

The background of the cover features a low-angle shot of modern glass skyscrapers. In the foreground, there is a large, dark, curved architectural element with several white, five-pointed stars of varying sizes attached to it, resembling a stylized logo or a decorative structure.

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FINANCING INVESTMENT IN
TIMES OF HIGH PUBLIC DEBT

2023 European Public
Investment Outlook



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II. European Public Goods¹

Marco Buti, Alessandro Coloccia, and Marcello Messori

A well-functioning economic union needs a permanent central fiscal capacity. Stepping up the supply of European Public Goods (EPGs) delivered and financed at EU level appears the most promising avenue. EPGs should meet a number of criteria at the intersection of the economic theory of public goods, the theory of fiscal federalism, and EU-specific institutional and political features. The green, digital, and social transition; the supply of critical raw materials; health; security; and defence define the areas where economic, institutional, and political coherence meet. Several issues still need to be addressed before EPGs could be launched at the appropriate scale. However, the ongoing mid-term review of the EU Multiannual Financial Framework provides an opportunity for bringing EPGs to the centre of the policy debate.

II.1 Introduction

European Public Goods (EPGs) allow the European Union (EU) to pursue projects implemented at a centralised level by means of common financing. EPGs have been revived recently in the context of the green and digital transition (see Fuest and Pisani-Ferry 2019). This renewed attention was prompted by the pandemic shock which convinced the EU Member States of the necessity to create a central fiscal tool, albeit of a temporary nature: Next Generation EU (NGEU) and its main component, the Recovery and Resilience Facility (RRF). Many observers believe that the RRF should be transformed into a permanent instrument, thereby creating a European Central Fiscal Capacity (CFC). However, despite its innovative scope, the RRF is mainly characterised by a national use of EU financial resources (transfers and loans), as the European Council negotiations led to a reduction in the share of EPGs (Papaconstantinou 2020). Therefore, making it permanent would be politically controversial as it would raise the concern that the EU is turning into a ‘transfers union’. This risk would be mitigated by focussing on the production of EPGs (see Buti and Papacostantinou 2022; D’Apice and Pasimeni 2020).

¹ A slightly different version of this chapter has been previously published, with the same title, in *VoxEu*, 9 June 2023, pp. 1–8. Alessandro Coloccia speaks in his personal capacity

EPGs are politically less contentious compared to other forms of CFC for at least two reasons. First, the EPGs weaken the *juste retour* (or ‘net balance’) narrative, according to which each EU country tends to subtract how much it contributed to the EU budget from how much it receives directly back. Second, the production of EPGs would lessen the tensions between alleged ‘creditors’ and ‘debtors’ and the consequent risks of opportunistic behaviours linked to transfers to national budgets. From a policy perspective, EPGs could help deliver the ‘triple transition’ (green, digital, and social) and promote the role of the EU in the international markets, thus helping to reconcile European domestic and global agendas. Furthermore, EPGs can play an important role in tackling the economic and political fallout of the Russian invasion of Ukraine.

Let us add that, even if the EPGs can be produced at a centralised European level by coalitions of private firms belonging to various Member States, these goods will usually require a public intervention and will mainly contribute to the implementation of public investments. In defining EPGs (see Section 11.2), we do not emphasise the relations between these goods and public investment because—in principle—property rights are not a crucial component of our classification. However, our analysis has two implications: first, that EPGs play a fundamental role in the construction of a new European industrial policy and, second, that this policy is required to overcome the current obsolete EU’s production model and to build an innovative and competitive economy able to strengthen European competitiveness in international markets. The new EU’s industrial policy should be characterised by incentives designed to support private investment and by reforms and regulations to improve the efficiency of various markets and the effectiveness of economic institutions. In any case, an important component of this policy should also be the activation of public investments.

This chapter is part of a long-standing research stream on EPGs that has addressed their implications for the Euro Area (EA) policy mix (Buti and Messori 2021a, 2022a), the role of the EU in global governance (Buti and Messori 2021b, 2022b), and the future of NGEU (Buti and Messori 2023). Against this background, in Sections 11.2 and 11.3, we put forward an operational definition of EPGs and outline a preliminary classification of these goods. In Section 11.4, we explain how EPGs could be delivered and financed. Section 11.5 concludes by going back to the centrality of public investments in the new EU’s industrial policy.

11.2 Key Features of EPGs

The EPGs can be interpreted as a specific application of the concept of Global Public Goods that was utilised by Kindleberger (1973) and many other authors (see Buchholz and Sandler 2021) to extend the theoretical concept of pure public goods (see Samuelson 1954, 1955; Buchanan 1968) to the activities involved in the integration of international markets. This extension implies that the classical analysis of public goods has been grafted onto other strands of economic literature, namely the theory

of fiscal federalism. It has also weakened some of the original features of the public goods concept. Being a specific version of global public goods, EPGs require a further operational definition. We thus define three broad rationales for that definition: (i) economic, (ii) institutional, and (iii) political.²

According to the economic rationale, a 'pure' public good is characterised by two main features: (i) its utilisation by an additional beneficiary has a marginal cost approaching zero (non-rivalrous), and (ii) the exclusion of a potential beneficiary is either impossible or very inefficient (non-excludable). These two features have an important implication: market mechanisms tend to supply an insufficient amount of 'pure' public goods because a profit-maximising producer of this type of goods would bear the full costs but could internalise only a portion of the benefits (see, for instance, Stiglitz 1986: chapter 1). Hence, the creation of an efficient amount of public goods requires a direct or indirect public intervention.

At the global level, an undersupply applies not only to 'pure' public goods, but also to goods that satisfy only one of the two criteria above or even just a weak formulation of (one of) these same criteria. In the former case, the economic literature refers to 'mixed' public goods, in the latter to 'impure' public goods. Hence, the three types of public goods share the crucial feature mentioned above: that of giving rise to market failures. This feature is strengthened by two related and key characteristics of public goods: the ability of these goods to generate economies of scale and spillovers (positive externalities). Being a specific version of global public goods, EPGs incorporate all of these features. Hence, for the purpose of this chapter, we define EPGs as 'pure', 'mixed', and 'impure' public goods that produce positive externalities mainly thanks to centralised public interventions.

As to the institutional rationale for identifying EPGs, two additional specificities emerge. First, the production and financing of a given good or service take place optimally at the EU level as the added value of this same good or service increases when it is the outcome of a joint design and a common effort of the EU members. This feature leads to the second institutional aspect of the EPGs: it is in the mutual interest of the Member States to exploit the cross-border dimension to prepare, support, and implement the production of these goods and services.

Finally, according to the political rationale, EPGs should benefit the EU as a political entity and not only as the sum of its individual Member States. EPGs should strengthen the cohesion across countries and buttress citizens' support towards European cooperation. We label these features as 'beyond subsidiarity' to emphasise their multiplicative effects. Finally, EPGs should be 'mission oriented' by supporting EU's strategic domestic and international political priorities.

The EPGs' economic, institutional, and political rationales analysed above are 'translated' in the seven features illustrated in Table 11.1.³

2 For a similar attempt of specifying EPGs criteria, see Thöne and Kreuter (2020).

3 It should be noted that our analysis of EPGs is focused on 'material' public goods (and services), that is, on those EPGs based on investment and production processes. Hence, we leave the crucial issue

Table 11.1 Main Features of EPGs

RATIONALE	FEATURE	EXPLANATION
Economic	Non rivalry and/or non excludability	The existence of these two qualities or even of one of them, also in a weak form, imply that an EPG would be either a 'pure', 'mixed', or 'impure' public good.
	Economies of scale and scope	Beyond a minimum level, the production cost of additional units of EPGs decreases (economies of scale); the same applies to the joint financing and production of EPGs (economies of scope).
	Positive externalities	The production and utilisation of the EPGs in a given sector or by a given number of EU Member States create positive spillovers to other sectors and other EU Member States. Combined with economies of scale and scope, these externalities entail positive multiplier effects at EU level.
Institutional	Mutual interest	EU Member States have a mutual interest in jointly designing, financing, and producing EPGs because the availability of these goods is beneficial to each of the participating countries and the production of these same goods at national level would be too costly or unfeasible.
	Cross-border dimension	The effective acquisition of EPGs requires the involvement of financial resources of several or all EU Member States. Nevertheless, any good financed by EU resources but nationally produced is not included in our definition of EPGs.
Political	Mission oriented	EPGs are key to pursue EU's strategic priorities in the economic or non-economic areas.
	Beyond subsidiarity	EPGs produce externalities that improve the efficiency and effectiveness not only at national level, but also for the EU as a whole. Hence, the impact of the EPGs cannot be reduced to an assessment of subsidiarity.

Source: Authors' elaboration.

of the allocation of knowledge as a global public good (on this, see Stiglitz 1999) in the background, and we neglect the EPGs arising from reforms and 'immaterial' outcomes (for example, a positive externality such as financial stability).

Table 11.2 A Classification of EPGs

AREAS	OBJECTIVE	RATIONALE			EXAMPLES
		Economic	Institutional	Political	
Digital Transition	Boosting innovation and reconciling EU domestic and global agenda	XX	XX	XX	Cross border digital connectivity infrastructure (for example, 5G, backbone networks, quantum communication infrastructures), Research and Development
Green Transition and Energy	Decreasing EU energy dependence and safeguarding EU's leading role towards climate change	XX	XX	XX	Cross-border energy projects (for example, electricity, smart grids, and CO2 networks)
Social Transition	Rebalancing welfare state towards re-skilling of human resources	X	X	X	EU platform for skills acquisition and exchanges
Raw Materials	Reducing competitiveness gaps and increasing strategic autonomy	X	XX	X	Common purchase of critical raw materials
Security and Defence	Overcoming different strategic perspectives to ensure EU protection	X	XX	XX	Borders management, and handling of migration flows
Health	Protection against health catastrophes	X	X	XX	Procurement of vaccines, near-shoring of basic medical facilities, research and development

Source: Authors' elaboration.

11.3 Identifying EPGs

Based on the analysis in the previous section, in Table 11.2, we identify six priority areas: digital transition, 'green' transition and energy, social transition, raw materials, security and defence, and health.⁴ For each area, we provide a subjective assessment of compliance with the three rationales mentioned above and we indicate some non-exhaustive examples of specific EPGs that meet their corresponding objectives.

The first four challenges pertain to the economic field: a) reaching climate neutrality to preserve EU's international leadership in terms of low environmental impact and 'circular economy'; b) reducing EU's technological gaps in relation to the USA and China and innovating the EU production model by means of a centralised industrial policy (see Buti and Messori 2023); c) improving education and re-skilling as necessary conditions to successfully pursue the double transition without weakening European social protection; and d) buttressing the EU open strategic autonomy as part of a renewed system of multilateral governance. These four challenges call for the supply of EPGs in areas such as digital transition (cross-border digital connectivity infrastructure), 'green' transition and renewable energy (cross-border energy projects), labour market and social transition (platforms for skills acquisitions), strategic raw materials required for innovative productions.

Additionally, the experience with COVID-19 calls for EU interventions in health such as the centralisation of the purchase of vaccines, the near-shoring of basic medical facilities, and the centralisation of innovative medical research. Finally, the war at the EU's eastern borders and the human drama affecting large parts of Africa and the Middle East point to the need of EPGs in the areas of defence and security. Examples are the inclusive management of migration flows and the protection of the EU's external borders.

In Table 11.2, we provide a subjective assessment of the compliance of the six areas with the economic, institutional, and political criteria identified in Table 11.1. A double cross (XX) denotes a high potential, and a single cross (X) denotes a satisfactory potential. Whilst most projects listed in this Table would qualify as EPGs according to our definition based on the number of crosses, the three areas which come out as critical for the supply of EPGs are the digital transition, 'green' transition and energy, and security and defence.

11.4 Financing and Delivering EPGs

To finance and deliver EPGs, it is necessary to put in place a permanent CFC because the common EU projects discussed above have a medium- to long-term dimension. The creation of a permanent CFC raises difficult legal and institutional questions that go beyond the scope of this chapter. According to Tosato (2021), the EU Treaties are

4 A partly similar classification was elaborated, before the pandemic, by Fuest and Pisani-Ferry (2019).

sufficiently flexible to include a 'recurrent' CFC as a tool of managing repeated external shocks. We, therefore, focus on the questions of how to finance and deliver these goods.

NGEU and the SURE programmes offer two different options for the financing of a temporary CFC. The former allows the European Commission to issue European bonds in the financial markets on behalf of the EU thanks to the guarantees offered by the headroom of the Own Resources ceiling. The latter entitles the European Commission to issue bonds backed by national guarantees that are offered by the EU Member States. However, these direct or indirect guarantees cannot work in the case of a permanent or recurrent CFC, as required by the production of EPGs. The extension of these guarantees to a very long (or even infinite) horizon would involve implicit and growing liabilities for national budgets that would impose binding constraints on national fiscal policies. Hence, the financing of EPGs requires that the central level be endowed with specific tax bases, or, in the EU jargon, new Own Resources. This task is fraught with difficulties as shown by the modest progress in the enlargement of the European taxation since the report by Monti et al (2016) was published. The proposals by the European Commission for a new corporate taxation basis (*Business in Europe: Framework for Income Taxation (BEFIT)*) offers an opportunity to define more robust new own resources.⁵

Even if it were possible to solve the problem of a centralised financing of the EPGs there would remain the issue of their effective delivery. A pragmatic idea would be to rely on the 'vehicles' offered by EU programmes, either new or already in place. In this respect, while the RRF and SURE cannot play a role as EPGs' vehicles because their projects are implemented at national level even if centrally financed, other EU programmes can serve the purpose of delivering EPGs. Some parts of the 'RePowerEU' support common initiatives at EU level; the same applies to a few NGEU programmes, such as 'Connecting Europe Facility', 'InvestEU', and 'Horizon'. European initiatives are also the core of the 'Innovation Fund' and the 'Hydrogen Bank'. Moreover, if reformed to allow financing via EU resources and devoted to genuine EU-wide projects, the 'Important Projects of Common European Interest (IPCEI)' would offer a very useful tool. Finally, it may be necessary to create other EU vehicles, such as the EU Sovereignty Fund put forward by the President of the European Commission in the State of the Union speech in September 2022, as a way to bring together under a unified and visible policy instrument the various separate vehicles mentioned above. In this sense, the recent European Commission proposal to revise the Multiannual Financial Framework 2021–2027 by creating a unified platform ('Strategic Technologies for Europe Platform' (STEP)) of various EU programmes may represent the start of a movement in that direction.

5 The lack of an independent sources of EU revenue to back the issuance of European bonds to finance NGEU may partly explain the recent underperformance of such bonds in financial markets.

11.5 Conclusions

A well-functioning economic union needs a permanent CFC. Amongst the various options for the creation of such a CFC, stepping up the supply of EPGs delivered and financed at EU level appears the most promising avenue. We have argued that EPGs should meet a number of criteria at the intersection of the economic theory of public goods, the theory of fiscal federalism, and the specific institutional and political features of the EU.

We have provided a preliminary conceptual framework that helps to define and select EPGs. In particular, we have listed a number of characteristics, under three main rationales: economic, institutional, and political. Against this background, we have identified six policy areas (digital transition, green transition and energy, social transition, raw materials, security and defence, and health) that respond to the main challenges that the EU is facing. We have listed a number of specific projects and suggested how they could be financed and delivered at EU level. Creating EPGs in these areas would help the EU economy tackle the growing innovation gap vis-à-vis the USA and China in digital activities and artificial intelligence, buttress its energy autonomy, and, thereby, shift the EU economy onto a more sustainable 'business model'.

In our view, the case for increasing the supply of EPGs is strong. However, so far, the debate on a EPGs and, more generally, on a CFC has not taken centre stage for at least two reasons. First, a large amount of resources remains to be spent following the successful implementation of the national recovery and resilience plans: it is hard to conceive of a permanent or recurrent CFC without the clear success of the RRF. Second, the European Commission has decided to strategically decouple the discussion on the reforms of the fiscal rules from that of the CFC, offering the rationale that it might be easier to agree on new fiscal rules without overburdening an already difficult discussion with further controversial elements. This decoupling is understandable in the short term, but, in the longer term, the credibility and success of a rules-based fiscal framework crucially depends on nesting a CFC into the new economic-governance model.

Today the conditions of supplying an adequate amount of EPGs are not yet fulfilled. However, this does not mean that the debate on EPGs should be postponed to an indefinite future. The impact of post-pandemic bottlenecks and the economic consequences of the Russian invasion of Ukraine have highlighted that the EU should implement a new production model to compete with the other main economic areas (namely, the USA and China) and to strengthen its international role. The shift to this new production model requires an innovative industrial policy in which the support of public investment at national level and the production of EPGs by means of EU public investment play a crucial role.

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