

Higher Education and Public Good

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Introduction

What is the basis of sociability, or ‘public goods’? How do we maintain and reproduce the collective human environment that is essential to our existence? The neo-liberal hegemony in policy, which models erstwhile public activities in terms of economic markets and business logics; and also the ubiquitous cultural emphases on autarkic individual self-realization and competitiveness; have created new questions about the sustainability of social relations. We are constantly aware of the conditions of society, on a daily basis; yet we know very little about public goods, or ‘the public good’, in terms that can be recognised by social science.

Although it is evident that higher education does not function in the manner of a capitalist market, and arguably can never so function (Marginson 2012c), methodological individualism, business models and market ideology have together blocked recognition of the public good or goods in higher education. How can we grasp the public good comprehensively? How do we move beyond a solely economic understanding of public goods, without setting aside production? How do we measure public goods while satisfying both inclusion and rigour? How common are public goods between social sites and across national borders? How can we enhance the incidence and value of public goods? Which institutions contribute to public goods and how? How does higher education contribute? Under what conditions? Arguably, research and conceptual development concerning the public functions of higher education institutions (HEIs) is important both in its own right and as a way into the larger problem of public goods.

HEIs are among the main social and economic institutions of advanced societies. They educate people in social skills and attributes on a large scale. They

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reproduce occupations, they provide structured opportunity and social mobility, they create and distribute codified knowledge, and they carry a heavy and growing traffic in cross-border relations. While there is no general theory of HEIs it is clear many of their goods are not captured as benefits for individual students or companies but are consumed jointly. These benefits are collective in nature. HEIs contribute to government, innovation capacity, and the formation and reproduction of both knowledge and relational human society. The public outcomes of higher education include these collective outcomes. The public outcomes also include certain individual goods associated with public collective benefits, such as the formation, in individual students, of social and intellectual capabilities basic to social literacy, scientific literacy, effective citizenship and economic competence. These individual capabilities are not associated with measured private benefits. Higher education has a special and multiple importance as a producer of public goods. HEIs also produce private goods for students and industry; that is, rivalrous and excludable benefits distributed on a zero-sum basis, such as the social status of graduates, earnings attributable to higher education, and income generated by intellectual property originating from university research. This does not negate their role in producing public goods. Yet higher education is some under pressure to focus primarily or exclusively on individualisable economic benefits. What happens to sociability when the pendulum swings more towards private goods? We need to better understand the collective costs entailed in this reduction.

To break open the problem of the public contribution of HEIs and systems, it is necessary to investigate relations between the state, society and university. The nation-building role is central to the evolution of the modern university (Scott 2011). However, state/society/university relations vary across the world, as do conceptions and practices of public goods. Arguably any of the differing national/cultural traditions have the potential to contribute to the common pool of ideas about, and practices of, the social and collective aspects of human existence—including the public dimension of higher education, and strategies for augmenting it. Meanings of ‘higher education’, ‘society’, ‘state’, ‘government’, ‘public’ and ‘private’ are not uniform or fixed but are nationally and culturally nested (Enders and Jongbloed 2007). Within these broad scale variations there are differences within national systems in the activities of individual HEIs. Public goods in higher education and research have a national dimension, in some locations a regional dimension, and also a global dimension whereby ‘global public goods’ (Kaul et al. 1999) are produced and distributed. Nations and HEIs vary in the extent to which they are globally active. Yet there are also growing elements in common between HEIs, especially research-intensive universities, amid global and regional convergence in knowledge, HEIs and state practices. Given the centrality of HEIs, and the importance of questions of ‘public’ across the world, by identifying the shared ‘public’ elements in higher education we can better understand what nations, and human societies, have in common. This suggests an inquiry into higher education and public good can be usefully pursued on a comparative basis, in order to identify generic dynamics of the collective in higher education.

Nevertheless, inquiry into public goods presents significant methodological challenges because of the nature of those goods: complex, difficult to measure,

globally variant. Collective benefits are a frontier problem in social research. We lack firm, consistent definitions, modes of observation, and pathways to measuring, public goods in higher education. No single disciplinary framework has been adequate to the task. The applied policy economics that is the principle discipline of government has been unable to adequately capture those goods. Many existing concepts of public goods are solely normative. Evidence-based methods and means of measurement are under-developed. In short, we need stronger concepts and analytical tools.

Higher Education as a Social Sector

Higher education institutions, especially large research universities, are major concentrations of political, social, economic, intellectual and communicative resources. They reach freely across populations and cultures and connect ‘thickly’ to government, professions, industry and the arts. Their functions centre on the creation, codification and transmission of knowledge, and certification of graduates. The potential of higher education is larger than suggested by the model of university as self-serving firm current in policy discourse in the English-speaking countries. The social meanings of HEIs derive from their many connections with other social sectors and their continuing direct and indirect effects in many people’s lives.

More global forms of higher education are now gathering momentum: a fast growing informal sub-sector on the Internet led by Mass Online Open Courseware (MOOC) programs produced by the leading American universities; formal cross-border distance learning; and university branches outside the parent country. But higher education still largely takes the form of institutions physically located in, and closely engaged in, nations (and regions) and cities. HEIs are also visible and connected to each other in the global environment, and subject to continuous comparison and rank-ordering. University ranking has normalizing effects (Hazelkorn 2011) generating convergence on the Americanized model of ‘Global Research University’ (Ma 2008) inherent in ranking systems. HEIs also operate in an open information setting, with multiple potentials for collaboration, in which national borders are routinely crossed, and identities are continually made and self-made in encounters with diverse others. We can imagine higher education as a single world-wide arrangement: not a unitary global system but a complex combination of (i) global flows of words, ideas, knowledge, finance, and inter-HEI dealings; with (ii) national higher education systems led by governments and shaped by history, law, policy and funding; and (iii) single HEIs operating locally, nationally and globally. This world-wide arrangement is imperfectly integrated. There are uneven and changing patterns of engagement and communication, zones of autonomy and separation, stable and unstable hierarchies. Relations are structured by both cooperation and competition. There are fecund mutual influences, doggedly persistent differences, and surprising similarities of approach across borders. This bounded, complex, hierarchical, fragmented, contested, product-making,

subject-forming, continually transforming world-wide setting; with its rules, discourses and exchanges; recalls Bourdieu's (1993) notion of a 'field of power'.

Despite their globalised character (King et al. 2011) and various traditions of autonomy and academic freedom, mainstream HEIs are above all creatures of society-building and nation-building by states (Scott 2011), and in Europe of the Europeanization project. This is true in relation to all public HEIs, many private HEIs—in most nations they are closely regulated, with the exception of online institutions—and also in relation to HEIs' global activities. Through higher education, states provide comprehensive social opportunity and vocational training, reaching well over half the school leavers in some countries, and sustain basic research and research training. HEIs are often central to development in sub-national regions (OECD 2007). 'Global competition states' (Cerny 2007) model the nation-building role of HEIs in terms of national economy and prosperity. HEIs are expected to advance the global competitiveness of the nation by preparing and attracting knowledge-intensive labour, and fostering innovation.

State management of HEIs is not always made explicit. Increasingly contemporary states achieve policy objectives not through direct provision by through the arms-length steering of actors in semi-government instrumentalities, universities, NGOs and the private sphere, using codes, financial incentives and prohibitions (Rose 1999). Further, the policy frameworks used by governments often model HEIs as economic units in a competitive market, and students as consumers (Marginson 1997). New Public Management reform enhances the scope of HEI executives. In many nations the government share of HEIs' income is falling (OECD 2012), a trend exacerbated in the post-2008 recession. Nevertheless, in the neo-liberal era states have not reduced their hold on higher education; nor has the broader public withdrawn. State interest in the sector has been enhanced by globalisation, the economics of innovation, and the growth of student participation. In all countries higher education is politicised and the object of societal and economic expectations. In many countries it is subject to extensive public debate. It is not the exclusive province of student consumers and employers as the market model implies.

Higher education departs from orthodox economic markets in another respect (Marginson 1997, 2012c). Universities produce status goods (Hirsch 1976; Frank and Cook 1995), student places and certificates that are subject to absolute scarcity. Elite universities are not driven by profit maximization or market share. They do not expand to meet all demand. The hierarchy of elite HEIs is stable over long periods, unlike producer hierarchies in other industries. Leading HEIs are more like core institutions of government, such as the legal system, than firms. Commercial training and mass education HEIs are more demand dependent and less stable.

In sum, research universities in all countries are best understood as semi-independent institutions tied to the state. The relationship with the state varies by type of HEI. The strongest research HEIs have the most organisational agency and most scope for global engagement and partial disembedding in relation to the nation-state. The relationship with the state also varies by country and culture. In East Asia, Russia and Latin America the leading universities are publicly positioned as

autonomous arms of government. Nevertheless, even in the USA, where higher education has long been defined as a market, federal programs and regulation crucially shape that 'market', e.g. in relation to student loans, research funding, intellectual property, for-profits (Slaughter and Rhoades 2004); and universities' global strategies coincide with state policy.

While higher education everywhere is implicated in the projects of states, these projects, and the state-HEI relation, also vary significantly. As noted, relations between state/society/HEIs, including ideas and practices of the 'public' mission, are shaped by long-term national and cultural traditions and also by differing hybridisations between those traditions and global modernization. It is known that across the world there is marked variation in private/public funding balances in higher education (OECD 2012). Variations in notions of public good are less well understood. Within the global setting we can identify distinctive *meta-national regional* approaches to higher education, deriving from differing ideas of the social character of HEIs, the scope and responsibilities of government and family, and relations between family, state, professions, employers and HEIs. These regional variations are shaped by differences in the role of the state, and in political and educational cultures (Marginson 2012a). In English-speaking countries there are North American and Westminster systems. The role of national government is felt more directly in the UK, Australia and New Zealand than in the United States and Canada. Europe has sub-regional traditions like Nordic (Valimaa 2011), Germanic and Francophone. There is Russian higher education (Smolentseva 2003), Latin American (Marginson 2012b), the Post-Confucian systems in East Asia and Singapore (Marginson 2011), South Asia, Saudi Arabia and the Gulf States.

Contrast the English-speaking systems and Post-Confucian systems. In the Anglo-American world and where the British colonial legacy is strong, Adam Smith's limited liberal state prevails, with separations between government-market and government-civil society. Normative individualism problematizes 'collective' and 'public'. State agendas are pursued in the language of deregulation; though at the same time, state subsidies are often used to buy the participation of poor families in tertiary education. Tensions on the state/non-state border dominate politics, the correspondingly question of university autonomy dominates the politics of higher education. In the Sinic East Asia, in both single-party and multi-party polities, a more comprehensive state prevails. This form of state is in direct lineage from the Qin and Han dynasties in China in the third century BC. In the Sinic world government and politics are typically dominant in relation to economy and civil society (Gernet 1996). The state's role in ordering society is less often questioned than it is in the West (Tu Wei-Ming 1999, p. 2). Notions of social responsibility are more holistic than in English-speaking systems (Zha 2011a), and notions of the individual are inclusive, taking in the social other. Nonetheless the endemic debate in Western universities, between higher education for instrumental economic purposes and higher education for moral formation and social enrichment, plays out also in East Asia (Bai 2010; Xiong 2011).

Sinic universities are openly part of the state, albeit with scope behind closed university doors for independent scholarship, debate and criticism of state practices.

Confucian educational cultivation at home, and ‘one-chance’ examinations that allocate social status via entry to high status universities, underpin near universal desires for education that extend even to very poor families. The state does not need to incentivize poor families to participate in tertiary education. The post-Confucian desire for education is universal. Post-Confucian takeoff in higher education and science (Marginson 2012a) is created not only through performance-focused state policy, state-financed infrastructure and international benchmarking, but by symbiosis between state and family. Yet while in East Asia comprehensive states are joined to high household funding and stratified systems, in Nordic countries the state provides equitable access to universal high quality public services, though the Nordic model is now under pressure (Valimaa 2005). Compared to East Asia, and notwithstanding recent funding cuts, higher education in most English-speaking nations and all of Western Europe is more state dependent in the economic sense, while more autonomous from direct state ordering in the political sense.

The way to a generic analysis of higher education and public goods lies through nuanced exploration of national practices and regional cultural variations, enabling the identification not only differences but of commonalities of approach. This requires an interdisciplinary approach. A political economy framework tends to flatten out those qualitative differences that are nested in cultural practices. But with political economies converging globally, cultural traditions and practices are the medium in which political economic practices and global trends are articulated in varied ways. This does not mean a relativist cultural analysis replaces a generic political economy analysis. Arguably, both are needed. Together their analytical power is maximized.

Conceptual Frameworks for Identifying Public Goods in HEIs

The politicised nature of public outcomes in higher education, together with the difficulty of identifying public goods, especially on a comprehensive basis, tends to favour *a priori* and normative approaches. Many statements by HEIs, HEI organizations and governments address the issue with rhetorical claims about productivity, knowledge, literacy, culture, local economies, social equality, graduate training in leadership, democracy, tolerance and global understanding; even universals like ‘civilization’ and ‘the future of humanity’. Such claims are rarely tested empirically. But notions of ‘public’ with no grounding in empirically observable practices tell us nothing. The other problem is narrow approaches. As noted, economics is the main discipline used for empirical investigation of public goods. But neo-classical policy economics employs analytical frameworks that privilege market transactions and use an *a priori* idea of ‘public’ that excludes much of what HEIs do, especially the collective goods.

There are three disciplinary approaches to the public outcomes of higher education, grounded in economics, political theory, and communications theory respectively. The public goods are modeled as a production, as a polity or part of

a polity, and as a communicative network. No single approach on its own can provide a comprehensive theorization. Arguably, however, all have something to contribute to the understanding of sociability.

In economics Samuelson (1954) provides an influential schema for distinguishing public and private goods. Public goods are defined not by ownership (state or non state) but by social character. Public goods are one or both of non-rivalrous and non-excludable. Goods are non-rivalrous when consumed by any number of people without being depleted, for example knowledge of a mathematical theorem, which everywhere sustains its use value indefinitely on the basis of free access. Goods are non-excludable when the benefits cannot be confined to individual buyers and are consumed collectively, such as national defence. Private goods are neither non-rivalrous nor non-excludable. Private goods can be produced and distributed as individualized commodities in economic markets. Public goods and part-public goods are unproduced or under-produced in markets. Ostrom (2010, p. 642) notes this approach is consistent with the idea of an ‘institutional world’ divided between ‘private property exchanges in a market setting and government-owned property organized by a public hierarchy’. Samuelson’s schema, while couched in generic terms, embodies the norms of one kind of society and polity. It applies best in Anglo-American nations in which the role of government is limited, private/public tend to be practised as zero-sum, and ideally, all production occurs in markets unless there is market failure. But the world is not as neatly divided as Samuelson suggests, and subsequent work in economics has rendered his public/private distinction rather more complex.

After Buchanan’s ‘club goods’ (1965), Ostrom (2010) adds ‘toll goods’ exclusive to part populations but non-rivalrous in the group, as in collegial relations in universities. Stiglitz (1999) reflects on the public good nature of knowledge, which affects both research and teaching. At first new knowledge is confined to its creator, and can provide exclusive first mover advantage as a private good. Once communicated knowledge is a classical public good that retains its value no matter how often it is used. Across the world, regardless of public/private financing in other respects, basic research is subject to market failure and funded by states or philanthropy. Despite this, devices like journal pay-walls artificially prolong the excludability of texts or artefacts embodying particular knowledge. Those who seek free access to university research assert the natural form. The OECD (2008) notes the potential for creativity in innovation, especially collaborative creativity, is maximized when knowledge flows freely and quickly. Other economists emphasize that intellectual property barriers provide incentives to creators. Economics produces one or another summation of public goods, depending on the political and technical assumptions in which the analysis is nested. In the economics of education, neo-liberals downplay the problem of market failure and the scope for collective goods, favouring markets and high tuition (e.g. Friedman 1962); endogenous growth theorists tend to talk up the roles of public goods and public investment (e.g. Romer 1990).

One strand of political theory models the ‘public good’ as comprehensive or universal, akin to an all-inclusive polity. A more precise concept, though difficult

to operate empirically, is the ‘commons’, a shared resource utilized by all not subject to scarcity (Mansbridge 1998). Universal education systems may take this form but the stratification of HEIs on the basis of status or resources qualifies the notion. Another strand in political theory models HEIs as a semi-independent adjunct to the state with a distinctive role as source of criticism and new ideas and options for strategy. Calhoun (1992) and Pusser (2006) apply Habermas’s (1989) notion of the ‘public sphere’ to the broad political role of higher education.

Habermas describes the public sphere in eighteenth-century London as the field of discussion, debate and opinion in salons, coffee shops, counting houses and semi-government agencies where people met and opinions were formed and communicated on the matters of the day. Organizationally separate from the state but focused on it, the public sphere provided it with critical reflexivity. Likewise, in American research universities, expert information and education help the public to reach considered opinions (Calhoun 1992). Pusser (2006) models the university as zone of reasoned argument and contending values. American higher education has been medium for successive political and socio-cultural transformations, such as 1960s civil rights. In China, leading national universities, especially Peking University, perform an analogous role inside the party-state, as a space of criticism that is continually connected to power within the framework of Sinic practices of constructive intellectual authority and responsibility (Yang 2009; Hayhoe 2011; Zha 2011a). Because of its advanced capacity to form self-altering agents (Castoriadis 1987, p. 372) and engender critical intellectual reflexivities, and ease of movement across boundaries, at times, in East and West, higher education incubates advanced democratic formations. This suggests that one test of the ‘public’ university is the extent that it provides space for criticism, challenge and new kinds of public space.

Habermas’s public sphere also highlights the role of communication in constituting ‘public’. Some theorists define ‘public’ as the network of organizations, public and private, constituting the common communicative space (for contrasting but potentially compatible ideas about the communicative public space see Castells 2000; Cunningham 2012; Drache 2010). Here research universities are quintessentially ‘public’ in their capacity. Early adopters of the Internet all over the world, they are intensively engaged in global, regional and local/national networks.

However defined, the public outcomes of higher education have three spatial dimensions. The national dimension encompasses sub-national regions like states/provinces, and cities. Knowledge about public goods in higher education mostly imagines HEIs as solely in a national system and defines their outcomes in national political terms. But HEIs also operate regionally and globally. The notion of global public goods, which emerged from the work of the United Nations Development Program on ecological sustainability and cross-border refugees, provides another conceptual framework, combining economic theory with an inclusive polity. Global public goods are ‘goods that have a significant element of non-rivalry and/or non-excludability and are made broadly available across populations on a global scale. They affect more than one group of countries’ (Kaul et al. 1999, pp. 2–3). Such goods are increasingly important in higher education, with its thick cross-border flows of knowledge and people, especially in research.

The Empirical Terrain

On the empirical terrain many practices can be identified as ‘public’ in whole or part. In almost all national higher education systems, regardless of political culture, the growth of student participation, and enhancement of social equity in participation, are seen as public goods (OECD 2008)—though around the world, there is much variation in notions of ‘equity’ and programs designed to achieve it. Social equity is a keystone public good that conditions other public (and private) goods. Goods like social literacy and collective citizenship are maximized when there is universal access to good quality education. Three other public goods common to most systems, albeit difficult to monitor, are industry innovation via research; the ‘engagement’ of HEIs (Gibbons 1998) in servicing local populations, cities and sub-national-regions; and internationalization via student and academic mobility and cross-border HEI collaboration (Knight 2004). Despite much research on these and other outputs, no study is comprehensive.

McMahon (2009), in the economics of education, integrates other studies to summarise the private and public goods in terms of individualised benefits to students. The limitations of this method are that it downplays the collective benefits; it limits scrutiny to outcomes assigned prices or shadow prices, and reflects the conventions of North American higher education. McMahon finds the non-market benefits of higher education exceed the market-derived benefits. Private non-market benefits for individuals, like health and longevity for graduate and children, and better savings patterns, average USD \$38,020 per graduate per year, 22 % more than the extra earnings benefits per graduate per year (\$31,174). The social (collective) benefits of higher education include its contribution to stable, cohesive and secure environments, more efficient labour markets, faster and wider diffusion of new knowledge, higher economic growth, viable social networks and civic institutions, cultural tolerance, and enhanced democracy. These direct non-market social benefits of higher education—externalities received by persons other than graduates, including future generations—average \$27,726 per graduate per year. McMahon notes the full externalities of HEIs also include indirect social benefits, the contribution of the direct social benefits to value generated in private earnings and private non-market benefits. Once this indirect element is included, externalities total 52 % of all benefits of higher education. McMahon argues that because externalities are subject to market failure, more than half the costs of higher education should be financed by persons other than the student (p. 2).

Yet tuition regimes are not primarily based on calculations of the value of externalities. The public/private balance of costs can vary sharply in higher education systems similar in other respects. In two-thirds of the OECD countries state-dependent institutions charge domestic students under USD \$1,500 per year. In the five Nordic countries, the Czech Republic and Turkey, public students pay no fees. Tuition fees in English-speaking systems are relatively high: in the UK the norm is 9,000 pounds per year. In Japan and Korea private outweighs public funding by three to one (OECD 2012) and China may be heading towards this level. In Russia

free student places sit alongside low fee and high fee places. These variations reflect historical, cultural and political factors like citizen entitlements. There appears to be little fit between the public/private balance of costs and the public/private balance of benefits. In high fee education, some public goods are financed by private tuition (e.g. formation of citizenship). In free systems governments fund the production of private goods (e.g. scarce places in sought after universities and programs). This does not negate the potential for market failure in public goods, but suggests it is not linearly related to financing, and is likely to be socially and culturally nested.

Perhaps the dimension of public goods in higher education that is most neglected is that of global public goods, which were first discussed by the present author (Marginson 2007; Marginson and van der Wende 2009). The concept has since entered policy discourse in several nations, including Singapore, South Korea and the US (Sharma 2011). Globalisation has enlarged the space for free 'public' exchange (Peters et al. 2009). The considerable potential for global public goods is mostly under-recognised. Global public goods range from capacity building in developing nations to the inadvertent fostering of global cosmopolitanism in education export markets. Public research goods include not only inter-university collaboration on common problems like epidemic disease but all scholarly knowledge that crosses borders.

Policy Problems

The absence of an agreed nomenclature for classifying public outcomes, the lack of tools for monitoring and measurement in most areas, and the normatively-charged nature of the discussion, have generated policy lacunae in relation to the difficult problem of higher education and public goods. As noted, policy-makers take an approach that is either too broad and vague, so that the extant notions of public goods are meaningless; or an approach that is too narrow, using *a priori* economic methods solely focused on readily measured benefits. Both approaches disable policy: either way, public goods cannot be effectively identified and regulated.

The narrow economic approach mostly understands the HEI outcomes as private earnings and rates of return. This policy bias is dominant in English-speaking countries. Over time it weakens the rationale for public planning and public funding except in basic research, emptying out awareness of the public outcomes of teaching, except in social equity and engagement. Successive reductions in public subsidies are justified by pointing to measured private earnings (Dawkins 1988; Browne 2010; Norton 2012). Anglo-American policy enjoys global influence in a wide range of other jurisdictions. Yet, arguably, the Anglo-American discussion of public goals in higher education is particularly unhelpful. Concepts and policy mechanisms have become largely frozen, reducing state purchase on the higher education sector. So long as private/public are treated as zero-sum and public goods seen as marginalised or diffuse, there appears little prospect of a forward move in conception, practice or measurement of public goods. There has

been little effort to explore the measurement of public goods, except in relation to social inclusion and balance in student participation. Without conceptual and practical clarity on public goods in higher education, governments around the world have found it relatively easy to make large-scale cuts to higher education budgets in recession (Eggins and West 2010; Douglass 2010; UNESCO Bangkok 2012); and also to introduce large scale marketization reforms as in the UK, where public subsidies for non-STEM teaching are now zero, without regard for the short-term or long-term effects on collective benefits.

Likewise, there is little awareness or clarification of global public goods in higher education. This is partly explained by the absence of a global state or regulatory framework. Because global public goods are under-recognised they are under-funded and probably under-produced. No one nation takes responsibility for them. No global protocols regulate equity in distribution. Yet global public goods raise issues of regulation and financing that should be considered. For example, when research in one nation generates benefits elsewhere, should the cost of research be shared between producer and consumer? What governance mechanisms could identify, regulate and finance global public goods in education and knowledge? (Kaul et al. 2003). Inversely, negative global externalities ('global public bads') such as brain drain raise questions about cross-border compensation for countries losing their 'brains'.

Recognition of global public goods also suggests the question of *whose* public goods. Each nation (and institution) has its own global projects and distinctive ideas of global good. Thus there are multiple—partly overlapping—global public goods. However the dominant ideas of global public goods are skewed towards the strong higher education nations (Naidoo 2010). For example the use of English as a global language and the standardization of science as a single system constitute global public goods to the extent that all institutions communicate and share a common system; but diversity of knowledge is another, often contrary, global public good. In nations with academic cultures in, say, Spanish, English-language dominated globalization can generate both public goods *and* 'public bads'. The 'bads' are minimized when there are broad two-way flows between national and global domains (Marginson and Ordorika 2011). The key is to identify, monitor and broaden the common global ground. The problem of 'whose public goods', and the contested nature of the global, highlight the value of comparative research.

Conclusion: One Possible Way Forward

How can we investigate higher education and public good(s) so as to advance concepts, empirical understanding and policy wisdom? In contrast to the normative and *a priori* conceptions that have hitherto dominated ideas about public goods in higher education, two moves are essential. First, it would seem best to adopt an empirical and cross-disciplinary inclusive method (here normative practices of 'public' in higher education are among the objects of study rather than the horizon of inquiry). Second, this kind of work requires an adaptive theory approach

(Layder 1998). Using this method the starting notion of public goods is left partly open, to maximize inclusions from the higher education systems under study. Thus the notion of ‘public goods’ is used to frame the project; it functions as an object of study during empirical research; and then, having been developed during the processes of research and data synthesis, a revised form of that starting notion—all going well a newly coherent generic definition of public goods in higher education—becomes the outcome of the inquiry.

Starting Notion of Public Good

What follows is more tentative than the preceding analysis and requires empirical test. Rather than starting from a notion of public goods in higher education that is drawn from one discipline it would seem best to begin with a combination of economics and sociology. This could draw on Samuelson’s (1954) distinction between public and private goods, his notion of rivalry and excludability as determinants, and the idea of public goods, including collective goods, as goods subject to market failure and dependent on governments or philanthropy. Whether such public goods are consumed individually (e.g. productivity spillovers at work) or jointly, they require a policy, administrative or donor process. However, it would be unwise to adopt Samuelson’s assumption that relations between public and private goods are zero-sum. Observation suggests that in higher education, as in other social sectors, public goods and private goods may be advanced at the same time, rather than the one necessarily excluding the other. Indeed, one may function as condition of the other; for example the education of students in elite HEIs may advance citizenship, or internationalization. These potentials are open-ended. For these reasons, the public/private balance of funding cannot be determined by the public/private balance of goods created, though the reverse causation partly applies: funding is one (but only one) factor that determines whether the goods are public or private. High tuition enhances private goods.

Samuelson’s assumption that public goods are exhaustively defined by their natural or intrinsic characteristics also seems mistaken. Whether an activity is ‘public’ or ‘private’ is shaped not by whether markets are intrinsically possible—that would privilege markets as the norm of social organisation—but by social arrangements. The category of ‘public’ can extend beyond residual goods subject to market failure. If there is no hierarchy between HEIs and student places are universally accessible, the ‘public’ element is enhanced. Hence both teaching and research can be more or less rivalrous and/or excludable in character. Research, when first created and when subject to property arrangements, can be exclusive. Otherwise it is public. The knowledge contents of teaching are mostly non-excludable and non-rivalrous. MIT, Harvard and Stanford provide free access to MOOC units on the Internet, without impairing the private value of their face-to-face Ivy League degrees. Degree programs entail more than knowledge. Places in MIT or Stanford provide scarce valuable private goods, constituting zero-sum social

positions and access to elite networks. This enables high fees. Teaching programs are mixed, variable and ambiguous, embodying a wide range of combinations of public and private goods.

Measurability

One key question is the measurability of public goods in higher education. To conduct empirical research it is necessary to make provisional decisions on this; yet conclusive decisions about measurability require research. In the face of this circularity the issue must be kept partly open.

Keynes notes in his *Treatise on Probability* (1921) that qualities apprehended by social science can be divided into three categories: those open to measurement and computation, those to which a precise number cannot be assigned but are capable of rank ordering (more/less, better/worse), and those that can be apprehended only in the exercise of expert judgment. All three categories are relevant. Quantification provides states and HEIs with more direct purchase on the problem, but given the overlapping and multiple nature of these public goods, and the fact only some can be measured, all computations are partial in reach.

Globalised Comparative Methods

The transformative (and problematic) impact of global HEI rankings (Hazelkorn 2011) shows the growing weight of the global dimension. But orthodox comparative education cannot simultaneously comprehend both global and national elements. The orthodox method compares bounded national systems using templates grounded in the home country, most often the United States. This tends to downplay global elements and systems such as policy borrowing, people mobility and cross-border science, though these elements have a strong presence in both public and private goods. The part-global integration of higher education and knowledge, and the emergence of a more plural higher education world, in which the European Higher Education Area and the East Asian systems have larger roles, reducing Anglo-American dominance, highlights the limits of this approach (Marginson and Mollis 2001). This suggests we need an alternate *relational* method (Marginson 2008; 2010a) that (a) envisages worldwide higher education as a unified field of heterogeneous organizations, national systems and cross-border agencies, including all relations inside, between or across nations; (b) combines the global, national and local dimensions of action (Marginson and Rhoades 2002) while acknowledging pan-national regions (Dale and Robertson 2009) and scales of subject-relations; and (c) engages concepts, values and practices from higher education traditions other than the Anglo-American, like the French, German, Nordic, Latin American, Japanese, and Chinese.

Here the guiding meta-assumption is that the route to common understanding lies through national case studies that foreground diversity. Using this method the generic language about public goods, devised after empirical investigation in contrasting sites, will be site-sensitive and inclusive of the major systems and traditions, not grounded in only one (Zha 2011b).

In a 2008–2011 study of Asia Pacific universities for the Australian Research Council, the author distinguished global and national effects, focused on relations between them, and separated elements common to the universities in the study from context specific elements. This approach can be extended to identify definitions and practices of national public goods in higher education, through case studies that investigate contrasting national systems; distinguish that which is common to national public goods across the different systems from that which is nation-context bound; interpret observed public goods in the context of differing national/regional political cultures, state practices and education cultures; and devise generic terms and indicators that integrate notions of public goods from the range of national/regional traditions.

The above argument suggests that in order to situate public goods effectively within each national system and cultural tradition, empirical data should be interrogated in terms of:

1. *The state and political culture*: Ideas and practices of the roles, responsibility and scope of government, state relations with economic markets and civil society, prevailing ideas of ‘society’ and ‘public’.
2. *Relations between government and HEIs*: HEIs and state/society building, autonomy, regulation, funding, discursive/other practices of the social and economic roles of HEIs.
3. *Social-educational culture*: Social and economic expectations of higher education, family educational practices, examinations/social selection, social mobility, school-university relations.
4. *System organization in higher education*: Institutional stratification, competition and cooperation between HEIs, and the diversification of public and private goods.
5. *The private sector and public goods*: State/society/HEI relations in that sector.
6. *The global perspectives and activities of HEIs*: Global imaginings, global position and positioning, cross-border linkages and mobility, global policy borrowing and commonalities.
7. *Public goods in higher education*: Specific programs and practices of HEIs and systems, including measurement of the relevant activities, that contribute to public goods (broadly defined) in the national system concerned; the funding of those activities, and the relation between funding and activity.

Finally, the inquiry should incorporate global public goods in cross-border flows and systems, identifying both nationally-specific elements and globally common elements. Global public goods can be identified from the viewpoints of several national/regional traditions, enabling both triangulation between perspectives and also the isolation of common elements.

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