

Anna Visvizi*

EDUCATION, (PRODUCTION OF) KNOWLEDGE AND PROGRESS IN THE CONTEXT OF THE GLOBAL PUBLIC GOODS DEBATE

Abstract

As the relevance of the EU's political, social and economic model(s) diminishes and the EU's safety and security paradigms are put under pressure, the nexus between education and knowledge (production) and the delivery and availability of public goods needs to be rethought. With this in mind, this paper offers a critical insight into the "education and knowledge as public goods" thesis in order to make a case that the prospect of continued socio-economic progress in the EU requires that very specific values, attitudes and worldviews are instilled in students already at a pre-school age. In this context, the salience of the principle of "solidarity" and its dwindling currency are highlighted. Moreover, a case is made that for the concept of public goods to regain its explanatory merit, a more pronounced connection between its macro, mezzo and micro-levels needs to be established, so that the feedback effects at work can be identified and effectively translated into the policymaking process.

Keywords: (global) public goods, transjurisdictionality, EU, education, knowlegde

Introduction

The Eurozone crisis and the economic uncertainty that it provoked, followed by a dramatic rise in youth unemployment across the European Union (EU) and accompanied by declining competitiveness of EU economies render it necessary to reconsider the role of education and knowledge (production) in the current EU social, political and economic model(s). The role of education and its availability becomes an equally salient question when viewed from the angle of the rising political instability on the EU's frontiers and the challenges that the massive inflow of refugees

* DERE – The American College of Greece; avisvizi(at)gmail.com

to the EU will trigger. To what extent, how and under what premises education and knowledge (production) can contribute to the emergence of viable alternatives to Europe's contested political, economic and social model(s)? May education and knowledge prove useful with regard to the delivery of public goods? As a means of addressing this twin question, first, this paper offers a critical insight into the (global) public goods debate and suggests that a more pronounced conceptual nexus between the macro-, mezzo- and micro-levels of that debate needs to be established. Only in this way, it is argued, the feedback effects at work between those levels can be identified and employed in the policymaking process in view of improving the delivery and availability of public goods at the global level. In what follows, the "education and knowledge as public goods" thesis is questioned only to restate the understanding (derived from Plato) of the role of education as a carrier of values, attitudes and worldviews conducive to the attainment of public goods. In the third step, by way of conclusion, education and (the production of) knowledge are discussed in the context of the Eurozone crisis and the prospect of socio-economic progress in the EU.

1. Rethinking the Public Goods Debate and Its Core Assumptions

Originating in the field of economics, the concept of public goods refers to the goods that while available to all members of society and shared by them, even if scarce, are still defined by two features: non-rivalry of consumption, i.e. the consumption by one individual does not reduce the amount left for others, and non-excludability, i.e. it is difficult, if not impossible, to exclude an individual from enjoying the good (Verschreagen, Schilz 2007: 159). The most frequently cited examples of public goods include: fresh air, water, peace, security, but also light, houses, safety, social justice, gender equality, greater economic wellbeing and environmental sustainability. These qualitatively diversified concepts of a lesser and greater degree of abstractness are by default elusive, subjective, non-quantifiable and prone to be unevenly distributed. Think for instance of (the perceptions of) peace and security, on the one hand, and (the perceptions) of social justice and wellbeing on the other hand. In this view, "public goods" are an abstract, hypothetical concept that is contingent on two limitations, i.e:

First, the debate on public goods implicitly reifies the existence of private goods and impure public goods, i.e. goods that are characterized by both rivalry of and excludability from consumption. "Goods (or services) that possess only one of the two criteria are called impure public goods" (Verschreagen, Schilz 2007: 159). There

is a further distinction that treats goods that are non-rivalrous but excludable (for example, cable television signals) as “club goods” (McNutt 1999: 928) and goods that are non-excludable but rivalrous (for example, high seas fisheries) as “common pool resources” (Bodansky 2012: 653). Second, due to the abstract nature of the concept of public goods, the debate on public goods implicitly assumes smooth, unconditional availability and/or delivery of public goods, including their equitable territorial and societal distribution. This is clearly not the case (Long, Woolley 2009). Public goods have their temporal and spatial dimension, i.e. they may be available today but they may become scarce tomorrow; they may be in abundance in one geographical area and nonexistent in another. In fact, a great deal of research deals with the question of incentives and ways of improving the delivery of certain public goods to the broadest possible audience (Loeschel, Ruebelke 2014; Shank et al. 2015; Scharf 2014).

Another issue that needs to be pointed out is that modern states and modern societies operate on the assumption that public goods exist as if by default. In line with the social contract upon which modern societies are built, typically it is the state that – in return for taxation and respect for rules – is endowed with the responsibility to provide certain public goods. What happens if the state cannot afford it or lacks the institutional capacity to do it? Taking into account the meagre growth rates in the developed economies and the pressures that the adverse demographic trends create for the state and its financial ability to deliver, pressures emerge for the delivery of certain public goods to be outsourced to private agents. This, supporters tend to argue, decreases the cost for the state and makes the process more cost-efficient while the delivery and availability of public goods improve. Critics argue nevertheless that such a way of dealing with the state’s inability to deliver public goods constitutes harm to democracy (Crouch 2004).

From a different angle, in the discussion on public goods the notion of positive and negative externalities is raised, i.e. it is argued that the cost of the delivery and utility of public goods is not evenly shared among the members of the society. While this observation feeds into the previously raised argument of non-equitable territorial and societal distribution of public goods, it also highlights the problem of free-riding in the process of delivery and access to public goods. Free-riding is considered problematic because it manifests unequal burden sharing, hence non-equitable distribution of both public goods and related externalities. As such, it can create disincentives for those involved in the process of the delivery of public goods.

2. From Public Goods to Global Public Goods

The concept of public goods made a spectacular entry to the field of international studies following the seminal 1999 UNDP publication titled *Global Public Goods: International Cooperation in the 21st Century* (Kaul et al. 1999). Therein, the concept of “global public goods” was deliberately employed to signal the necessity of new forms of collaboration to tackle problems and challenges of a global scope. Clearly the rationale behind the major argument advanced in that publication was that “many of the urgent issues facing mankind involve significant interregional, indeed international, interdependence” (Cornes 2008: 353) and therefore concerted action is needed to address them. Put in the context of the new millennium debate and Millennium Development Goals, the global public goods debate fed on the (fading by that time) charm of the globalization debate, while at the same time fitting neatly in the emerging global governance debate.

In what followed, the global public goods debate was employed to discuss “everything from global environment, international financial stability and market efficiency to health, knowledge, peace and security, and humanitarian rights” (Long, Woolley 2009: 107). As a corollary, the conceptual territory of the global public goods debate stretched to the extent that the very understanding of what a “global public good” is has become blurry and the boundaries between what constitutes the good itself and what serves as a means of its attainment have become unclear in several academic accounts. Consequently, even if the term “public goods” would retain its appeal as a rhetorical figure, as an analytical concept it lost its explanatory merit. Long and Woolley (2009: 108) argued that “the concept is poorly defined, avoids analytical problems by resorting to abstraction, and masks the incoherence of its two central characteristics. ... Even if the concept of global public goods is effective rhetorically, a precise definition and conceptual disaggregation are required to advance the analysis of global issues”.

In response to that plea, Bodansky (2012: 653) argues that even though the descriptors “global” and “public” do not always make the concept of global public goods more precise, focusing on the effects of a given good rather than on the good itself might constitute a way of bypassing the conundrum of indeterminacy that the concept entails. Indeed, in this reading it is possible to discern a consensus – most probably grown out of the global governance debate – that the global public goods concept signals “a common collective action problem and large potential benefits to international cooperation” (Long, Woolley 2009: 110). This understanding of the need of collective action suggests a tacit recognition among those involved in the debate

that a hierarchy among the public goods exists. One could argue that this is reflected in the growing list of issues considered as human rights (OHCHR 2015). In itself, it opens up a very interesting research question on the politics of the nexus between fundamental human rights and public goods in the global context.

From a different angle, in the debate on global public goods, the emphasis on the global descriptor of the term “public goods” has obscured the meanings originally attached to the concept itself. In other words, this overemphasis on the global dimension of public goods and the resultant call for international/global collaboration on the one hand effectively reduces the importance of challenges to the delivery/availability of public goods below the macro-level. On the other hand, it conceals the organic connections that exist between the micro-, mezzo- and macro-dimensions of the public goods challenge. In fact, in the debate on public goods (and their availability specific to local and regional contexts) their global dimension and implications are rarely emphasized. Obviously, however, the provision/availability of public goods at the local, regional and national levels is consequential for the attainment of public goods at the global level. They are correlated. One could go as far as to argue that to a certain extent the provision of public goods of global reach might stimulate the provision and availability of public goods locally and vice versa. This has important planning and policymaking implications. What follows is that a more pronounced conceptual nexus between the macro, mezzo and micro-levels of the public goods debate and its empirical corollaries needs to be established. Only in this way the feedback effects at work between these three dimensions of the public goods challenge can be identified and fed into the policymaking process. Only in this way the delivery and availability of public goods globally (and locally) can be improved.

3. Linking the Micro-, Mezzo- and Global Dimensions of the Public Goods Debate: Transjurisdictionality at Work

The rationale behind the emergence and rise in popularity of the concept of global public goods is linked to the debates on globalization and global governance. At the bottom of those debates lies the process of growing worldwide interconnectedness. What follows is that in order to bridge the micro-, mezzo- and macro-dimensions of the challenge inherent in the provision and access to public goods, the transjurisdictional nature of public goods and their provision need to be emphasized, not their trans-border nature as a bulk of literature implicitly does.

The term “transjurisdictional” is employed here to signal the challenge and the need of collaboration between and across many different (legal) jurisdictions, including but not limited to nation-states, involving cooperation between different levels of government, regional authorities as well as international institutions, hence stretching across geographic and cultural borders. This definition of transjurisdictionality draws on Laquer Estin (2013: 595), who applies the term “transjurisdictional” in the context of child welfare debate. It needs to be stressed though that the term “transjurisdictional” is not employed here in the strictly legalistic meaning suggested by Nash (2008). Nash employed that concept in the context of the discussion on “transjurisdictional adjudication, [i.e. to refer to a situation when], a court in one system faced with a question arising under a second system’s laws seeks an interpretation of that question from a court in the second system rather than conducting the interpretation itself”. This legalistic remark notwithstanding, the term “transjurisdictional” has had frequent applications in political science and international affairs (Ballard 2009), as well as in environmental science (Wang, Ongley 2009), specifically in discussions necessitating interdisciplinary insights.

Consequently, it is argued that by emphasising the transjurisdictional aspects of the public goods debate rather than its global, regional or local dimensions, the concept itself opens up to the challenge of accounting for a variety of issues pertinent in the delivery/availability of goods considered public. By conceptualizing the nexus that exists among the macro-, mezzo- and micro-levels of the public goods debate (and policy process aimed at their delivery) by reference to transjurisdictionality, this paper advances a more comprehensive insight into the nature of public goods and the challenges related to its delivery/availability in contemporary contexts. This specific “transjurisdictional” take on public goods highlights that a great variety of actors/constituencies are (and ought to be) involved in the delivery of public goods, and that the challenge in their delivery and availability may not be the scarcity of the goods themselves, but rather certain unresolved transjurisdictional hurdles. This calls for greater collaboration across the spectre. Interestingly enough, in this reading, the concept of public goods feeds in the (global) governance debate in that it signals that several actors/constituencies may have the capacity to provide certain public goods, yet not all of them may have the mandate to do so. This suggests that new modes of collaboration are needed, with this being the major argument advanced in the global governance debate.

Summarising, the addition to the concept of public goods suggested in this paper renders it more flexible, i.e. easier to be handled in the politicised discussions on the delivery of public goods across the spectrum. By making the nexus amid the macro-, mezzo- and micro-levels of public goods more pronounced, not only does

the conceptual addition advanced in this paper highlight the existence of the organic/functional connections between the different dimensions of public goods, but also helps to validate actions/policy strategies aimed at the delivery of public goods at the macro-level. The transjurisdictional take on the public goods concept reconciles the variety of dimensions that public goods entail and enables a comprehensive approach to the issues, problems and challenges that the public goods debate highlights. Education and knowledge serve as very good cases in point that confirm the utility of this approach. The following sections elaborate on this issue.

4. Rethinking the “Education and Knowledge as Public Goods” Thesis

There has been a tendency in academic and political debates to include education and knowledge on the list of public goods. To a large extent, this tendency coincides with the popular understanding that education and – by extension – knowledge should be available to all, with the state being responsible for their provision. Certainly, contemporary societies operate on that assumption; access to elementary education is considered a human right. Does it mean however that education and knowledge are public goods indeed? For instance, at the EU level, in line with the Bologna Process ministerial communiqués, higher education is considered a public good and a public responsibility (Bologna Process 2001). Are education and knowledge public goods? When and under what circumstances does it make sense to treat them as such? For the sake of the discussion, the concepts of knowledge and education will be discussed separately.

4.1. Rethinking the “Education as a Public Good” Thesis

Education is a process, a mechanism by means of which “the values and accumulated knowledge of a society are transmitted to the members of the society. In this sense, education is equivalent to what social scientists term ‘socialization’ or ‘enculturation’” (Encyclopaedia Britannica 2015). Seen in this way, education is a vital means of attaining certain public goods. This is because certain values and knowledge thus transmitted to the members of society may be reproduced through their actions, therefore contributing to growth and development of that society. As such, however, it is not education that should be considered public good. It is rather the possible future outcomes of specific education that under certain conditions may contribute to the

attainment of such public goods as peace, security, greater wellbeing, greater social justice, clean air etc.

Education does not fulfil the two basic prerequisites of a public good, i.e. non-rivalry and non-excludability. It is very easy for an individual to be denied access to a certain type of education on the grounds of it being “consumed” by others, e.g. a limited capacity of a music school, and exclusion on the account of not possessing the required skills, e.g. sufficient hearing skills to be able to learn how to play violin. Furthermore, from the perspective of externalities related to the provision of public goods, education represents a case where a good publicly available produces individual/private benefits, thus inflating the “education as a public good” thesis. The challenge of education lies somewhere else.

It is not education’s status as a public good that matters, it is not the amount of knowledge that it conveys. What matters are the virtues and attitudes that education instils and the skills that students become equipped with in the course of education. Certainly, this observation constitutes a restatement of Plato’s argument on education. As Hensley et al. (2013: 553) note, “One of the central issues Plato addresses in *The Republic* is the relationship between education and ‘the Good,’ with education serving as the mechanism through which public good – characterised by truth, beauty, virtue and justice – is advanced”. Indeed, many contemporary educational paradigms draw on this relationship. This is reflected in mission statements of high schools, colleges and universities. Frequently, it serves as the rationale behind education policies at national/local levels (Hensley et al. 2013: 553). Education remains therefore a priority for national governments not because of it being a public good itself, but because of potential future positive outcomes that it produces and/or might contribute to. Here, the challenge is twofold. On the one hand, how to define the principal goals that a given educational system should contribute to, i.e. what should they entail? With this in mind, what are the most efficient ways of making education accessible to the greatest possible number of members of society.

The latter point especially makes several observers argue that education, particularly at the elementary level, should be considered a public good and a public responsibility. With regard to higher education opinions are divided (Nyborg 2003; Mosteanu, Cretan 2011; East et al. 2014; Gibbons 2000; Santos 2006). To play the proverbial devil’s advocate, one could argue that although the provision of education may be the responsibility of the state, by virtue of the state having this responsibility education does not become a public good. It is rather the nature of the – by now changing – social contract upon which our societies used to draw, where the citizens would consent to a certain degree of state intervention (via taxes and rules) in return for certain privileges and gains/provisions, education included. This social contract

would sanction as well the existence of the state and its institutions. Should it happen that the state becomes obsolete, so will the provision of education by the state. This suggests that education is not a public good. That the Bologna Process builds on the assumption that education is a public good suggests nevertheless that the idea of the nation-state is so deeply ingrained in conventional thinking about politics and policymaking across the EU that we cannot do without it. This opens up quite a different field of inquiry, though.

4.2. Rethinking the “Knowledge as Public Good” Thesis

There has been a tendency in the public goods debate to suggest knowledge is both non-rivalrous and non-excludable.

“Firstly, unlike material things, knowledge and information are not rivalrous in use or consumption: the consumption of one individual does not detract from that of another. I can use an idea or piece of information at the same time as other people are discussing this idea without any loss of utility for either of us. Using knowledge or information does not ‘consume’ the knowledge; it remains available for others to use” (Verschraegen, Schilz 2007: 159).

The problem with the above argument is that, first, it neglects the problem of accessibility/availability of knowledge and information; second, it neglects the problem of quality and validity of information; third, it assumes the possession of skills necessary for the assessment of the quality and validity of information obtained; fourth, it assumes an honest and honourable use of knowledge and information, and therefore, fifth, downplays the issue of power inherent in the concepts of information and knowledge. In other words, although knowledge in its purest definition may fulfil the basic precondition of a public good, it is unclear if in the domain of public policymaking and in the context of the public goods debate knowledge can be considered a public good itself. The dubious status of knowledge in the public goods debate can be approached from yet another perspective.

In line with the basic assumptions underpinning critical realism, real world exists, and it exists independently of our knowledge about it. Therefore, we can perform such cognitive practices as those associated with science only on the assumption that the objects of inquiry exist independently of our knowledge about them. Furthermore, our ignorance about things social does not render them non-existent and hence there exist unobservable entities of reality. What follows is that our knowledge of the world is fallible, and science is and should be emancipatory, whereby knowledge has to be a process and an “achievement”. Accordingly, the surface appearance of things is potentially misleading as to their true character. Therefore,

since knowledge is fallible and appearances may be misleading, and since science holds the emancipatory potential, current beliefs will always be open to correction in the light of further cognitive work, such as observations, experimental evidence, interpretations, theoretical reasoning, dialogue (Benton, Craib 2001: 120–121; Marsh, Furlong 2002: 31).

The above suggests that even if the objectivity of things cannot be denied, our knowledge of the world is limited and open to constant updates. This means that knowledge may not necessarily fulfil the prerequisites of non-rivalry and non-excludability. That is, let us assume that an individual proves capable of disclosing fallibility of a piece of knowledge. As long as this new piece of information has not been made publicly available, then another individual will still have access only to the defunct and faulty pieces of information that existed earlier. This is an unintended phenomenon that in the language of the public goods debate could be termed as “temporal excludability”. It highlights the thin line that divides information and knowledge on the one hand and the problem of access to information on the other hand. It also sheds light on the issue of skills related to the selection and critical evaluation of the information available. Therefore, what really matters is not necessarily the recognition that knowledge is fallible, and hence that “temporal excludability” is at stake, but rather that serious notions of power and interpretation inherent in the process of transmitting various accounts of reality affect the ontological status of knowledge. If power and interpretation are involved, how can we know that the “accumulated body of knowledge” is indeed what we believe to be a true account of reality? Does everyone have the skills necessary to “sort out reliable information from the tsunami of data washing over us every day” (Hornik, Kajimoto 2014: 175)?

Summing up, in the preceding paragraphs a case was made that for very specific reasons, neither education nor knowledge can be considered as a perfect public good. Nevertheless, education may play a pivotal role in the process of attaining certain public goods, such as peace, greater prosperity, greater social justice, fresh air etc. In a similar manner, it was argued that knowledge may be considered a public good only under very specific circumstances.

5. Conclusion: the EU and the Public Goods Debate

The preceding discussion highlighted the limits and limitations of treating education and knowledge as public goods. At the same time, it was stressed that by focusing on the jurisdictional rather than territorial dimensions of public goods and seeking ways

of bypassing them, the delivery/availability of public goods might be enhanced. To this end, however, emphasis in education needs to be placed on instilling values, attitudes and skills conducive to the attainment of specific public goods such as peace, greater wellbeing, greater social justice and inclusion, but also clean air etc. In this view, what really matters in the public goods debate with regard to education and knowledge is that great effort and resources need to be invested to establish, on the one hand, a framework of collaboration that will enable us to bypass the jurisdictional divides that hamper the delivery/availability of certain public goods, and on the other hand, educational systems focused on instilling values, norms, skills and attitudes. Ideally, therefore, attitudes of responsibility and accountability as well as news literacy and critical thinking skills would render the process of production and dissemination of knowledge a fair and truly emancipatory enterprise. In this way, education and knowledge (production) would contribute to the attainment of public goods and socio-economic progress. With that argument being highly normative, the following section by reference to the EU engagement in the field of education sheds some light on the contingencies besetting that argument.

In line with the EU regulatory framework, it is the EU Member States that bear the responsibility for the design of their educational systems. The Bologna Process constitutes an important step in aligning the different designs of educational systems across the EU in view of enabling student mobility across the EU. The curricula of national education systems are designed locally, i.e. either by governments (elementary and high school training) or by universities themselves (higher education). While EU institutions have limited prerogatives in the field of education policy and national education systems, the EU does encourage cooperation in that field. This is particularly visible at the level of higher education. The European Commission (2015) highlighted recently that “higher education and its links with research and innovation play a crucial role in individual and societal development and in providing the highly skilled human capital (...)”. The question is, what kind of skills are in demand? In its recent report, *New Vision for Education*, the WEF & BCG (2015: 1) advance the argument that “to thrive in a rapidly evolving, technology-mediated world, students must not only possess strong skills in areas such as language arts, mathematics and science, but they must also be adept at skills such as critical thinking, problem-solving, persistence, collaboration and curiosity”. What is missing in both accounts is the notion of values, attitudes and worldview that education systems would have to attempt to instil in students, so that the skills that they become equipped with are employed for the attainment of public goods. Therefore, two points need to be raised.

First, acknowledging the salience of values, attitudes and worldviews is but one thing. The other one is the recognition that those have to be instilled in students in a

process that starts at the pre-school age. This suggests that EU Member States need to take the transjurisdictional effort seriously, whereby the European Commission needs to encourage cooperation in that field so that collaboration and coordination (possibly in line with the open method of coordination) can be enhanced. Second, crises tend to unveil weaknesses otherwise concealed in times of prosperity. The Eurozone crisis demonstrated that the notion of solidarity in the EU is by no means to be taken for granted. This suggests that greater effort needs to be invested across the EU to instil in the European youth the foundational values (including solidarity, democracy, liberty, freedom) upon which the EU is built. This would be the first step on the way towards the strengthening of the European project. The next step would be that politicians actually make these values relevant. All too easily, in the discussion on education and knowledge the essence of things is lost. At the end of the day, it is not the amount of loose pieces of information that we have accumulated that matters, but how we can put these pieces together, and most importantly what we do with them.

References

- Ballard, R. (2009), 'The dynamics of translocal and transjurisdictional networks: a diasporic perspective', *South Asian Diaspora* 1(2): 141–166
- Benton, T., Craib, I. (2001), *Philosophy of social science: the philosophical foundations of social thought*, Basingstoke and New York: Palgrave
- Bodansky, D. (2012), 'What's in a Concept? Global Public Goods, International Law, and Legitimacy', *The European Journal of International Law* 23(3): 651–668
- Communiqué of the meeting of European Ministers in charge of Higher Education in Prague on May 19th 2001 (Bologna Process) (2001), *Towards the European Higher Education Area*, http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/mdc/prague_communique.pdf [accessed on 23.06.2015]
- Cornes, R. (2008), 'Global public goods and commons: theoretical challenges for a changing world', *International Tax and Public Finance* 15(2008): 353–359
- Crouch, C. (2004), *Post-Democracy by Colin Crouch*, Cambridge (UK): Polity Press
- East, L., Stokes, R., Walker, M. (2014), 'Universities, the public good and professional education in the UK', *Studies in Higher Education* 39(9): 1617–1633
- Encyclopaedia Britannica (2015), <http://www.britannica.com/topic/education> [accessed on 23.06.2015]
- European Commission (2015), *EU activities in the field of higher education*, http://ec.europa.eu/education/policy/higher-education/index_en.htm [accessed on 15.07.2015]
- Gibbons, M. (2000), 'Mode 2 society and the emergence of context-sensitive science', *Science and Public Policy* 27(3): 159–163

- Hensley, B., Galilee-Belfer, M., Lee, J.J. (2013), 'What is the greater good? The discourse on public and private roles of higher education in the new economy', *Journal of Higher Education Policy and Management*, Vol. 35, No. 5: 553–567
- Hornik, R., Kajimoto, M. (2014), 'De-Americanizing' News Literacy: Using Local Media Examples to Teach Critical Thinking to Students in Different Socio-cultural Environments', *Asia Pacific Media Educator* 24(2): 175–185
- Kaul, I., Grunberg, I., Stern, M.A. (1999), *Global Public Goods: International Cooperation in the 21st Century*, Oxford and New York: UNDP, OUP
- Laquer Estin, A. (2013), 'Transjurisdictional Child Welfare: Local Governments and International Law', *Transnational Law & Contemporary Problems* 22(3): 595–622
- Loeschel, A., Ruebelke, D. (2014), 'On the Voluntary Provision of International Public Goods', *Economica* 81: 195–204
- Long, D., Woolley, F. (2009), 'Global Public Goods: Critique of a UN Discourse', *Global Governance* 15 (2009): 107–122
- Marsh, D., Furlong, P. (2002), 'A Skin not a Sweater: Ontology and Epistemology in Political Science', in: Marsh, D., Stoker, G. (eds.) *Theory and Methods in Political Science*, Basingstoke and New York: Palgrave Macmillan
- McNutt, P. (1999), 'Public goods and club goods', *Encyclopedia of law and economics* 1 (1999): 927–951
- Mosteanu, T., Cretan, G.C. (2011), 'Education and the Characteristics of Public Goods: Overlaps and Differences', *Theoretical and Applied Economics* 18(9)/562: 33–40
- Nash, J.R. (2008), 'The Uneasy Case for Transjurisdictional Adjudication', *Virginia Law Review* 94: 1869–1929
- Nyborg, P. (2003), 'Higher Education as a Public Good and a Public Responsibility', *Higher Education in Europe* XXVIII(3): 355–359
- Rosenau, J.N. (1997), *Along the Domestic-Foreign Frontier: Exploring Governance in a Turbulent World*, Cambridge: Cambridge University Press
- Samuelson, P.A. (1954), 'The Pure Theory of Public Expenditure', *Review of Economics and Statistics* 36(4): 387–389
- Santos, B.S. (2006), 'The university in the 2P' century: Toward a democratic and emancipatory university reform' in: Rhoads, R.A., Torres, C.A. (eds.), *The university, state, and market: The political economy of globalization in the Americas*, Stanford: Stanford University Press
- Scharf, K. (2014), 'Private provision of public goods and information diffusion in social groups', *International Economic Review* 55(4): 1019–1042
- Shank, D.B., Kashima, Y., Saber, S., Gale, T., Kirley, M. (2015), 'Dilemma of Dilemmas: How Collective and Individual Perspectives Can Clarify the Size Dilemma in Voluntary Linear Public Goods Dilemmas', *PLoS ONE* 10(3): e0120379. doi:10.1371/journal.pone.0120379

- Slaughter, S., Rhoades, G. (2004), *Academic capitalism and the new economy: Markets, state, and higher education*, Baltimore: Johns Hopkins University Press
- United Nations (2015), Office of the High Commissioner for Human Rights (OHCHR), *List of Human Rights Issues*, <http://www.ohchr.org/EN/Issues/Pages/ListofIssues.aspx> [accessed on 21.08.2015]
- Wang, X., Ongley, E.D. (2009), 'Transjurisdictional Water Pollution Disputes and Measures of Resolution: Examples from the Yellow River Basin, China', *Water International* 29(3): 282–289
- WEF & BCG (2015), *New Vision for Education: Unlocking the Potential of Technology*, World Economic Forum (WEF) in collaboration with the Boston Consulting Group (BCG), Geneva