

Public and private benefits in the “new” higher education

Taking Public Universities Seriously

Frank Iacobucci and Carolyn Tuohy (eds), 2005
Toronto, University of Toronto Press
£35, 633 pp.
ISBN 0-8020-9376-0

Higher Ground: Ethics and Leadership in the Modern University

Nannerl O Keohane, 2006
Durham NC, Duke University Press
£15.95, 304 pp.
ISBN 0-8223-3786-X

The University, State and Market: The Political Economy of Globalization in the Americas

Robert A Rhoads and Carlos Alberto Torres (eds), 2006
Stanford CA, Stanford University Press
\$24.95, 393 pp.
ISBN 0-8047-5169-2

Higher Education in China

Zhou Ji, 2006
Singapore, Thomson Learning
£22.99, 311 pp.
ISBN 981-254-364-3

Fritz Haber, professor of physical chemistry at the University of Karlsruhe in the early years of the twentieth century, was paid a generous retainer by the chemical company BASF for first refusal on research coming out of his lab. It must have been the best investment the company ever made, as in 1909 Haber and his colleague Carl Bosch discovered the holy grail of contemporary chemistry, the synthesis of ammonia from its constituent elements, hydrogen and nitrogen. There were huge private and public benefits arising from this discovery. The royalties from the Haber-Bosch process made its two inventors very rich, with Haber receiving an annual income estimated at the equivalent of \$4m in today's money. The benefit to the German state of a virtually unlimited supply of ammonia – the essential feedstock for the manufacture of artificial fertilizers and explosives – was incalculable: without it, it seems likely that the First World War naval blockade on imports of nitrates would have forced Germany's surrender after a matter of months (Shapin, 2006). (Haber's outstanding service to the

German state, though, cut no ice later on with the Nazis, once they discovered his Jewish background. And his death in 1934 mercifully prevented him from learning of the use to which the Nazis put another of his inventions, a hydrogen cyanide-based insecticide known as Zyklon-B.)

Haber was at the forefront of what we would now call the knowledge economy - taking ideas and research and applying them for economic gain. The Haber-Bosch process arose from careful research by university experts in chemistry and engineering, working with a leading company in the field: what the European Commission calls “the three poles of [the] knowledge triangle: education, research and innovation” (European Commission, 2005) were linked together to considerable effect. The Prussian state, along with its continental neighbours, was in no doubt about the public value of its universities, especially in scientific and technological fields, and nurtured their development accordingly (Green, 1990). The basis of the modern research university was laid. In *Higher Education in China*, Zhou Ji notes that, as with so many things, China was there first, pursuing a similar policy at around 1000 BC (the iron age in Europe), with its National University and specialist colleges. (Zhou provides the kind of factual, upbeat account of his country’s higher education system that you would expect from any education minister.)

The private benefits arising from higher education, as Haber’s own case showed, could be equally striking. A century later, questions about how the public and private benefits of higher education should be managed continue to resonate: how should higher education’s costs be shared between taxpayers in general and direct beneficiaries?; what are the state’s responsibilities, and what exactly is it buying when it funds universities?; how should the university’s links with commercial interests be managed?; how should individual academics should be rewarded for producing commercially-valuable findings? – and so on. The emergence of these questions, from cases such as Haber’s and comparable ones in the United States, showed that a new and distinctive form of higher education was emerging at the turn of the last century in both continents.

That these questions remain problematic and contested down the years testifies to the particular niche that the university (the research university, at least) occupies in the social and economic ecology of almost all societies. Its distinctiveness as an institution,

Nannerl O Keohane argues in *Higher Ground*, resides in its moral purpose, probing matters that are at the core of societies' concerns, discovering and sharing knowledge, and so pursuing a human passion "as deep and hungry as any other human passion". But it is perhaps the ambiguous or even contradictory character of much of university life, and the tensions arising from these contradictions, that seem to put simple political or managerial solutions to university problems out of reach. As Keohane points out, universities are at once timeless and restless; at once parochial and cosmopolitan; at once absorbed with learning for its own sake and with pursuing its practical applications. For Keohane, perhaps, the university is also always new, but also old. Sorting out public and private benefits arising from the "product", when the product itself is so hard to pin down (as well as the organisational goals and methods lying behind it), is never going to be easy.

Take the question of the finance of higher education, a politically contested issue at some level throughout most of the developed and developing world. In principle, it is a straightforward matter: either the state, through the tax system, redirects resources to higher education from other potential public or private projects; or individuals and firms pay directly for the higher education that they (or others) receive; or there is a mixture of the two models. Beyond this, matters become complicated, when issues such as public policy goals, the variable objectives of institutions, how exactly public funds should be allocated in the face of competing institutional and individual claims, how demands for both equity and efficiency might be reconciled, and a host of other issues, present themselves.

This complexity arises in large measure because university education provides both public and private benefits, and university research may produce both public and private goods. Were university outputs wholly one or the other, the funding issue could, in principle at least, be readily settled. In Haber's case, it appears that the state was in favour of the private benefits of research, to individuals and to corporations, being maximised, with the state benefiting indirectly. Had Haber's chair been at an American research university in the early twentieth century, he would probably have been under pressure not to commercialise his breakthrough, surprising though this may sound today. The duty of an American university researcher was at that time seen as the

maximisation of public benefit through the dissemination of knowledge, not the seeking of private financial reward, for the individual or for a corporation (Bok, 2003).

Canada, in contrast, was slow off the mark here, as Jones points out in one of the essays in *Taking Public Universities Seriously*, edited by Frank Iacobucci and Carolyn Tuohy following a 2004 symposium in support of a review of post-secondary education in Ontario. Not until the 1960s were the public benefits of higher education implicitly acknowledged through the provision of significant provincial government funding to what were (on the British model) essentially private universities. Now of course, in Ontario, the universities are seen as crucial contributors to the knowledge economy, and James Milway, Director of the Province's Institute for Competitiveness and Prosperity, worries about "under-investment in post-secondary education", despite federal funding now being added to provincial support. Ontario seems troubled that its universities are not coming up with the modern equivalent of the Haber-Bosch process: as Challis et al note, despite "government funding...being linked to commercialization outcomes", these outcomes are seemingly not following on from academic achievement. Now, apparently, the emphasis has been switched to one of higher education providing private, not public, benefits: a new view of the role of universities, or a return to an older model?

But as I have noted, most of the public and private benefits from higher education are, in practice, inextricably linked. An example of this is presented by Gertler and Vinodrai's *Anchors of Creativity* in Iacobucci and Tuohy's volume, which draws on Richard Florida's influential "creative class" thesis. Universities, these authors argue, by helping to create more cohesive societies (through social capital formation) and by linking particular regions to global knowledge flows, encourage creativity and innovation, attract talented people to an area, and thus drive a virtuous spiral of social and economic betterment. In particular, public funding of research universities, this argument goes, will lead to both public benefits (through increased tax receipts and reductions in the costs associated with societal dysfunctions) and private benefits (through the more and better-paid jobs which a local innovative environment produces). The implication – though not one explored by these authors – is that reliance on private funding will lead to under-investment in higher education and research and a resulting reduction in both public and private benefits: that is to say, market failure will have occurred. It is noteworthy that even in California's Silicon Valley, where market forces are normally thought to operate

in their most red-blooded form, initial investment by the federal government, and work by public research universities, were needed to kick-start what became a self-sustaining process of creativity and commercialisation (Cohen and Fields, 2000).

If Canada has only recently woken up to the social and economic possibilities of publicly-funded higher education, elsewhere, apparently, the idea is already being junked. In *The University in the 21st Century: Toward a Democratic and Emancipatory University Reform*, one of the papers in *The University, State and Market*, edited by Robert A Rhoads and Carlos A Torres, Santos argues that the idea of the university as a public good is “in many countries” no longer politically persuasive. This has led to a reduced political commitment to higher education, lower levels of public funding, and a resulting need for the university “to seek new dependencies [on private support] that were much more burdensome than dependence on the state”. Santos’s fear is that the new university will be very like a much older one.

The key empirical basis of this argument is “disinvestment [in public higher education as] a global phenomenon”. Unfortunately, “disinvestment” is left undefined (an absolute real-terms reduction, a reduction as a proportion of public spending, a reduction in unit costs? – to name but a few possibilities); and, surprisingly in a volume the project of which is political economy, the argument is not backed up by any numbers at all. The argument seems not to apply in China, where Zhou tells us that public funding of higher education has more than doubled since 1997; and it is not supported by OECD data, which show increased levels of (mostly) public spending on higher education in nearly all OECD countries between 1995 and 2001, though in a few cases the growth of student numbers means reduced expenditure per student (OECD, 2004). This is not what most people would think of as “disinvestment”.

The problem with arguments of the kind put forward by Santos is that they imply a lost golden age, but never actually specify when, or where, it was. Thus, the problems of African universities – “collapse of infrastructures; an almost total lack of equipment; miserably remunerated, unmotivated, and easily corruptible teaching personnel” - are laid at the door of the World Bank and its neoliberal policies which, it is said, persuaded African states to reduce spending on their universities. But most African universities had become disaster areas when they *were* wholly state funded, and operated as

mechanisms for transferring wealth from the poor to the relatively rich, providing negligible public benefits but significant private ones. The World Bank's policies were aimed at encouraging poor countries to transfer the costs of higher education to its main beneficiaries, the local elites (World Bank, 1994). It seems surprising that this financially progressive policy is described as "catastrophic": not catastrophic for poor Africans, for whom under-funded basic education has put universities out of reach.

The question of "the public good", around which a number of the papers in the Rhoads and Torres volume revolve, can be a slippery one. To an economist, a public good implies non-excludability and non-rivalness: my consumption of it does not reduce the possibility of your consumption, and I cannot restrict your access to it. As knowledge is (mostly) a public good, the economic argument is that without public funding of knowledge production and dissemination, sub-optimal amounts of it will be created: the essence of the case for the public research university. University education itself, though, is not a public good in the economic sense – at least, not if the number of student places is fixed in the short run. Of course, many non-state universities are equally good at knowledge creation, for reasons to do with their traditions, governance and the norms of academic life; but the case in principle for public funding remains a strong one, as Ripstein discusses in *Public and Private Benefits in Higher Education* in Iacobucci and Tuohy's volume.

This precise use of the term "public good" is, however, not the one used generally in the Rhoads and Torres volume. Rather, *the* public good seems to be understood here as "what governments say it is". Thus, in their paper on *Globalization and the Challenge to National Universities in Argentina and Mexico*, Rhoads et al argue that "globally driven free-market views of higher education" will (necessarily, it seems) not "adequately support such 'public good' enterprises". They may well not; but where is the evidence that state-controlled, centralised higher education passed this test of providing "*the* public good"? The authors go on to quote a senior figure at the University of Buenos Aires lamenting "the rigidity of [its] degree and course requirements, the low rate of graduation, and the high dropping out rate". These are not problems arising from globalisation, but the result of poor institutional management over many years and the involvement, as another respondent makes clear, of "[internal] political alliances", themselves almost certainly the results of excessive detailed control by the state

bureaucracy. Globalisation, indeed, may have the effect of showing up these failings in stark relief and forcing the pace of change – as both the Canadian and Chinese volumes reviewed here imply is happening, in varying ways, in both these countries. It is hard to see how this process, so far as it affects universities, could fail to benefit ordinary Argentinian citizens and students – though probably not comfortably-off professors - by bringing a new type of university into being. The papers in the Rhoads and Torres volume offer no basis for thinking that this new university will offer a worse deal to students and taxpayers than did the old form.

It is remarkable that a volume such as Rhoads and Torres's, with a large proportion of contributors from, or closely associated with, Latin America, seems to make largely benign assumptions about the role of the state in a region not historically famous for disinterested high-mindedness in the administration of public assets. One might have expected that corporate funding of research, say, might have been welcomed as injecting a degree of pluralism into the funding system. The likely alternative is the Chinese approach in which, Zhou explains, “researchers closely relate their work to the national economic restructuring...[and] become disseminators of Chinese culture at home and abroad”. As Keohane notes from the elevated vantage point of the presidency of a private US university, “the power of governments to control results [of research] has become increasingly significant...Withholding funds or placing specific conditions on how research can be carried on if it is to be funded [by government] are effective constraints”. She welcomes “the alternative of corporate-university partnerships [as]...a strong alternative to government support for university research.” Of course, a long spoon is essential in supping with corporate partners too, but if the head of a powerful and wealthy *private* university has concerns about inappropriate state pressure on research in her institution, should not leaders of institutions even more dependent on state patronage be concerned also?

Globalisation and the knowledge society – distinct but interacting phenomena – are affecting universities everywhere. Change is probably taking place faster in institutions than many government or international policy makers realise, as, for a variety of reasons, state controls are loosened, or are applied in different ways: this is the finding of recent institution-based research in Europe (Shattock and Temple, 2006). The problems of balancing the public and private benefits of higher education and research

are likely to become more apparent, and more politically salient, in these circumstances of increased institutional diversity than they were when more rigid forms of state control applied (Fuller, 2005). It is right to examine the changes these effects are having, but wrong to write them off as necessarily damaging – or at least, not before asking, damaging to whom?

To understand these problems better, it is necessary to study the internal workings of the university; to poke about in the entrails, and it is noticeable that, of the four books reviewed here, only Keohane seems to have an interest in doing this. For Santos, for example, in *The University, State and Market*, there is a single model of the university, whose internal workings warrant little examination. Mollis, in the same volume, offers “a diagnosis of Argentine and Brazilian universities” which says next to nothing about the ways in which they are, or should be, governed, financed, staffed, planned or managed. One senses that many academics writing in these volumes prefer to deal in the generalities of culture, knowledge and global politics than to conduct empirical studies of actual institutions. Even the more concrete papers in *Taking Public Universities Seriously* tell the reader little about what actually goes on inside Ontario’s institutions (though the absence of an index in a 600-page volume makes it hard to be certain about this). “The university” is not a standard form: more work is needed to help us understand, in different national and regional contexts, its workings, how it is changing, and what are, to use Keohane’s phrase, its “compelling moral purposes”.

Fritz Haber’s great discovery came at a time when, it can be argued, the world economy was about as globalised, in percentage terms, as it is today (Held et al, 1999). His own research was driven in large part by global economic and political imperatives. If he were to look at critical issues facing universities in Europe and the Americas today, Haber would surely find much that was familiar, including debates on the role of the state, tensions around the public and private benefits arising from universities’ activities, and their links with the global economy. These questions and tensions are likely to be with us for as long as the university lasts. New university forms may, on examination, come to seem rather like older ones.

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