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4. HIGHER EDUCATION AND PUBLIC GOOD

A Global Study

INTRODUCTION

Discussion about the purposes and benefits of higher education has been stymied by a particular construction of the relation between private and public benefits that now leads in policy circles and public debate. In this reading of higher education, the private and public benefits are rhetorically juxtaposed on a zero sum basis, while the individual benefits of higher education are defined as solely private and in solely economic terms. In liberal Western societies, in which limiting the role of the state is seen as the central problem of politics, and individual freedoms are positioned as outside both state and society, the collective conditions ("social benefits") provided by higher education are readily seen as exclusive of the individual benefits. At the same time these collective benefits remain shadowy, under-defined or undefined altogether.

What is the basis of "public goods"? How do we maintain and reproduce our sociability, the collective human environment 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-realisation 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, 2012b), 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 notions of 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 as a whole contribute? Under what conditions? Arguably, empirical social research, policy-focused inquiry, and conceptual development concerning the public functions of higher education institutions (HEIs), are important both in their own right and as a way into the larger problem of public goods in all social sectors.

G. Goastellec and F. Picard (eds.), Higher Education in Societies, 51–71.

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 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 higher education, it is clear that many of the goods produced by HEIs are not captured as benefits for individual students or companies but are consumed jointly. They are collective in nature. For example, 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 on producing public goods. Yet higher education is under some 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.

Given that in liberal Western societies – especially English-speaking societies – understandings of the public good(s) created by higher education have become ideologically "frozen," so that the public good can scarcely be identified, it may be helpful to look beyond the liberal Western jurisdictions for fresh insights and possible conceptual frameworks. Arguably, an inquiry into higher education and public good that is pursued on a comparative basis can enable us to more deeply explore generic dynamics of the collective in higher education. Notions of the role of government and of universities, of the "social," the "community," individual and collective, and public good, vary considerably between different traditions of higher education, for example the Nordic, German, Russian, Latin American and Chinese traditions as well as those in the United States and the Westminster countries. Meanings of "higher education," "society," "state," "government," "public" and "private" are not uniform or fixed, but nationally and culturally nested (Enders & Jongbloed, 2007). There is no good reason to treat the Anglo-American approach to public/private as the sum of all possibility. 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. By comparing the different approaches to "public good" in higher education that have evolved across the world, generic elements can be identified, and a common language of public good developed. This move can also makes it possible to establish a broad-based notion of specifically global public goods.

Within the broad scale variations between the differing national/cultural traditions, there are differences within national systems in the activities of individual HEIs. Public goods in higher education and research have a local dimension, 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. National systems, and HEIs, vary in the extent to which they are globally active. At the same time there are 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 in contemporary societies – and the importance of questions of "public" across the world – by identifying the shared "public" elements in higher education, it may be that we can better understand what nations, and human societies, have in common. This understanding can contribute to the evolution of global society.

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. It must be said that we lack firm, consistent definitions, modes of observation, and pathways to measuring public goods in higher education. No single disciplinary framework has been adequate. Applied policy economics, 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. To investigate concepts and tools we need to begin by locating higher education as a social sector (see next section of the chapter).

The Conceptual Basis for an Empirical Study

The remainder of this chapter outlines the conceptual basis for an empirical study of higher education and public good(s), using a globally-defined comparison that takes into account both differences between national systems, and global public goods. The ultimate objective of this empirical study is the development of a common generic language and analytical system for observing, judging and where possible measuring public good(s) in higher education. To understand the commonalities, it is first necessary to grasps the specificities and the patterns of similarities, divergences.

The empirical study is currently underway. At the time of writing, case studies had been completed in two national systems of higher education, with six more planned. The Appendix to the chapter provides more details.

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 it is 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) programmes produced by the leading American universities, formal cross-border distance learning, and university branches outside the parent country. Nevertheless, higher education still largely takes the form of institutions physically located in, and closely engaged in, nations (and regions) and cities. At the same time HEIs are visible and connected to each other in the global environment, and subject to continuous comparison and rank-ordering. University ranking has normalising effects (Hazelkorn, 2011) generating convergence on the Americanised 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.

A Worldwide Assemblage

Recognising the interplay of all of the local, national and global forms, agencies and practices, we can imagine higher education as a single world-wide arrangement: not as a unitary global system but as a complex combination of, or worldwide assemblage 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 themselves operating locally, nationally and globally (Marginson, 2006).

This worldwide 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 of higher education – with its rules, discourses and exchanges that are on the one hand specialized to higher education, and on the other hand draw on more universal habits of government, business and civil society – 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, creatures of the Europeanisation project. This is true in relation to all public HEIs, many private HEIs – in most nations private HEIs are closely regulated, except for 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 but through the arms-length steering of actors in semi-government instrumentalities, universities, NGOs and the private sphere, by 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 concern been withdrawn. State interest in the sector is enhanced by globalisation, the economics of innovation, and the growth of student participation. In all countries higher education is politicised and an object of economic and societal expectations. In many countries it is subject to extensive public debate. It is not the exclusive province of HEIs as economic producers, student as self-investors/consumers, and the employers of graduate labour as human capital, as the market model implies. It remains a common property.

Higher education departs from orthodox economic markets in another respect (Marginson, 1997, 2012b). Universities produce status goods (Hirsch, 1976; Frank & Cook, 1995), student places and certificates that are subject to absolute scarcity. Elite universities are not driven by profit maximisation 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.

Universities and States: The Comparative Dimension

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 and also by the prevailing state formation and the associated political culture. 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 markedly by country. 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 programmes and regulation crucially shape that "market," for example in relation to student loans, research funding, intellectual property, and "for-profit" HEIs (Slaughter & Rhoades, 2004). HEIs' global strategies mostly harmonise with state policy.

While higher education everywhere is implicated in the projects of nation-states, these projects, and the ongoing relations between state and HEI, 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 longer traditions and global modernisation. It is known that across the world there is marked variation in private/public funding balances in higher education (OECD, 2012). The 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, 2013). 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, 2012a), the Post-Confucian systems in East Asia and Singapore (Marginson, 2011), South Asia, Saudi Arabia and the Gulf States.

For example, when we compare the English-speaking systems and Post-Confucian systems, we find differences that are significant in relation to the public dimension of higher education. 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 problematises "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 incentivise poor families to participate in tertiary education. The post-Confucian desire for education is universal. Post-Confucian takeoff in higher education and science (Marginson, 2013) 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 of not only differences but also commonalities of approach. This requires an interdisciplinary method. A political economy framework tends to flatten out qualitative differences that are nested in cultural practices. But when national political economies are become parallel to each other at global level, the differing political and educational cultures around the world, with their associated behavioural practices, operate as mediums in which political economic practices and global trends become articulated or filtered in varied ways. This does not mean that a relativist cultural analysis replaces a generic political economy analysis. Arguably, both are needed. Together their analytical power is maximised.

CONCEPTUAL FRAMEWORKS FOR IDENTIFYING PUBLIC GOODS IN HIGHER EDUCATION

The politicised nature of public outcomes in higher education, together with the difficulty of identifying public goods, especially on a comprehensive basis, tend to favour *a priori* normative approaches. Many statements by HEIs, HEI organizations and governments address the issue with rhetorical claims about the role of higher education in relation to productivity, knowledge, literacy, culture, local economies, social equality, graduate training in leadership, democracy, tolerance and global understanding – even to "civilisation" 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 lies in the use of narrow approaches. As noted, economics is the main discipline used for empirical investigation of public goods. Neo-classical economics employs analytical frameworks that privilege market transactions and use *a priori* ideas of "public" that exclude much of what HEIs do, especially 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 modelled 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 theorisation. Arguably, however, all can contribute to the understanding of sociability.

Economics

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 non-rivalrous and/or 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 individualised commodities in economic markets. Public goods and part-public goods are unproduced or under-produced in markets. Ostrom (2010, p. 642) notes that this approach is consistent with the idea of an "institutional world" divided between "private property exchanges in a market setting and government-owned property organised 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 more complex.

After Buchanan's "club goods" (1965), Ostrom (2010) adds "toll goods" exclusive to part populations while 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 maximised when knowledge flows freely and quickly. Other economists emphasise 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).

Political Theory and Communications Theory

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 that of the "commons," a shared resource that is utilised by all and 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 higher education as a semi-independent adjunct to the state with a distinctive role as source of criticism and new ideas and options for state 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 18th 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. Organisationally separate from the state while also 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 a 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 and engender critical intellectual reflexivities (Castoriadis, 1987, p. 372); and also because of the way it facilitates movement across boundaries; at times, in both East and West, higher education incubates advanced democratic formations. This suggests one test of a "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 organisations, 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.

Global Public Goods

The notion of global public goods, which emerged from United Nations Development Programme work on ecological sustainability and cross-border refugees, provides another conceptual framework, combining economic theory with an inclusive polity. Global public goods are "goods with a significant element of non-rivalry and/or non-excludability and 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 of the national higher education systems, regardless of political culture, the growth of student participation, and enhancement of social equity in participation, are seen as public goals (OECD, 2008) – though around the world, there is much variation in notions of "equity" and programmes 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 maximised 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 internationalisation 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 per cent 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 per cent 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 $1500 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 9000 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 such as differing notions of citizen entitlements and household responsibilities. 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 programmes). This does not negate the potential for market failure in public goods. Rather it suggests that market failure is not linearly related to financing, and is likely to be socially and culturally nested.

Perhaps the empirical 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 & 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 too broad or too vague, so that the extant notions of public goods become 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 relation to social equity and perhaps institutional 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 has been unhelpful. As noted, concepts and policy mechanisms are 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 find it relatively easy to make large-scale cuts to higher education budgets in recession (Eggins & West, 2010; Douglass, 2010; UNESCO Bangkok, 2012); and also to introduce large scale marketisation reforms as in the UK, where public subsidies for non-STEM (Science, Technology, Engineering, and Mathematics) teaching are now zero, without regard for the negative 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 standardisation of science as a single system constitute global public goods to the extent that all institutions communicate and share a common system. Yet diversity of knowledge is another, often contrary, global public good. In nations with academic cultures in, say, Spanish, English-language, dominated globalisation can generate both public goods *and* "public bads." The "bads" tend to be maximised when global relationships take a one-way imperial form, with all the influences flowing in one direction and the benefits flowing in the reverse direction; and tend to be minimised when there are broad two-way flows between national and global domains. The key is to identify, monitor and broaden the common global ground. The problem of "whose public goods," and the contested nature of the identity of the global dimension of practice, highlight the value of comparative research conducted from more than one point of view.

MOVING 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 maximise 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, constituting 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 ultimately requires empirical test.

Rather than starting from a notion of public goods in higher education drawn from one discipline, it would seem best to begin by combining economics and sociology. Such a bi-disciplinary approach might 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, grounded in marginalist economic assumptions about scarcity, and implying 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 internationalisation. These potentials are open-ended. For these reasons, the public/private balance of funding cannot be read from the public/private balance of goods created. Nevertheless, the reverse causation partly applies. Funding is one (but only one) factor that determines whether the goods are public or private. For example, high student tuition charges enhance the private character of student places, as excludability is advanced thereby.

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 privileges 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 if 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. Massachussets Institute of Technology (MIT), Harvard and Stanford provide free access to MOOC (Massive Open Online Courses) units on the Internet, without impairing the private value of their face-to-face Ivy League degrees. Degree programmes entail more than knowledge. Places in MIT, Harvard or Stanford provide scarce valuable private goods, constituting zero-sum social positions and access to elite networks. This enables high fees. Teaching programmes 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 remarks 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 that are nevertheless 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. Nevertheless, given the overlapping and multiple nature of the public goods, and the fact only some can be measured or even ordered (all such computations are only partial in their reach across the material domain), when apprehending public goods there is considerable need for expert judgement.

Globalised Comparative Methods

The transformative (and problematic) impact of global university rankings (Hazelkorn, 2011) shows the growing weight of the global dimension. However, 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 & 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 organisations, 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 & Rhoades, 2002) while acknowledging pan-national regions (Dale & 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.

CONCLUSIONS

The above argument suggests that in order to situate public goods effectively within each national system and cultural tradition, and also across national systems and in the extra-national global space, empirical data concerning the potentially "public activities" of national systems, global consortia and partnerships, and individual HEIs, 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 higher education*: Higher education 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 organisation in higher education*: Institutional stratification, competition and cooperation between HEIs, within national systems and within regional and global networks, and the diversification of public and private goods;
5. *The private sector and public goods*: State/society/higher education relations in the private sector;
6. *The global perspectives and activities of institutions and systems*: Global imaginings, global position and positioning, cross-border linkages and mobility, global policy borrowing and commonalities;
7. *Public goods in higher education:* Specific programmes and practices of institutions and systems, including measurement of relevant activities, that contribute to public goods (broadly defined) in the national system; and those that contribute to global public goods; the funding of those activities, and the relation between funding and activity;
8. *Global public goods in higher education:* Specific programmes and practices of institutions and systems, including measurement of the relevant activities, that contribute to global public goods, whether produced from one country or between countries; the funding of those activities, and relations between funding and activity.

Because global public goods are neglected, any such inquiry should explicitly 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 isolation of common elements.

APPENDIX: EMPIRICAL RESEARCH AND DATA ANALYSIS

As noted, the author has developed a research programme designed to explore the question of the public good(s) produced in higher education, on a comparative basis as outlined above. This research programme entails semi-structured

interviews across HEIs, government, industry and other organisations. There will be at least 30 interviews per national system in eight national systems, and at least 260 interviews all told, constituting a relatively large qualitative study. The data set will enable many relevant internal comparisons.

At the time of writing, case studies had been completed in Australia (47 interviews, including 6 in government, conducted between November 2012 and August 2013) and Russia (30 interviews, including 5 in government, conducted in April-June 2013). The results will be combined with the findings of later case studies so as to simultaneously explore public good(s)-related phenomena on both national and comparative basis, while identifying global patterns.

Data from all country studies will be synthesised and used to identify public goods common to all national systems. As suggested, it is hoped that the ultimate outcome will a widely applicable conceptual framework that can be used by researchers and governments for defining, where applicable measuring, comparing, and enhancing public good(s) in higher education. By comparing the different approaches to "public good" in higher education that have evolved across the world, generic elements can be identified, and a common language of public good developed. This move can also makes it possible to establish a broad-based notion of specifically global public goods.

It is expected that the outcomes of the research programme will assist policy makers, philanthropists and HEIs themselves to clarify public goods and think creatively about practices designed to optimise those public goods and their distribution.

The following are the "stem" interview questions used in the study. In the manner of semi-structured interviews, there is some variation according to context and subject; and significant variation, including follow-up questions, on the basis of the answers received to the "stem" questions.

1. Please list your training, job history, present position and main responsibilities
2. What is the role of government in higher education? What should government do? Are there limits – what should government not do?
3. What do you understand by the term "public good"? What benefits and activities fall under this?
4. Does higher education produce collective goods, some say social goods, that are distinct from benefits that can be identified in relation to individuals? What are those collective goods?
5. What does higher education contribute to the "public good," in the following areas [some individual, some collective]. Consider: (1) Are there public good/ public goods created here? (2) How do we know, and can we measure them?
   - Knowledge;
   - Research, development and innovation;
   - Arts and Science not vocationally specific;
   - Professional and occupational training;
   - Equitable social opportunity;
   - Creativity in different fields;

- Social communications;
- Building cities and region;
- Citizenship, tolerance and cosmopolitanism;
- Internationalisation;
- Arts and culture;
- Public policy development, and better government

6. If higher education creates a mix of public and private goods, do you think that both kinds of good can grow together? Or is it that the more public goods are created, the less private goods are created? Is it zero-sum?
7. If higher education was 100 per cent funded by student tuition would the public goods still flow? (*Possible follow-up question – In part or whole?)*
8. Higher education is funded from a mix of public and private sources. How should the balance be determined? (*Possible follow-up question – Is it essentially just political and arbitrary? Can it be grounded?*)
9. What is the global public good?
10. The UN Development Program defines the global public good as benefits that flow across borders and are widely shared. Do Russian universities contribute to this global public good? How? How do we know?
11. Governments fund research because it generates innovations in the national economy. What if the benefits are captured by foreign firms?
12. If public goods flow across borders, who should pay for them, producer country or receiver country?

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