INTRODUCTION

BRUNO CABRILLAC*

GLOBAL PUBLIC GOODS (GPGS) OR UNIVERSAL COMMONS: A CONCEPT ADAPTED TO TODAY'S CHALLENGES

Over the past fifteen years, the world has been confronted with two major crises, the great financial crisis of 2008 and the crisis caused by the Covid-19 epidemic. At the same time, the growing awareness of the seriousness and urgency of climate change, as well as of the damage to biodiversity and more generally to the environment, is confronting the world with "an unparalleled polycrisis, with crises in multiple global systems becoming causally entangled in ways that significantly degrade humanity's prospects", as *Charlotte Gardes-Landolfini* notes. These "global systems" – financial stability, climate, protection against pandemics, biodiversity, security, including energy and food security, etc. – exhibit the characteristics of GPGs, which are recalled many times in this issue: non-rivalrous use ("each individual's consumption of such a good leads to no subtraction from any other individuals' consumption", Samuelson, 1954), varying degrees of non-exclusion, i.e. the impossibility of excluding individuals from consumption of the good, and, finally, universality. In this way they transcend geographical and socio-economic borders.

As *Charlotte Gardes-Landolfini* points out, public goods are a typical case of market failure, since they do not satisfy "Samuelson's condition": "The allocation or creation of a GPG is Pareto-optimal[1] if the sum of the individual marginal benefits associated with the last unit produced is exactly equal to the marginal cost of producing said unit." Public goods are therefore a relevant concept for public policy. In this respect, GPGs are almost an oxymoron, given the shortcomings of public policy at the

* Deputy General Manager, Statistics, Research, and International Division, Banque de France.
Contact: bruno.cabrillac@banque-france.fr.

global level and, as *Gaël Giraud* points out, the impossibility of a global state. Another concept that *Gaël Giraud* traces back to the taxonomy of Roman law, but which has once again become fashionable because of the work of Elinor Ostrom, that of common goods (*res communis*) as distinct from that of public goods (*res publica*), provides a way out of the ambiguity. The universal commons are not necessarily managed by the state, but by all stakeholders in various forms.

Jean-Michel Severino emphasizes that companies play a key role as active participants in the management and financing of the commons, that "they are destined to become new and essential contributors". Increasingly, companies become "common producers of commons" for all their stakeholders (shareholders, employees, and consumers) and, more generally, for their ecosystem. In this context, financial considerations, i.e. profit, can no longer alone dictate corporate behavior. Stakeholders of companies call on them more and more to also maximize their social usefulness, i.e. their net impact on society through the production or destruction of common goods or public goods.

Echoing *Jean-Michel Severino*, *Catherine Casamatta and Sébastien Pouget* explain how the stakeholders who ultimately control corporate governance (the shareholders) have to be concerned with the common good, and therefore with the company's impact on society. On the one hand, maximizing profit alone does not make it possible to optimize the impact on society due to the failure of markets to create GPGs. On the other hand, public policies, especially on the global level, only imperfectly rectify corporate practice through various financial or regulatory incentive instruments. Shareholders, who are also citizens, may want companies to voluntarily contribute to maximizing this impact on society. Even shareholders who are not driven by "social preferences" may be led by purely financial considerations to concerned themselves with the common good if other stakeholders are in favor of that and are prepared to bear the cost: consumers by paying more, employees by reducing their salaries. It is from this conjunction of stakeholders that the CSR (Corporate Social Responsibility) strategy draws its legitimacy.

THE ISSUE OF GPG GOVERNANCE AT THE HEART OF THE ISSUE OF FINANCING GPGS

Whatever the mode of governance for creating GPGs or commons, one of the key issues remains preventing free-rider behavior or, more to the point, preventing "free-destroyer" behavior, as *Ruchir Agarwal and John-Arne Røttingen* emphasize. The "free destroyer", an active replica of the free rider, is a player who unilaterally damages or destroys GPGs. The authors give six examples of such actions, either

Promethean acts that do not respect the principle of precaution (geo-engineering for carbon capture, uncontrolled development of artificial intelligence), or failure to apply GPG management rules (nuclear proliferation, cyber-security, security of biological research centers, protection of biodiversity). The current failings of global governance make managing the "free destroyers" problematic. The authors then suggest several avenues for improving global governance of GPGs that we find again in many of the contributions to this volume. First, governance should be inclusive and universal in order to involve all state and non-state players, including potentially dangerous ones. It should be part of an overall strategy, given the interactions involved in creating GPGs, and it should cover the various phases in the creation of negative externalities (prevention, treatment, repair). It should benefit from sufficient diversified, reactive (particularly in emergencies), and supplementary funding.

Julien Arthur, Fabio Grieco and Quentin Paul take a look at the evolution of global economic governance over the last fifteen years. Although the broad outlines of this portrayal confirm major shortcomings in managing GPGs in a "polycrisis" context, its general complexion is less frightening than might have been feared. Several layers of the multilateral system have indeed emerged, whether they be consensus-building institutions (as in the macroeconomic or climate fields) or standard-setting institutions (as in the field of financial regulation). These layers are in addition to, and sometimes overlap with, the institutions created after the Second World War, either within the UN framework or coming out of Bretton Woods. The risk of cacophony is very real, but since 2009 the G20 has taken on the role of orchestra conductor, based on the triple approach of impetus, validation, and implementation. In this role, the G20 has achieved a certain success in terms of GPGs: tax equity (tax transparency and tax reforms for multinational companies) and financial stability. Concerning the example chosen by these authors, that of the fight against climate change through the organization, on a global level, of green finance, the progress made, while more limited, is no less significant with the launching of studies regarding international standards for extra-financial information on corporate carbon footprints in particular.

Benedetta Guerzoni and Giorgia Mangani give another example of the still embryonic but promising progress in the multilateral management of GPGs. The conjunction of the Covid-19 pandemic and the heightened urgency of climate change has raised awareness of the interactions between health and the environment and of the need to take these interactions into account in managing these two GPGs.

While significant progress has been made in terms of goals (the why), action is hampered by the challenge that the multiplicity of players and their isolation from each other presents (the who). While a unified strategy, the One Health approach, makes it possible to meet this challenge, it is not enough to surmount it. On the how, the authors argue, "climate and health financing should be conceived as mutually reinforcing tools, capable of triggering a virtuous process towards common objectives". They also note that the IMF's (International Monetary Fund) new Resilience and Sustainability Facility, created in 2021 to facilitate the recycling of SDRs (Special Drawing Rights), is consistent with this goal.

DIFFERENT APPROACHES TO FINANCING GPGS

The issue of climate change, with the colossal investment efforts required for mitigation and adaptation, has also drawn attention to the extent to which financing GPGs is at the heart of managing them. As *Sébastien Treyer* points out, the international financial community already has a long experience of financing a GPG on a large scale – development. But financing other GPGs, such as the fight against pandemics or against climate change, also requires North-South financing for at least two reasons. The first reason is that of the weakest link. For example, a pandemic cannot be eradicated unless it is defeated everywhere. Strengthening the prevention, preparedness, and resilience of the most fragile healthcare systems is in everyone's interest. The second reason is the contrasting responsibilities in the management of GPGs. Rich countries both benefit more from the preservation of GPGs and are more responsible for the degradation of GPGs, as is the case, for example, with greenhouse gas emissions. Within this framework, the convergence of ecosystems for financing development and other GPGs is all the more indispensable because trade-offs are inevitable, as *Patrick Guillaumont and Sylviane Guillaumont Jeanneney* show in the case of the climate, even if the goals are largely aligned, notably through the global strategy of the Sustainable Development Goals (SDGs). *Sébastien Treyer* believes that the commitment of the multilateral banks to the Paris Climate Agreement shows the way forward towards this convergence, but there is a need to go further and "put the entire international financial system to work".

As in the case of financing development, establishing collective and universally accepted measures and targets for financing GPGs is a central point. They must serve to measure both the contribution made by each country, or even each stakeholder, as well as the funding each beneficiary country receives in order to assess its impact. *Thomas Melonio and Jean-David Naudet* show just how complex

measuring is. When measuring the effort, “the wide variety of initiatives may make it difficult to clarify politically and in the media what the targets to be reached are and who is responsible for achieving them”. The authors point out that a new measure, Total Official Support for Sustainable Development (TOSSD), developed in 2016, helped determine the SDGs and makes it possible to comprehensively measure financing development and GPGs. But they note that “TOSSD is having a hard time establishing itself as a reference”. Moreover, TOSSD measures funding at the source, not at destination, and therefore does not make it possible to assess the impact of this funding. For this reason, the authors advocate the concept of sustainable development investment (SDI), which includes all the funding for the South stemming from the development policies of countries of the North in order to supplement the efforts made. In any case, these measurements come up against the same difficulties as those encountered in financing development: determining the scope, including the players involved, and tabulating together heterogeneous funding. Last but not least, an overall measurement is insufficient. Measuring must also be done for each GPG; both concerning the effort, because of the varied responsibilities for each GPG, and at destination, because this funding supports different public policies and has a differentiated impact. Given the interdependence of GPGs (and SDGs) and how intertwined they are with development, the methodological challenges are immense.

Pauline Fournel and Julien Velud look back at the first stage of multilateral development bank (MDBs) efforts to finance GPGs. To complete this stage, they suggest that “it is nevertheless necessary to reinforce the action of MDBs in favor of GPGs through new approaches, such as the systematic integration of GPGs into MDB activities and the use of financial and non-financial incentives in favor of GPGs”. Beyond aligning their mandates with SDGs, MDBs must, like the World Bank, integrate GPGs into their perspectives, their missions, and their operating models. This last point has several aspects. It may mean collaborating more closely with private vertical funds, such as the Vaccine Alliance, or public vertical funds (Unitaid), or even integrating them in their own structure, as the World Bank has done with the new (2022) Pandemic Fund for preparedness, prevention, and response. This may also lead to improving tools for mobilizing private capital by seeking more systematically to maximize leverage, while taking care to reserve concessional resources for low-income countries.

The convergence of development and GPG ecosystems must preserve the public concessionary resources allocated to development. This additionality is often jeopardized when these resources come directly or

indirectly from government budgets. It is for this reason in particular that the idea of financing GPGs, including development, through earmarked taxes has often been proposed. *Vianney Dequiedt, Audrey-Anne de Ubeda and Grégoire Rota-Graziosi* draw a balance sheet on two recent, distinct experiences: the tax on airline tickets allocated to the French Solidarity Fund for Development (FSD) and the tax on transporting hydrocarbons by sea attributed to the International Oil Pollution Compensation Funds (IOPC Funds). The authors use the analysis grid of mechanism design theory to assess "(1) the efficiency and equity of financing through an earmarked tax, (2) the coordination, cooperation, and commitment that an earmarked tax makes possible, and (3) the way in which issues of stakeholder behavior control are taken into account". Applying this type of analysis to these two examples shows the importance of the choice of the tax base for efficiency and equity and the importance of the extent of integration into the budgetary and attribution process in order to maximize the incentive for cooperation. The trade-off between securing long-term funding and influencing behavior (Pigou effect) is also a key element in designing these earmarked taxes. The authors use these two examples to show that there is no obvious optimal answer, but that pragmatic solutions can be found. This is an important point at a time when the discussion about taxes earmarked to finance the energy transition (taxes on marine fuel oil, on kerosene for civil aviation, and on digital transactions) is intensifying.

CLIMATE, OCEANS AND FINANCIAL STABILITY: THREE "PURE" GLOBAL PUBLIC GOODS, THREE APPROACHES TO GOVERNANCE AND FINANCING

Climate, a "pure" GPG, is obviously the focus of all the current discussions on the governance and financing of GPGs. *Mark Carney* was not only a key observer, but also and above all an important player in the early stages of the establishment of global climate governance. It took a long time to set up the cornerstone of this structure, which was based on UN bodies. After the failure of the Kyoto Protocol, the "genius" of the Paris Agreement was to group voluntary national commitments around a common global goal, regular assessment of these commitments, and a voluntary process to bridge the gap between action and ambition. The second cornerstone, which was hammered out at the COP27 in Glasgow, was, to echo *Jean-Michel Severino*'s words, the participation of private companies, particularly financial companies, in creating the climate GPG made possible by the Paris Agreement ("when society sets a clear goal, it becomes profitable to be

part of the solution and costly to continue to be part of the problem"). For *Mark Carney,* this progress now needs to be accelerated. "That means incorporating net-zero transition planning into statutory requirements, regulation, and legislation[...] In parallel, international cooperation is needed to reform the international financial architecture to ensure it is supporting the mobilization of climate finance at scale to emerging and developing economies[...]."

Using the same climate example, *Patrick Guillaumont and Sylviane Guillaumont Jeanneney* brilliantly illustrate the difficulties and political stakes involved in measuring GPG financing. "Currently, "*les financements pour le climat*" or "*les financements climat*", uncertain French translations of the elegant but ambiguous English expression "climate finance", in no way correspond to a clear concept. The term is nonetheless being bandied about, all the more so since there is no agreement on its meaning." The commitment made at the COP15 in Copenhagen in 2009 to transfer $100 billion a year in climate finance from the North to the South is far from having resolved this ambiguity, given the lack of clarity on what is being covered (nature and goal), as shown by the methodology developed by the OECD to account for it, methodology which moreover has not been accepted by everyone. The authors propose re-establishing a classification system based on goals. Adaptation funding is closely linked to development, and from the beneficiaries' point of view, its impact and therefore how it is apportioned must be evaluated in terms of the improvement of the relevant SDGs, and concessional funds must be concentrated on poor and vulnerable countries. Mitigation financing follows a different logic, as its impact and how it is apportioned must be assessed according to the effectiveness in reducing greenhouse gas emissions. While the two envelopes should be kept separate, the targets of contributions are subject to the same differentiated responsibilities. In any case the goal must be their additionality to development aid, because in the case of mitigation and, to a lesser extent, adaptation, the existence of trade-offs with development cannot be denied.

Philippe Le Houérou takes a different approach to the ambiguities of climate financing and looks at the proliferation of climate funds. He counts 94 such funds that have been created over the past 30 years, 82 of which were still active at the end of 2022. "Yet these funds make only a marginal contribution to financing the climate GPG. Furthermore, it is very difficult, if not impossible, to view even the simplest aspects of the management and impact of these funds as a "system"." Given this obvious ineffectiveness, due in particular to exorbitant coordination costs, and considering the divergent purposes and operations, the author proposes drastically reducing the number

of climate funds, consolidating them along various axes – purposes (mitigation/adaptation), geography, host institutions, etc. – and thoroughly reforming and harmonizing their operating methods.

Climate funds are just one element among many in the climate financing landscape, as *Odile Renaud-Basso*'s depiction shows. The diversity of players is welcome, since the magnitude of financing needs is immense, but coordinating the players is a challenge. A challenge first and foremost for governments, who are responsible for encouraging and monitoring this financing through appropriate policies. But MDBs can also help meet this challenge, as *Pauline Fournel and Julien Velud* demonstrate. MDBs must contribute to the creation of "bankable" mitigation and adaptation projects, of which there are currently too few. They must also "catalyze systemic change through their investments and their support for regulatory reforms that make climate investments economically viable". Finally, they must seek to better marshal private capital for climate financing in emerging and poor countries. "Overall, green investments accounted for half of the EBRD's activities last year, with $6.7 billion in climate financing. At the same time, we raised an additional $10 billion in private capital."

Other players can also contribute effectively to the coordination of climate financing, notably regulators and central banks. The Network for Greening the Financial System (NGFS), an original organization that brings together central banks and regulators on a voluntary basis to take part in the fight against climate change, is an illustration of the new forms of multilateralism for managing GPGs that *Julien Arthur, Fabio Grieco and Quentin Paul* describe.

While climate remains at the top of the concerns, the oceans (and more specifically the high seas under international law) have long been a testing ground for the governance and financing of GPGs, as *Tanguy Stehelin* reminds us. "While the high seas are not open to appropriation, the United Nations Convention on the Law of the Sea, also known as the UNCLOS, sets out a series of activities that may be freely carried out in the high seas by virtue of the freedoms enshrined in the Law of the Sea (freedom of navigation and fishing, freedom of conducting marine scientific research, freedom of laying cables and pipelines). In contrast to the regulations and international oversight established for the utilisation of marine soil and subsoil, the UNCLOS does not provide any guidelines or global authority concerning the exploitation of biodiversity in the high seas." And yet, the biodiversity of the high seas (50% of the earth's surface and 64% of its oceans) is remarkably rich, and in part unexplored. The good news is that negotiations on the BBNJ treaty (Biodiversity Beyond National Jurisdiction), stimulated by the biodiversity COPs and in particular

the COP15 in Kunming/Montreal, and despite geopolitical tensions, resulted in a pioneering solution in terms of governance and financing in March 2023. In terms of governance, the major breakthrough was abandoning the consensus rule, which often blocked progress and ambitions in terms of GPGs, in favor of a two-thirds majority for most decisions. In terms of financing, the solution was also innovative, with cost-sharing based on the financial resources from exploiting the biodiversity of the high seas, but also an initial contribution from developed countries.

The successful conclusion of the negotiations on the BBNJ treaty gives us hope for further progress on this key GPG that the ocean constitutes. *Robert Calcagno* evokes the theme of a symposium held in 2015 and organized by the Oceanographic Institute of Monaco, which he leads: "The Ocean, common good of humanity: a utopia for the 21st century". The BBNJ treaty is doubtlessly a decisive step towards this utopia, but much remains to be done to protect biodiversity and combat the overexploitation of fishing resources and the proliferation of plastic waste. The author emphasizes that "together with major international agreements, cooperation between governments, combined with a redefinition of sovereignty, and well-managed collaboration with NGOs or private companies can provide answers for how to preserve the oceans". He cites the actions of the Principality of Monaco as an example.

Along with climate change and the fight against pandemics, financial stability is one of the GPGs highlighted by the current polycrisis context described by *Charlotte Gardes-Landolfini*, and "one of the most important" because it is a necessary condition for financing the other GPGs, writes *Hélène Rey.* While the reforms undertaken in the wake of the 2008 financial crisis – reinforcing international microprudential regulation (Basel III), introducing macroprudential policies in systemic economies, more actively managing capital flows in emerging countries – have made it possible to bolster global financial stability, the organization of the international financial system around the dollar represents a fundamental weakness. Indeed, "a powerful Global Financial Cycle exists. The risk-taking channel is an important monetary policy transmission mechanism that affects financial stability, and the Fed's monetary policy has important ripple effects far beyond the borders of the United States". However, because of the Federal Reserve's mandate, US monetary policy is managed solely on the basis of internal U.S. considerations, and not on the basis of the financial stability GPG. Nevertheless, *Hélène Rey* doesn't consider the central role of the dollar to be unacceptable, since the United States has fulfilled its role as banker and insurer of the rest of the world fairly well, assuming its

"exorbitant duty" in exchange for the dollar's "exorbitant privilege". But much remains to be done for financial stability: further strengthening microprudential regulation by resisting industry lobbies, reinforcing the IMF's financial capacities, better coordinating macroprudential policies to mitigate the effects of the global financial cycle, etc.

Vera Songwe makes the same point about the hegemony of the dollar in the international monetary and financial system. In this context, the dollar itself should be a GPG, but its creation is controlled by the Fed on the basis of purely internal considerations of the US economy. The author draws different conclusions from those of *Hélène Rey*. The distortions, and hence the instability, that this systemic flaw introduces into the international monetary and financial system cannot be corrected. Under these conditions, the dollar should be replaced by an international currency that could be managed in way that takes account of the imperatives of the financial stability GPG. The SDR could be such a currency, even if we have to be realistic and anticipate that the transition will be a long one.

Putting forward the concept of GPGs or commons is an important step towards meeting the immense challenge of saving the planet, because it crystallizes and justifies shared interest and coordinated action. The various contributions to this issue emphasize the necessity, but also the difficulties, of a comprehensive approach that, in the absence of true global governance, involves all stakeholders, takes into account all interactions, and also mitigates the tragedy of the horizon. The time for thought must therefore continue without impeding action, as *Bertrand Badré* pleads in his foreword. In this respect, the various contributions to this issue, which recall or advocate pragmatic solutions that have enabled or will enable us to move forward, breathe an air of optimism.

August 28, 2023

NOTE

1. In the sense of Vilfredo Pareto: a reallocation that is completely beneficial for at least one agent necessarily disadvantages another.