided, all members of the collectivity will enjoy its fruits. Moreover, the enjoyment of the benefit by one member of the collectivity will not detract from other members. In other words, such 'pure' public goods are both non-excludable (everyone enjoys the benefits) and non-rival (the good is not easily depleted).

Precisely, for these reasons, public goods invite free riding. From an individual perspective, it is perfectly rational to enjoy the fruits of, but not to contribute to, publicly accessible goods. Contrast this to a classical private good, which can be made excludable and exclusive in consumption: the person producing a good can recoup costs by charging the person who wishes to use it. To overcome this collective action problem, a common authority (government, perhaps) needs to extract mandatory contribution (say, taxes) from all potential beneficiaries. This is how modern states produce core public goods, such as legal institutions, lighthouses, or

national defence. At the international level, where a collectivity of states aims to produce a publicly available good such as mutual security, clean air, or eradication of a disease, the problems are analogous, but the solutions less obvious.

Public goods can vary in the extent to which they are either excludable or rival, which leads to different combinations of these two separate variables. In turn, different combinations lead to different sets of production incentives. For some goods, exclusion may be possible once they are produced (e.g. charging a toll to use a swimming pool), while there is only very limited rivalry consumption (congestion, but not destruction of the good). This can mitigate the provision problem, since a private actor can provide the good on a cost-effective basis. Other goods may be non-excludable in practice, but exhibit direct rivalry of consumption. The classic examples here are fish stocks in the open sea, which are at risk of over-fishing or over-consumption. In short, such ‘impure’ public goods – variously called ‘toll’ or ‘club goods’ and ‘common pool resources’ (Poteete *et al.* 1994) - present their own sets of problems regarding how a good is provided and at which optimum level it has been provided. But the gist of the problem remains the same: when these goods are not produced or preserved, everyone in a collectivity suffers. Table 1 summarises this basic distinction of different goods and related ‘collective action problems’ in producing collective welfare or utility.²

Production method

In addition to the characteristics of non-exclusivity and non-rivalry, a public good may differ in a third way: the method in which it is produced (Sandler 1992). Traditional approaches to public goods assume that the overall level of a public good is a function of the sum of individual contributions (in the case of, say, producing enough influenza vaccine) or the sum of restrained consumption (in the case of, for example, a grazing meadow). A clear cooperation problem here is one state free riding on others. However, the level of a public good may also be a function of other production ‘technologies’. A good may only be produced at the level of the smallest contribution (in the case of a border control system at the frontier of a single market, for instance, a single, weak effort by one state determines the level of security for all).

Table 1. Basic public goods and cooperation dilemmas.

	Excludable (non-contributors can be prevented from benefiting from good)	Non-excludable (non-contributors cannot be prevented from benefiting from good)
Rival	Private goods	Common pool resources
One actors’ use decreases benefits available for others	(e.g. food, cars) Dilemma: affordable or cost- effective production	(e.g. fish stock) Dilemma: over-consumption
Non-rival	Club goods	Pure public goods
One actor’s use does not affect benefits available for others	(e.g. air traffic control) Dilemma: fair burden-sharing, (possible overcrowding)	(e.g. disease eradication) Dilemma: free riding and under-provision

A cooperation problem here is equivalent to the prisoners' dilemma, since one defection in cooperation makes everyone worse off.

Alternatively, a good might be produced by a single state with strong enough incentives to do so alone, albeit with some burden-sharing (the standard examples here are asteroid defence or a vaccine for a rare disease). The obvious cooperation problem with such 'single shot' goods is shirking by states not interested in helping out. Finally, a good might be produced only if there are enough contributions to sustain a certain threshold; below that amount, the good does not exist (in the case of, for example, mobilising a sufficient number of relief personnel to comprehensively address a disaster). Thus, individual contributions combine to produce a good matter, since different 'technologies' give different weight and importance to each participant – and thus generate positive and negative cooperation incentives.

Context and cooperating actors

Finally, one must also consider various contextual factors. Olson's (1965) classic studies on collective action show how group size and heterogeneity of preferences condition the likelihood of cooperation. The larger the group, the higher the incentives for an individual member to free ride (not only is an individual contribution less noticeable, but monitoring and mechanisms of compliance – especially normative pressure – are more difficult to enforce). Similarly, even if preferences towards a cooperation outcome are aligned, different preference intensities matter. States with weak preferences can exploit states with stronger preferences, thus 'easy riding' on the efforts of others and raising concerns of fairness and equitable burden sharing. Building on Olson, Sandler (2004, p. 11) adds four additional factors, including the nature of existing institutional arrangements, the frequency of interaction, the amount of information available to participants and the sequence of interactions.

Taken together, these contextual factors can generate useful hypotheses about the optimal size of cooperating groups or the nature of institutional arrangements for monitoring fair burden-sharing (see Table 2 for further examples). We will touch on a few of these in the last part of this introduction and also refer to the different contributions to this special issue that develop these points in greater detail. Ultimately, it is a matter of choice for the analyst whether focusing on the properties of the public good per se are important, or whether introducing group, contextual and institutional characteristics to explain various aspects of cooperation dynamics is preferred.

Table 2. General solutions to collective action problems generated by public goods (examples).

Production technology	Possible solutions
Summation	Burden-sharing, naming/shaming, enforcement
Weakest link	Full participation, capacity building, transparency
Single best shot	Finding contributor, ensuring accountability, benefit distribution policy
Threshold	Central secretariat to gauge contributions

Rather than go into greater depth into the public goods theoretical model, which may be superfluous for some readers' interests, we turn now to applications of the approach to international security questions before offering our own research agenda in Section 3.

Public goods theory and international security

Analysing different kinds of security goals using public goods theory has a long pedigree. National defence is often cited as an archetypical example of a public good. If national borders are well-defended against external attacks, all citizens benefit in equal measure – whether they serve in the army or not (e.g. non-excludability of benefits). Moreover, the level of peace and security does not diminish the more people who enjoy it (e.g. non-rivalry of consumption). These characteristics of national defence mean that a central function of government must be to provide this good through non-voluntary contributions. Other internal security questions also have a long lineage of analysis from a public good perspective. Classical government functions such as fire suppression and community policing were recognised as public goods, with scholarly questions focused on which level of governance (local, state, or national) should provide these services (Tiebout 1956).

While public good theory originated with investigations of the role of the state per se, in an age of globalisation and interdependence, states and other stakeholders must act jointly to realise international or global public goods. During the Cold War, this led to a long list of studies examining the effectiveness of alliances. Military alliances were necessary and desirable to produce effective defence, and yet questions of cost-sharing and appropriate provision levels, as modelled by public goods theory, posed difficult challenges. This theorising remains relevant today under conditions of changing objectives and membership dynamics of alliances (Shimizu and Sandler 2010).

At the same time, 'softer' international security goods such as international monetary stability have been examined extensively from a public goods perspective (Kindleberger 1981). Over the last decade, scholars variously speak of 'international', 'regional' and 'transnational' public goods as ones necessary for solving pressing problems as diverse as climate change, infectious diseases, the spread of nuclear weapons and financial instability (Kaul *et al.* 2003, Sandler 2004, Bobrow and Boyer 2005, Barrett 2007). Different production forms of goods have become particularly relevant to security provision. Transnational security threats has often been formulated as 'weakest link effects' (Brück 2005), such as in relation to international terrorism (Enders and Sandler 2006).

Public goods theory and EU integration

Viewed against this backdrop, it should come as no surprise that there have been a number of applications of public good theory to EU integration, in general, and EU security policy, in particular. Some might see EU cooperation itself as a classic effort to turn pure public goods into club goods to allow a better mobilisation of resources or improved regulation (Windhoff-Héritier 2002, Ahrens *et al.* 2005, Schemm-Gregory 2009). Particularly in terms of trade policy, an international political economy perspective shows how a club good was created by 'charging'

members to participate and to receive discrete and accountable benefits (Jamet 2011). The more general debate on optimal level and form of governance for policy provision, which underpins studies of multi-level governance (Marks and Hooghe 2000) and of flexible EU integration (Kölliker 2006), also draws on a public goods perspective.

In general, these previous studies allow for an optimistic reading of the EU's capacity for collective action and the provision of public goods. Not only is the EU smaller in size and greater in homogeneity than most international organisations, but interactions are also highly frequent, institutionalised and information rich. These factors reduce risks familiar to less institutionalised contexts (risks such as cheating, free riding, or shirking). However, Holzinger (2008), who developed the most sophisticated theoretical applications of public good theory to EU policymaking, comes to more ambiguous assessment. She shows how multi-level arenas for collective choice can favour partial interests or self-reinforcing dynamics (races to top or bottom) and thus lead to biased transnational good provision.

As it stands, a few isolated applications of public good theory to EU internal security reflect both strengths and limitations in cooperation outcomes. Apart from more metaphorical references to the security problem of weakest links (Duke 2002), this has mostly concentrated on the issue of burden-sharing. For instance, Thielemann and Dewan (2006) detect relatively effective burden-sharing in EU refugee policy (see also Thielemann and Armstrong 2013), while an extensive quantitative survey of EU 'security governance' from a public goods perspective (Dorussen *et al.* 2009, p. 791) argues that security tasks have been effectively balanced across member states. In contrast, Rhinard's (2009) study on health security surveillance and control shows that the EU has yet to establish a system of effective resource mobilisation in times of crisis, as problems of shirking or free riding have not been resolutely addressed.

The potential of the public goods approach to EU internal security

It is at this point that our special issue aims to expand the research agenda. Our starting point is that different internal security objectives, which we define broadly (and beyond the traditional remit of police and criminal justice questions), have different public goods qualities. They may not all be 'pure' public goods, but they display different degrees of exclusivity, rivalry and types of production technology. Our core argument, as outlined above, holds that understanding those differences helps to get at the root of cooperation dynamics and institutional reform solutions.

Specifically, we see three main directions in which a public goods approach can be utilised in the study of internal security cooperation in Europe: (1) as an exploratory framework for assessing the nature of a good, (2) as an explanatory tool for elucidating cooperation problems and (3) as a prescriptive model for generating institutional design suggestions. Each direction of analysis generates a unique set of research questions, and allows for different kinds of methodological techniques. We also discuss a set of possible critiques or limitations pertaining to each type of analysis. Finally, we show how these three research angles can either be pursued separately or drawn together in a stepwise analysis.

Exploring the nature of different security goods

The public goods approach can be used, first, for exploratory purposes to define the nature and cooperation incentives of different security objectives. As discussed above, public good theory has long been associated with the analysis of national defence or regional defence, where the central concern has been the question of fair burden-sharing between alliance members. Today, as other areas of the 'new' security agenda are increasingly taken up by policymakers, understanding the nature of what is trying to be produced, and the incentives and disincentives that might result, is of renewed importance. This is true whether the research goal is to understand the complexity of addressing today's security challenges (from a functional point of view) or whether it is to explore the political nature of defining objectives linked to security (from a normative point of view). Both suggest that the definition of public security goods could be a stand-alone research topic.

The first step here is to consider questions of publicness, meaning the degrees to which a good is non-excludable and non-rival. Different kinds of 'scores' on these variables suggest different goods (as discussed earlier in section two), including a pure good, a club good, a common pool resource or perhaps even private goods that do not require international cooperation. In this context, it has become widely accepted that categories of excludability and non-rivalry depend on social and physical technologies (Kaul and Mendoza 2003). While many natural common goods, like land, can be fenced, other more social goods depend entirely on our construction, such as the definition of property laws. Against this background, more recent applications of public goods theory has asked not only whether a good is excludable or not but also how costly it would be to make it exclusive (Holzinger 2008). Thus, it can become a research objective in itself whether goods might be 'transformed' from one type to another (for example, from a pure public good to a club good, through exclusion and/or charging for the good) in order to overcome collective action problems.

The second step is to consider the production technology. Production technology is generally less amenable to deliberate intervention than the degree of publicness. Still, determining analytically the kind of production technology required often requires considerable knowledge of the issue in question. For instance, different aspects of the fight against terrorism can variously be seen not only as a case of weakest link dynamics but also as a summative or best shot case (Enders and Sandler 2006, see also Bosson 2013). Exploring and comparing these different options can be contrasted with political discourses, which often make simplistic assumptions about the nature of security threats or kinds of cooperation challenge.

Indeed, this research agenda brings various methodological questions to the fore. One question focuses on the appropriate level of abstraction: Should security goods be measured in abstract (e.g. 'peace') ways or concrete (e.g. 'vaccine stockpiles') ways? For instance, Kirchner and Sperling (2010) deduce four abstract functions of European security governance: protection, assurance, compellence and prevention. In contrast, some contributions of this special issue assume more 'medium-level' goods or public products that contribute to European security, such as greenhouse gas reduction, protection of infrastructures and trade flows, or refugee protection. Kaul and Mendoza (2003) highlight the compound nature of most international or transnational goods, so that both perspectives can be legitimately taken. Without

wanting, or needing, to take a firm stance on this question, we suggest that in the light of the EU's many different internal security initiatives, some degree of precision is worthwhile if we are to fully exploit the advantages of the approach.

This also leads to the question of whether goods should be approached from a more inductive or deductive angle. That is, should they be subjectively defined according to a researcher's understanding or according to interpretation of official texts, political statements, or on the basis of public opinion (Mitchell and Carson 1989)? Here, we suggest a pragmatic course of interpreting a security good primarily through the lenses of official utterances and policy ambitions, combined with a more analytical assessment of what the good in question might look like in practice. Public goods theory does not enter the realm of power politics or why goods are being produced in biased ways (as does the securitisation research agenda). A public goods approach does, however, require the investigator to have a strong technical understanding of a policy issue in order to understand the public good in question.

Analysts must also decide whether different security goods can be quantitatively measured and how a sufficient or even 'optimal' supply level could be defined. This was the focus of study in classical studies of military alliances when analysts aimed to 'count' contributions to a public good (through aggregate defence spending, for instance). Similar assessments may be made with regard to other security goods that heavily rely on physical resources and capabilities, such as disaster protection and management. However, the complexity of the contemporary transnational security agenda does not consistently allow for such quantitative operationalisation – but this challenge should spur intriguing research questions (see Sperling 2013).

Finally, one may take the public goods approach as a starting point to question different conceptions of security per se. For instance, Loader and Walker (2007) show how the public good of security needs to be embedded in social practices, norms and institutions that go far beyond 'technical' production of different security measures. This is a fundamental point when it comes to deciding how security actors should be controlled by society, and what expectations for security should be raised in political discourse. Our special issue does not engage further with such 'thick' definitions of public goods, but contents itself with exploring cooperation incentives from a more instrumental perspective. Still, there is a potential for public goods theory to stimulate a renewed engagement with political philosophy and the nature of, or definitional authority over, common goods (Mayntz 2002). This may be particularly necessary in the case of EU security, since it has already stimulated intensive normative debates as we discussed in Section 1. However, in contrast to existing critical approaches that mostly draw inspiration from the theory of securitisation and related patterns of exclusion, a public good approach can also shed additional light on the positive, non-discriminatory dimensions of security policy.

Explaining patterns of cooperation

Moving beyond exploratory questions of how to define and measure public goods, this theoretical approach also provides a useful set of conceptual tools for explaining cooperative or non-cooperative outcomes. This is not only an explanation of whether cooperation takes place (which would be a rather crude instrument, especially in the EU context where cooperation is ongoing) but also an indication of the level or 'quality' of cooperation. The approach allows us, for instance, to uncover whether

member states might have temptations to drag their feet, to intentionally or unintentionally underperform, or to prioritise talk over action.

The basic insight of public goods theory is that ineffective cooperation can be explained by more than just divergent preferences amongst partners. Even when preferences converge, various obstacles emerge to produce ‘market failure’ (or ‘government failure’ in this case). Obstacles may be related to the properties of the good described above (excludability, rivalry, production technology and interaction context), the different combinations of which generate specific incentive structures for cooperation or non-cooperation. The simplest and most basic hypothesis here is underprovision due to free-riding incentives on non-excludable and non-rival goods produced using summation technology. If this basic scenario is varied in any way, the incentive structure in turn changes with varying effects on cooperation. In turn, new sets of hypotheses can be drawn up. One might examine a good that is partially rival, which would lead to overconsumption and failed cooperation, the theory posits, if some degree of exclusion is not considered (with possible knock-on problems of equity and distribution). Looking at the variables concerning cooperation context leads one to believe that if an interaction context exists with, say, only a few homogenous actors sharing information over the long term, basic disincentives can be rectified and cooperation improved. In short, varying the different elements of public goods provision generates a rich and diverse set of hypotheses.

Of course, this brief introduction cannot outline all the logically possible combinations of different properties of public goods and all the possible incentive structures that result.³ It is this depth and variability of the approach that makes the approach so useful. It is ‘sensitive’ to very different kinds of goods, which produce very different kinds of incentive structures, all under a common theoretical rubric.

Three specific sets of examples of explanatory research follow from the above. The first set of studies examine the overall provision level and distribution pattern of the benefits of a good, asking whether and why a security good is under-provided, efficiently provided, or over-provided. Depending on answers to this question, further analysis can examine whether steps can be taken by the EU to tackle the challenges of free-riding, burden-sharing, mutual assurance, or rent-seeking in public goods in EU internal security.

As already mentioned, Thielemann and Dewan (2006) and Dorussen *et al.* (2009) have argued that free-riding could be held at bay by means of cross-issue trading or comparative specialisation. The existing debate on executive empowerment in EU internal security may, in contrast, be fruitfully embedded as a case of ‘rent-seeking’ opportunities (Holzinger 2008). Most contributions to this special issue provide further critical evidence of why the EU may not generally be able to achieve a balanced supply of security goods due to skewed incentives for cooperation or non-cooperation.

A second set of studies focuses on the level and appropriate institutional framework for producing certain goods. In other words, public goods theory can help to explain complex cooperation forms that may seem cumbersome but are designed to address collective action problems. That is, the characteristics of different goods can favour centralised or de-centralised production and related monitoring or mutual commitment mechanisms. This relates to the theory of clubs (Buchanan 1965), which is intimately connected to public good theory. As is more extensively discussed by Gaisbauer (2013), this approach has particular relevance to the study of

EU internal security, which, from its inception, has been characterised by both opt-outs and intensified cooperation among a limited subset of member states.

The third set of research questions in this category seek to explain cooperation dynamics amongst mixed providers of public goods, including not just states but also different kinds of public actors and the private sector (Krahmann 2008). This 'broad stakeholders' approach has been a defining feature of contemporary security governance and continues to be seen as a politically attractive way to study new security policy fields such as critical infrastructure protection. However, as shown by Krahmann (2013), public good theory can also help to explain why combinations of state and market mechanisms for security provisions may ultimately fall short in providing the right kind of incentives and supply levels of a desired good.

These different explanatory uses of public good theory rest not only on various analytical decisions about the nature of goods but also on the treatment of actor interests as exogenous. This reveals an assumption that, by and large, the interests of cooperation partners are not directly affected by the cooperation process itself, an assumption that has long been criticized in the context of EU studies. EU integration is often seen to trigger significant transformations in state interests by different social or argumentative mechanisms (Checkel 1999, Schimmelfennig 2003, Neyer 2006). We do not dispute these claims; quite the contrary, there is much to recommend them. However, the increasingly problematic nature of EU internal security cooperation is difficult to square with imputed self-sustaining processes of integration. One might also argue that the field of internal security cooperation, in contrast to other areas, frequently requires swift action on new issues where actors cannot build on long-term preference convergence.⁴

Finally, we stress that rationalist explanations of collective action on the basis of public goods do not have to be equated with complete individual rationality. Various contributors to this issue show explicitly how short-term pressures can dominate 'efficiency-oriented' solutions to cooperation. Nevertheless, we maintain that public good theory is not only useful to highlight and flesh out contrasts between a 'rational' course of action and the messy reality of security policy-making, but also can show that incentives and disincentives to cooperation can have more structural influences. That is, while a particular policy decision may be driven by a wide variety of concerns, long-term trends may fall more in line with the expectations of self-interested and (boundedly) rational actors. This arguably offers an initial hypothesis for much of the gap between public declarations for cooperation in times of crisis and long-term willingness to stay committed and marshal the appropriate resources for reliable security provision.

Prescribing solutions

From complex explanatory accounts, it can be a short step to identifying prescriptive solutions. Many, but not all, negative incentives associated with cooperation on public goods can be corrected with the creation or reform of institutions (indeed, this was the premise behind the rise of rational choice institutionalism). Knowing how institutions – formal rules, mechanisms and bodies along with informal norms – can be used to 'fix' perverse incentive situations could be a focus of study unto itself. This approach is particularly appealing to economists who have used public goods theory in increasingly formalised ways to determine 'first-best' or 'second-best' cooperation

games (Batina and Ihori 2005). Public goods theory could be attractive to non-quantitative strands of political science to generate institutional solutions, provided the analyst is comfortable with the simplifications and prediction risks that always accompany model-building.⁵

Starting with cooperation dynamics and supply levels per se, a number of institutional mechanisms and other clever design solutions might be available: enforcement agents, clearer oversight mechanisms, more stable or transparent contribution rules, information providers, or any other solutions that can dampen temptations to defect and improve confidence. Other prescriptions might include changing the nature of the good itself, if that is a feasible option. Pure public goods may be turned into different kinds of club goods, for example, if a reasonable membership fee justifies the costs of exclusion. Alternatively, an authoritative pricing of 'non-excludable' public bad goods, (e.g. greenhouse gas emissions), may lead to a new mixture of public and private incentives for cooperation.

The question of the appropriate level or form of cooperation (e.g. limiting membership) raises perhaps the most fundamental prescriptive questions. As mentioned, original public good research supported arguments regarding the importance of state functions in market economies (implying a centralisation of provision at national levels), whereas subsequent theorising on clubs (Buchanan 1965), common pool resources (Ostrom 1990) and good provision in federal systems (Frey and Eichenberger 1996) accentuated the benefits of more decentralised and mixed approaches. By now, research increasingly focuses on 'policy-centric' mechanisms for mixing local and global good provision (Ostrom *et al.* 2010). This closely relates to the long-standing debates in EU studies about subsidiarity versus supra-nationalisation, or different forms of governance and public/private partnerships, all of which needs further exploration in the area of internal security.

Finally, one can also ask the reverse, namely whether 'model solutions' to EU internal security cooperation could strengthen bridges to comparative regionalism or global governance. That is, if public good theory indicated that the EU provides an efficient and fair mechanism for the provision of security goods, can this be taken as an argument for comparable regional integration in response to new transnational threats? For instance, the African Union or ASEAN have also instituted cooperation on counterterrorism and natural disasters. While there are many reasons to be highly sceptical of a direct or easy 'transfer' of cooperation models (Acharya and Johnston 2007), we should not lose sight of this wider agenda. Human security and development may ultimately hinge on such effective regional security cooperation (Kaul *et al.* 2003).

Conclusion

European cooperation in internal security matters is a growing field of study, but one that lacks robust theoretical frameworks capable of uncovering its fundamental dynamics. For the most part, this field is populated by empirical descriptions and narrow, single-variable analyses. We showed in this article that a theoretical focus on 'public goods' can offer useful exploratory, explanatory and even prescriptive leverage on explaining outcomes, and allows scholars to compare across internal security issue areas. Focusing on the cooperation dynamics surrounding the production of a public good illuminates incentives for as well as fundamental

challenges to cooperation, which can help explain even the most subtle dynamics. As such, we believe this framework, or its components, can be used to set a new research agenda in the field of EU internal security studies.

That agenda might include exploring the nature of an internal security good itself, including the reach of its effects, the durability of its benefits, the way member states must each contribute to it, the social impact of a good, or the logic of supplying that good at different governance levels. Or that agenda might involve explaining cooperation dynamics, by focusing on the incentive structures generated by efforts to produce a public good collectively. We demonstrated that the properties of a good, the way it is produced and the cooperation context combine in different ways to produce perverse incentives. Those incentives can help explain the familiar national traits of foot-dragging, free-riding, easy-riding, constructive abstentions, opt-outs, or other phrases frequently invoked in EU circles. Finally, the research agenda might include prescriptions for fixing these problems, by either changing the properties of the good (to partially privatise it, for instance) or by designing cooperation structures that change negative incentive structures (by using creative funding solutions to ensure trust amongst partners, for example).

In some respects, our approach is not new to the field. The EU as a whole can be seen as a project to provide the general 'public goods' of peace and security (Marks 2012). However, the approach cannot explain everything, while this issue does not aim to renew the search for a 'grand theory' of European cooperation. But the specific, complex and even operational aspects of internal security goods today challenge the capabilities of a cooperation system not designed for that purpose. This might explain why cooperation outcomes produce mixed results (at best) and effects that generate questions about appropriate and effective levels of production. The time is right to ask fundamental questions about the EU's internal security-related public goods in a structured, theoretically informed manner, and we are pleased that a distinguished group of contributors have agreed to take part in that examination.

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Notes

1. Transnational spillovers either occur in relation to a specific crisis or shock, or develop on the basis of fundamental political changes. A familiar argument holds that the creation of the Single Market led to the adoption of the Schengen regime, which in turn demanded further cross-jurisdictional cooperation between police, security and judicial authorities.
2. The following basic matrix can be amplified by including 'intermediate' scores on the two categories. For instance, some goods may have medium exclusion costs and no rivalry, which may render a mixture of public and private provision possible. This may be labeled as 'joint' (public private) or 'impure' (public with some private incentives) goods. Conversely, toll goods with partial rivalry could often better be described as club goods, whereby there is a clearly declining benefit if too many members join (e.g. an overcrowded swimming pool). Lastly, rivalry of consumption can also be inversed, i.e. the good is increasing rather than diminishing in benefit with additional consumers/users. Respective examples of a good

with negative rivalry and exclusive or non-exclusive characteristics would be a spoken language or a computer operating system.

3. Multiplying the four standard cases of public goods (see Table 1) by at least four production technologies already results in 16 cases, which then could be further amplified by including mixed goods (partial excludability, partial rivalry, joint public-private benefits – again to be multiplied by four production technologies). For extended typologies, see Sandler (2004, p. 81), Holzinger (2008, p. 19) or Kaul *et al.* (2003, p. 83). Moreover, each case could then be modulated with at least six contextual variables that can vary independently of each other. Such a systematic variance across cases motivates part of the expanding research literature that applies public goods hypotheses in laboratory settings and experimental games (Batina and Ihuri 2005).
4. The assumptions of endogenous preferences is even more problematic if different kinds of actors (e.g. public private) are brought together in less institutionalised patterns of governance. In any case, exogenous preferences do not have to be equated with ‘fixed equilibrium’ cooperation (Heritier 2007, Thompson 2010).
5. It should go without saying that any such model or prescription needs to be continuously tested against new empirical research, and that we do not expect universally valid laws of cooperation.

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