

RESPONSE

'The turn of the screw'; marketization and higher education in England

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Ben Martin's powerful proposition paper describes a puzzle and poses two challenges. The puzzle is to understand how universities in the UK have come to be dominated by forms of management and organizational practice that are the opposite of what the social scientific evidence suggests are most effective. I shall suggest that the answer to this puzzle needs to be sought in long-term changes in British public policy and the paradoxical position of higher education within it. This leaves the two challenges. How do we explain that senior managers have not themselves sought to push back against those policy changes when they are so clearly deleterious to the very activities they are seeking to manage? How do we explain that the wider group of academics, whose activities are the university, have been so quiescent in the face of changes to the university and, therefore, the meaning of their own working lives?

We need to take a long view in order to understand the anomalous position of higher education within public policy. Piecemeal accommodation to wider neo-liberal public policy prescriptions – from the Jarratt Report (Committee of Vice Chancellors and Principals, 1985), through the research assessment exercise (replaced by the research excellence framework), the transparent approach to costing, the national student survey, the introduction of student fees, and now proposals to facilitate for-profit higher education and introduce a teaching excellence framework (Brown and Carasso, 2013) – is now being applied directly to create a thoroughgoing neo-liberal knowledge regime. Higher education is to be understood in terms of its contribution to human capital and economic growth in a global knowledge economy.¹

As the wider literature on neo-liberalism attests (Jackson, 2010), the marketization of former public services and de-regulation (perhaps a better term is 're-regulation') of provision requires strong central government action. Whereas some vice chancellors seem to have believed that the marketization of higher education would increase their autonomy (in line with market ideology), they have discovered that more thoroughgoing marketization means they are more severely constrained by performance audits governing their access to revenue [as is evident in the proposals of the recent White Paper, *Success as a Knowledge Economy* (Department for Business, Innovation and Skills, 2016) and the subsequent Higher Education and Research Bill 2016-17]. In this context, it is significant that the realization of a neo-liberal knowledge regime in higher education has gone further in the UK than in the US precisely because the UK has more effective centralized government. (Even in the UK

the devolved jurisdictions are providing some protection, so my claim should be amended to say that it has gone further in England than in the US.)

But if what is currently happening is a neo-liberal knowledge regime operating at an accelerated rate, we need to understand what preceded it. I want to suggest that in the 1960s, the reforms to higher education following the Robbins Report (Committee on Higher Education, 1963), together with other measures, including a commitment to student grants and an enhanced commitment to public spending on research under a reinforced Haldane principle (the social science research council was founded in 1965, for example),² constituted a distinct and different approach to higher education. This is the case, notwithstanding Robbins's own credentials as a liberal economist and the claim of David Willetts (2013), former Minister of State for Education and Science, that recent reforms represent the completion of Robbins.

I propose that this alternative approach might be called a 'social democratic knowledge regime' in which education had developed as a 'social right' (Holmwood and Bhambra, 2012). Under this regime, the public benefits of higher education and research were emphasized and, notwithstanding the private benefits of higher education, these were not seen as compromising public funding. This was because there was a conception that the economic growth to which expanded higher education and research would contribute would be inclusive, itself associated with what was perceived to be a secular decline in inequality.3 This also included changes in what might be regarded as the 'status order' of employment relations, as the terms of the labour contract became more similar across manual and non-manual work, and rights previously enjoyed by non-manual workers were extended to all employees. This is what T.H. Marshall (1950) refers to as the development of a 'secondary system of industrial citizenship. This idea of inclusive economic growth was integral to the notion of an emerging 'knowledge society' - as distinct from a 'knowledge economy' - and, in the telling phrase used by Clark Kerr (1963/2001), what had emerged was a 'multiversity' meeting multiple functions, economic functions certainly, but also wider social functions, including amelioration and democratization.

Commentators on social policy have tended to describe different 'ideal typical' social policy regimes (see Esping-Andersen, 1991; Ferragina and Seeleib-Kaiser, 2011); for example, the liberal, the social democratic and the corporatist-statist regimes, exemplified by the US, Sweden and France, and by Germany, respectively. However, the discussion of these regimes has been skewed toward specific social policies, such as the treatment of children, pensions, unemployment benefit and the like. Other policies have been omitted and there has been little interest, hitherto, in the comparative analysis of higher education and research in terms of different regime types. Significantly, Martin and Whitley (2010) is an exception. One of the difficulties in the use of regime types – notwithstanding the clarity achieved by the consideration of exemplary cases – is that most countries have mixed policy regimes. Since 1979, when the British government adopted a strong neo-liberal discourse of public policy, including attacks on the idea of social rights, the UK policy regime has generally been accepted as falling within the liberal cluster. Yet, there were significant anomalies in this designation; for example, the range of inequality in the UK was closer to the social democratic cluster than to the liberal cluster, or even the corporatist-statist cluster; in addition, the UK had a system of public health similar to that of Sweden and unlike private or insurance-based systems, as in France or Germany. I shall suggest that higher education was similarly anomalous. However, it was also anomalous within UK educational provision more generally.

The UK Education Act of 1944 had established a system of public education, albeit on a selective basis. Private education, however, remained in place. It was also untouched by the abolition of selection in the 1960s with the introduction of comprehensive schools. The Robbins Report of 1963, then, confronted a small set of institutions offering degree courses, ranging from the elite Oxford and Cambridge and large civic universities, separate Scottish institutions and polytechnics and local authority colleges. The elite institutions were strongly aligned with private secondary education, and, thereby, were part of the reproduction of a status order. The Robbins Report sought to mitigate that status order by providing all higher education on the same basis, with similar funding for similar kinds of degrees. Education was to be available to all who qualified by ability and attainment and the report recommended a significant expansion in student numbers. In this way, a system of public higher education was created which incorporated the older elite institutions. This was in contrast to the mixed public and private arrangement of primary and secondary education. Private secondary education was not directly addressed precisely because it was felt that the expansion of public higher education would cause it to atrophy.⁴

In this way, higher education in the UK became an outlier in the development of social rights, just like the national health service, with other areas of social policy lagging behind. The impetus to the expansion of higher education carried on through the 1980s, but, at the same time, the idea of social rights increasingly came under attack as neo-liberal policies dominated other areas of welfare services and public provision. Services were privatized and labour markets de-regulated (including, for example, the de-construction of the labour contract outside employment rights, as in the rise of zero-hour contracts) while taxes on higher earners were reduced. Inequalities widened such that the UK went from having a range of inequalities close to that of Sweden in the 1970s to a range close to that of the US by 2010, and became one of the most unequal countries in the world.

Cuts in public services had paradoxical consequences both for higher education and the NHS. Concerns were raised about their costs and their potential unsustainability, at the same time as spending fell behind that of comparable countries whose outcomes were superior. Thus, in the case of higher education, a report from the European commission evaluated different national systems of higher education and found that the UK was top in terms of teaching and research, but also offered greatest value for money (St Aubyn et al., 2009). While higher education was initially spared direct marketization, it became subject to the same audit measures of the new public management being applied to other public services. The frogs (to use Martin's apt metaphor), for their part, croaked that it was only right that there should be public accountability where there was public funding. What was missed was the wider consequence of changes to the environment in which higher education operated, and also changes to the character of that public funding.

The expansion of higher education continued, with former polytechnics incorporated into the university system in 1992. At least here there was the beginnings of a zero-sum game as more institutions and more academics sought funds from a declining budget overall, both in real terms and per full-time equivalent. This, in turn, gave rise to new competitive measures to distribute funding, such as the research assessment exercise, which in turn had consequences for the performance management of staff to achieve higher scores alongside diminishing returns. However, it also gave rise to competition over the nature of the funding mechanism in order to produce greater concentration in its distribution. University groupings, such as the Russell Group, lobbied on behalf of their special interests.⁵ The general mantra of concentration and specialization, coupled with the empty signifier of 'excellence' (Readings, 1997), was applied to all tight funding decisions.

In the area of research grant funding, this led to increased central control of the research agenda as research councils were pressed by government to direct research to specific 'challenges', reduce administrative costs, and shorten the time taken from idea to application under the impact agenda, where applicants for funding had to demonstrate its utility and measures taken to secure its use. In an increasingly competitive situation, a tightening of the funding available occurred alongside increasing numbers of applications as universities sought to maximize grant capture. With demand management of applications, universities now mirror research council strategic priorities, until every university is doing 'cutting-edge' research along the same edge. Because the sources of funding are centralized, this is precisely what encourages universities to become centralized in supporting particular research areas in order to be best-placed to access large grant opportunities.

But the move toward emphasis on impact is itself an indication of the problem of the neo-liberal policy agenda. Initially, the argument had been that there should be no public subsidy of research produced for a private benefit, and research should be properly costed [this is what gave rise to the audit mechanisms of transparent approach to costing (TRAC) and full economic costing (FEC)]. This was initially articulated by the Rothschild Report (Cabinet Office, 1971) under the 'customer pays' principle. However, the consequence of the neo-liberal emphasis on shareholder value has encouraged short-term returns and a situation in which investors do not want to pay the costs of research and development. So, the proportion of GDP devoted to research and development in the UK has collapsed from being one of the highest in the OECD at the time of Robbins to now being among the lowest. In this circumstance, the impact agenda is designed to leverage public funding to the commodification of research, although the need to do so is itself an indication of the wider failure of the market to secure proper investment. There should now be no public funding unless there is a private (or government) beneficiary. But public funding directed through the impact agenda begins to reproduce the problems of the market and its displacement of long-term research in favour of short-term returns (Mirowski, 2011; Mazzucato, 2013).

The wider social context also includes increasing social inequality. This has also had significant implications. The implicit social contract under Robbins was that the knowledge society would include a general adaptive upgrading of jobs, evident in the removal of status differences among different kinds of jobs and common contractual conditions (for example, in access to employment rights, pensions, sickness and unemployment benefits and the like). As these have been eroded, so there has been a polarization between good and bad jobs (Brown et al., 2011; Kalleberg, 2011), with significant implications for social mobility. A large part of social mobility in the past has been of the 'structural', rather than the 'exchange' form; that is, an increasing proportion of higher quality jobs in the occupational order has facilitated upward mobility among those from lower class backgrounds, rather than upward mobility being matched by an equivalent downward mobility. This trend seems to have come to an end. This has had several consequences. The first is that, with widening inequality, the benefits of higher education to graduates are seen as potentially unfair. Unlike the case with research, the argument here is specifically that the beneficiary should pay. This was the principle argument for the introduction of fees, underpinned by publicly-backed loans, set out in the Browne Report (Department of Business, Innovation

and Skills, 2010). It is something that derives its logic from widening inequalities while at the same time reinforcing that trend (something to which I shall return).

For the first time, it was also suggested that a market principle should be introduced into the setting of fees, reflecting the fact that some degrees had different returns in the labour market associated with the nature of the course and the institution at which they were attained. In effect, the Browne Report proposed that the market should be allowed to set fees and that the market (via students equipped with information about labour market outcomes and bearing loans to be cashed in with their provider of choice) should determine the distribution of higher education courses. The same degree programme could charge different fees at different institutions according to what the market would bear. In so far as more 'selective' institutions were in higher demand, they could also charge higher fees than less selective institutions and also recruit more students once the cap on numbers was lifted.

Electoral contingencies blocked the full development of this phase of marketization, preventing the lifting of the fee cap and setting an income threshold for the repayment of loans. However, the recent White Paper, Success as a Knowledge Economy (Department for Business, Innovation and Skills, 2016) represents a return to the thrust of the Browne Report. Competition is to be extended to allow the entry of for-profit providers to facilitate their participation in a common regulatory regime, and to allow them the title of university (despite their status as single function, teaching-only institutions) and to have their courses qualify for student loans. At the same time, measures are being introduced to provide student information about courses via a teaching excellence framework, equivalent to the research excellence framework, as well as to provide more finely-grained information about graduate prospects via data from the tax system. The last is designed to facilitate the identification of students who are 'good for their loans' and, therefore, the sale (in tranches) of the student loan book. Universities might even be able to generate their own loan book (should defaults be estimated as low) and, by leaving the government-underpinned system, avoid any fee cap.

Each step of the process of marketization is accompanied by an intensification of competition via audit mechanisms for research and teaching that can be constructed into rank orders to inform student choices (including research rank orders, which are promoted by universities as indicators of quality). In a system of differentiated fees and open recruitment for places (which were previously capped), this represents a serious risk for managers. A low ranking can affect the ability of an institution (or course) to recruit, while competition from for-profit providers with lower costs can undermine the ability of an institution to charge higher fees to help maintain its infrastructure (built up when universities were defined as multi-function institutions). This has created a situation in which institutions pursue revenue (from teaching and research) and manage their staff in relation to this aim. The fact that data about performance are increasingly self-generated and public – publications are online and generate downloads and citations that can all be gathered as 'academic analytics' - means an intensification of performance management against such indicators.

The management of macro-processes is mirrored in the micro-management of individual performance. The measures are self-referring and self-reproducing. They are not indicators of a deeper reality - the underlying quality of teaching and research - but are the surface phenomena of the (self-)managed academic life which has become the very definition of what it is to be a successful academic (Burrows, 2012). And the stakes are high in a system that is becoming increasingly differentiated in terms of the distribution of resources, while becoming undifferentiated in terms of its academic (mono-)culture. This is why managers

have let it happen, but what of academics themselves, since its consequences are most serious both for their working conditions and for their sense of vocation?

In the wider social policy literature, the processes of marketization I have described would be charted in terms of a phase of de-commodification followed by re-commodification. Since this has to take place in real time, it is a process that also unfolds across generations. So, although a standard account of commodification within sociology sees it in terms of a class struggle imposing stricter labour conditions to maintain or extend profits, it is also something with generational effects. Thus, those who built up claims in a previous system do not usually lose their claims (which even amongst neo-liberals can be regarded as quasi-property rights). Rather, they are made unavailable to new entrants. This is an example that applies from labour contracts to pensions (as well as access to higher education). Thus, a recent study (Huws and Joyce, 2016) shows that the casualization of employment - 'crowd working' - is most marked in the younger workforce. In the same way, the privatization of social housing produced a one-off windfall to an older generation that bought the houses they had rented within the public sector. Over time, this housing has entered the private rental market. This has had the consequence that younger people have difficulty purchasing a house and renting. It is also they who are graduating with high levels of debt deriving from the shift to fee-based funding of higher education. At the same time, cuts in the burden on the public finances have the form of tax cuts for previous beneficiaries of that funding.

Universities do not stand outside these processes. Increasingly, services are outsourced in order to provide efficiencies, where the consequence of outsourcing is their provision by for-profit companies (such as 4GS and Serco) with reduced contractual conditions for workers. The operation of FEC and research buyout redraws the balance between casual and fully-contracted staff, which also has a strong generational aspect. At the same time, the balance is shifting as a consequence of the entry of teaching-only institutions, such as Pearson, planning a central online curriculum and dispersed centres of face-to-face tuition by hourly-contracted staff. Indeed, the Pearson think tank advocates the unbundling of the university as one consequence of the new technologies that for-profit education will facilitate (Barber et al., 2013). This creates a different staffing structure among institutions (between academics responsible for the curriculum they teach and those teaching a curriculum as casually-employed staff), but also within institutions as the balance between what used to be called 'tenured' staff and 'adjunct' staff shifts to a higher proportion of the latter (concentrated in the ranks of early career academics).

Increasingly, universities justify these processes in terms of creating value for money for students. At the same time, these students are being debt-leveraged to provide revenue for the university. It is not only increased stratification among staff at each institution that is being created, but the re-stratification of institutions. But the generational conflict is most stark when we consider the different perspectives of students and academic staff. After all, we confront this generational difference every time we teach. After the financial crisis of 2008 and the election of a coalition government in 2010 committed to reducing the deficit, universities were faced with possible cuts of up to 30%, in line with cuts faced by government departments generally. In the end, a cut of 82% was achieved by shifting from direct funding to student fees. But the income from fees more than replaced the shortfall; in other words, moving to student-debt financing of universities helped maintain revenue in the sector. However, revenue was subject to greater competition and volatility, and winners were bound to the very mechanisms that diverted a greater proportion of resources to them, opening

the possibility that some could break out, while the devil took the hindmost. After all, the recent White Paper discusses the measures necessary to manage 'exit', by which it recognizes both the short-term orientation of for-profit providers (deriving from their commitment to shareholder value), and the fact that existing universities might be at risk. Institutions and individual academics seem to be bound into the logic of a competitive system that is not sustainable in its current form and which binds everyone into an ever-tighter performance management system in which metrics replace a proper valuation of academic knowledge and its production, reproduction and dissemination.

I began with a puzzle and two challenges: the puzzle was to understand the dominance of managerialism in higher education and the ever tightening of its screw, and the challenge was to explain how senior managers and academics alike could be complicitous in undermining the very values of the university each purports to uphold. Is there any possibility of a re-assertion of academic values? It seems to me doubtful unless this would also include the re-assertion of inclusive public values and address wider social inequality. On the above analysis, the possibilities that this may be generated from within the academy itself are bleak. Collegiality has been re-configured as a zero-sum game among both institutions and individuals.

Renewal might come from opposition to the generational injustices that have been created, but the situation is finely poised. Meister (2011, p.134) writes about this in the context of similar developments in Californian higher education in terms of the tax-debt 'bargain':

The core assumption of privatization-as-financialization is that rising income inequality increases the fear of falling behind and thus the willingness of middleclass students to borrow more. If this reasoning is correct, ... students should be indifferent to the choice between paying for the education premium up front (as equity) or taking on debt - higher tuition would simply move some students further up what financial economists call the 'efficient frontier' between being an investor and being a borrower. ... By following the logic of financialization, [universities] could theoretically raise revenues from enrolment growth for as long as [students] were more willing to incur debt than to pay higher taxes.

The tax-debt bargain has, of course, played out in the UK as a potentially divisive issue across generations, but we need to consider it as an issue that is also unfolding within a generation of new graduates. Advocates of the debt financing of English education have discovered that it has had little impact on applications to universities. However, as Meister suggests, this is taking place in a context of changes in the labour market and in the nature of jobs. Recent estimates suggest that loan repayments are unlikely to cover much more than half the aggregate sum that is being underwritten by the income-contingent nature of the loans (McGettigan, 2013).6 This is why the threshold at which loans are repaid is likely to be reduced, in order to achieve greater 'sustainability' (the Government has already reneged on its promise to increase the repayment threshold in line with inflation, while allowing universities to raise fees accordingly).

Indeed, the fact that some graduates will repay their loans, and some will not, creates a new tax-debt bargain for the former. They will have repaid their loans (at a rate of 9% on income earned over the current threshold), but will also be graduating as future taxpayers with an interest in reducing the costs of the loan system, which can be done only by lowering fees for courses where a higher proportion of students fails to meet income levels to make repayments, or by lowering the threshold for repayment. In other words, as the neo-liberal knowledge regime develops, it is likely to reproduce motivations that will reinforce it.

The current paradox of the government's reforms is that they have a high degree of approval from political elites and senior managers within universities, alongside a low degree of public acceptability. The British Social Attitudes Survey, for example, gathered data on attitudes to higher education going back before the Browne Report. Some 65% thought tuition fees should be the same across all universities; 70% thought there were more advantages to a university education than simply being paid more; and 75% thought the cost of going to university left students with debts they could not afford to repay (see McKay and Rowlingson, 2011). Significantly, surveys undertaken after the new fees regime came into being show that support for public higher education has fallen, but primarily amongst graduates. Among those with graduate-level qualifications, 42% support the idea that students should pay the costs of higher education, while 30% believe there should also be a reduction in the numbers studying at university. In contrast, among those without qualifications, only 11% support the idea that students should pay the costs of higher education, and only 19% believe there should be a reduction in student numbers.

In this context, we can see that the process of re-commodification is potentially reproduced as it becomes embedded in each new generation. As this happens, it will become more straightforwardly a situation in which higher education functions within a status order where some have better access to higher education as a consequence of family advantage, while the poorer access of others becomes a feature of wider disadvantages that are difficult to mitigate through the market. In this context, the neo-liberal knowledge regime becomes more thoroughly a part of a neo-liberal economy in which the academy is enjoined to study global challenges of sustainability while being itself at the mercy of unsustainable inequality. A truly sustainable higher education system would be one that addresses its own role in the reproduction of inequality and, in doing so, finds its way back to values that define the university of the future.

Notes

- This is the explicit agenda of the Browne Report (Department for Business, Innovation and Skills, 2010) and Students at the Heart of the System (Department for Business, Innovation and Skills, 2011).
- 2. The Haldane principle, named after Richard Burton Haldane, is the idea that decisions about what to spend research funds on should be made by researchers rather than politicians.
- 3. As set out by Kuznets (1953) and described by Piketty (2014) as a temporary phase that has come to an end. Inclusive economic growth has been newly endorsed by the Organization for Economic Cooperation and Development (OECD).
- 4. Part of the reason that Robbins perceived there was unmet demand for higher education, of course, was to do with the gender imbalance in recruitment - especially at elite institutions and low levels of participation of those from working class backgrounds. Changing attainment and aspirations required expansion of student numbers if higher education were not to become a zero-sum game in which upper class and middle class boys would be squeezed out. This is also part of the explanation for the grade inflation associated with the expansion of higher education.
- 5. See, especially, its pamphlet, Jewels in the Crown (Russell Group, 2012). A recent article in Times Higher Education sets out the competitive pressures on 'research intensive universities' (Ruckenstein et al., 2016).
- 6. More technically, the RAB charge (the Resource Accounting and Budgeting estimate of the amount of loans that will be unpaid) is set at about 45%.



Disclosure statement

No potential conflict of interest was reported by the author.

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References

Barber, M., Donnelly, K. and Rizvi, S. (2013) *An Avalanche is Coming: Higher Education and the Revolution Ahead*, IPPR, London, available from http://www.ippr.org/publications/an-avalanche-is-coming-higher-education-and-the-revolution-ahead [accessed June 2016].

Brown, P., Lauder, H. and Ashton, D. (2011) *The Global Auction: The Broken Promises of Education, Jobs and Incomes*, Oxford University Press, Oxford.

Brown, R. and Carasso, H. (2013) Everything for Sale? The Marketization of UK Higher Education, Routledge, London.

Burrows, R. (2012) 'Living with the H-index?', Metric assemblages in the contemporary academy', *Sociological Review*, 60, 2, pp.355–72.

Cabinet Office. (1971) A Framework for Government Research and Development (Rothschild Report), CMND 5046, HMSO, London.

Committee of Vice Chancellors and Principals (1985) Report of Steering Committee for Efficiency Studies in Universities (Jarratt Report), CVCP, London.

Committee on Higher Education (1963) Higher Education. Report of the Committee Appointed by the Prime Minister under the Chairmanship of Lord Robbins 1961–63 (Robbins Report), CMND 2154. HMSO, London.

Department of Business, Innovation and Skills (2010) Securing a Sustainable Future for Higher Education: An Independent Review of Higher Education Funding and Student Finance (Browne Report), October, London, available from http://www.bis.gov.uk/assets/biscore/corporate/docs/s/10-1208-securing-sustainable-higher-education-browne-report.pdf [accessed June 2016].

Department of Business, Innovation and Skills (2011) *Students at the Heart of the System*, June, London, available from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/31384/11-944-higher-education-students-at-heart-of-system.pdf [accessed June 2016].

Department of Business, Innovation and Skills. (2016) Success as a Knowledge Economy: Teaching Excellence, Social Mobility and Student Choice, May, London, available from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/523396/bis-16-265-success-as-aknowledge-economy.pdf [accessed June 2016].

Esping-Andersen, G. (1991) The Three Worlds of Welfare Capitalism, Polity Press, Cambridge.

Ferragina, E. and Seeleib-Kaiser, M. (2011) 'Welfare regime debate: past, present, futures?', *Policy and Politics*, 39, 4, pp.583–611.

Holmwood, J. and Bhambra, G. (2012) 'The attack on education as a social right', *South Atlantic Quarterly*, 111, 2, pp.392–401.

Huws, U. and Joyce, S. (2016) 'Size of the UK's "gig economy" revealed for the first time', *Crowd Working Survey*, University of Hertfordshire, February, available from http://www.feps-europe.eu/assets/a82bcd12-fb97-43a6-9346-24242695a183/crowd-working-surveypdf.pdf [accessed June 2016].

Jackson, B. (2010) 'At the origins of neo-liberalism: the free economy and the strong state, 1930–1947', *Historical Journal*, 53, 1, pp.129–51.

Kalleberg, A. (2011) Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s, Russell Sage Foundation, New York, NY.

Kerr, C. (1963/2001) The Uses of the University, Harvard University Press, Harvard MA.

Kuznets, S. (1953) *Shares of Upper Income Groups in Income and Savings*, National Bureau of Economic Research, Cambridge MA.



Marshall, T. H. (1950) 'Citizenship and social class' in Citizenship and Social Class, and Other Essays, Cambridge University Press, Cambridge.

Martin, B. and Whitley, R. (2010) 'The UK research assessment exercise: a case of regulatory capture' in Whitley, R., Gläser, J. and Engwall, L. (eds) Reconfiguring Knowledge Production: Changing Authority Relations in the Sciences and their Consequences for Intellectual Innovation, Oxford University Press, Oxford.

Mazzucato, M. (2013) The Entrepreneurial State: Debunking Public vs Private sector Myths, Anthem Press, London.

McGettigan, A. (2013) The Great University Gamble: Money, Markets and the Future of Higher Education, Pluto Press, London.

McKay, S. and Rowlingson, K. (2011) 'The religion of inequality' in Holmwood, J. (ed.) A Manifesto for the Public University, Bloomsbury Academic, London.

Meister, B. (2011) 'Debt and taxes: can the financial industry save public universities?', Representations, 116, 1, pp.128-55.

Mirowski, P. (2011) Science-Mart: Privatizing American Sciences, Harvard University Press, Cambridge

Piketty, T. (2014) Capital in the Twenty-First Century, Belknap Press, Cambridge MA.

Readings, B. (1997) The University in Ruins, Harvard University Press, Cambridge MA.

Ruckenstein, A., Smith, M. and Owen, N. (2016) 'How can we make UK higher education sustainable?', *Times Higher Education*, 25 February.

Russell Group (2012) Jewels in the Crown: The Importance and Characteristics of the UK's World-class *Universities*, Russell Group papers, 4.

St. Aubyn, M., Pina, Á., Garcia, F. and Pais, J. (2009) Study on the Efficiency and Effectiveness of Public Spending on Tertiary Education, Economic papers, Directorate-General for Economic and Financial Affairs, European Commission, Brussels.

Willetts, D. (2013) Robbins Revisited: Bigger and Better Higher Education, Social Market Foundation, London, available from http://www.smf.co.uk/wp-content/uploads/2013/10/Publication-Robbins-Revisited-Bigger-and-Better-Higher-Education-David-Willetts.pdf [accessed June 2016].