



Original Article

Academic Freedom and World-Class Universities: A Virtuous Circle?

Terence Karran^a  and Lucy Mallinson^b

^aHigher Education Research Institute, University of Lincoln, Lincoln, UK.

E-mail: tkarran@lincoln.ac.uk

^bSchool of Education, University of Lincoln, Lincoln, UK.

E-mail: ljmallinson@lincoln.ac.uk

Using empirical data from over 1500 respondents (drawn from across the UK) to a survey on academic freedom, and the Times Higher's World University Rankings, this paper is a comparative assessment of the relationship between professed levels of de facto protection for academic freedom by teaching and research staff in individual UK universities, and their institution's excellence, as evinced by world university rankings. The study reveals that normative protection for academic freedom is strongest in Russell Group universities and weakest in post-1992 institutions. Additionally, the professed level of protection for academic freedom reported by respondents to the survey is shown to have a positive relationship with the World Rankings' positions of their institutions. Furthermore, the study considers whether academic freedom may be a prerequisite for, or defining characteristic of, a world-class university. Finally, the paper assesses the possible policy implications of this research for universities and their leaders, and higher educational policy makers, within the UK and beyond, seeking to improve the Times Higher's World Ranking positions of their institutions.

Higher Education Policy (2018). <https://doi.org/10.1057/s41307-018-0087-7>

Keywords: academic freedom; world class university rankings

Introduction: The Rise of Rankings

For more than 20 years, university rankings (measuring the achievements of higher education institutions in terms of research, student satisfaction, teaching excellence, etc.) have been an integral part of the higher education firmament in the UK and, increasingly, across the globe. The first university league table produced in the UK appeared in *The Times* in October 1992, and since then international university rankings have proliferated in terms of provider, scope and number. Indeed, Shin and Toutkoushian (2011, 2) reported 'we found that as of 2009, there were at least 33 ranking systems of higher education around the world', and the number has increased since. For example, the *Times Higher*, in addition to providing the World University Rankings (since 2004), also offers Asia University Rankings, BRICS &



Emerging Economies University Rankings, US College Rankings, Latin America University Rankings and the Top 150 Universities Under 50-years-old Rankings. In consequence, in recent years, rankings have become widely discussed, not only at High Table and within academic cloisters, but also in national governments and in the media, and by aspiring university students and their anxious parents. The general surge in the interest of such rankings has been such that universities have found it increasingly necessary to demonstrate that they are improving their performance, by ‘moving up the rankings’. Thus, government departments, Rectors and academics alike, in turn either loath or love these statistics, negating the validity of such measures (when their universities have low rankings) or praising their value in improving transparency and accountability (when their universities have high rankings). This fixation has led Marginson (2007, 2) to argue that ‘[r]ankings are *the* meta-performance indicator, with a special power of their own. Rankings are hypnotic and become an end in themselves without regard to exactly what they measure, whether they are solidly grounded or whether their use has constructive effects. The desire for rank ordering overrules all else’.

Indeed, such is the desire by national governments to have institutions that occupy premier places in the *Times Higher’s* (and similar) World University Rankings, that some have taken special measures designed to achieve this goal. For example, in 2007, the Finnish government decided to merge Helsinki University of Technology, Helsinki School of Economics and the University of Art and Design with, as Aarrevaara *et al.* (2009, 10) state, ‘the unashamed aim of creating a “world-class” university’, and injected 500 million Euros as an initial investment. However, the *Times Higher’s* 2016–2017 World Rankings revealed that the new Aalto University (named after the famous Finnish architect) was ranked in the 201–250 group cohort (as it was in the previous year), some 100 places below Helsinki University, whose position it was designed to emulate, if not surpass. Similarly in China, Zang *et al.* (2013, 767) reported that in 1998, the (then) Chinese President Jiang Zemin declared that ‘China must have a number of first-rate universities with an advanced level internationally’, following which the Chinese government published its *Action Plan for Invigorating Education in the 21st Century*, which formalised the goal of developing ‘world-class’ universities and departments.

Not surprisingly, university rankings have been criticised, within academia and beyond, for the use to which they have been put, and their mode of calculation. For example, addressing the apparent shortcomings of such rankings, Amsler and Bolsmann (2012, 294) aver: ‘[t]here is little doubt that most ranking schemes indicate precisely what they claim to: where elite people are funded by elite people to teach elite people knowledge for elites. What university rankings do not indicate, however, is where and how education functions as a practice of freedom for the excluded majority’. Similarly, noting the dominance of American universities in most rankings, Pusser and Marginson (2013, 562f.) argue that ‘rankings are seen to



embody a meta-state project – an imperial project (that is, a project embodying the interests of the globally strongest states) in which institutions are being slotted into a preordained global hierarchy’, and pose the question which is germane to this paper, namely: ‘what are the short-term and long-term implications of rankings for academic freedom and creativity, and do these effects play out differently between leading universities (where academic freedom might be seen as one instrument fostering a high rank but on the limited terms of the ranking criteria) and other institutions?’

With respect to the statistical validity of the calculation of such indices, as Salmi and Saroyan (2007, 42) show:

‘Opponents question every element of the rankings, from the very principle of participating in an exercise seen as a typical product of an “Anglo-Saxon” culture obsessed with competitiveness or as an intolerable infringement on the universities’ independence, to a systematic criticism of flawed methodologies, including the conceptual design of the surveys, the choice of indicators, the relative weight attached to each indicator and the data bases on which the rankings are done. The results are often dismissed as irrelevant or wrong’.

Harvey (2008, 189), for example, despite providing no form of detailed statistical critique by way of substantiation, nevertheless dismissed such rankings as ‘arbitrary, inconsistent and based on convenience measures’. In a like vein, but more helpfully, Bowden (2000, 52) listed the following methodological challenges which had been made concerning the calculation of such rankings: the technical status of some of the variables used; inadequate construct validity; the scaling of variables; changes in variables, and in their respective weighting, from year to year; manipulation of data; vulnerability to perturbation; lack of correspondence between the overall rating or ranking and the quality of individual academic units; and distortion of institutional purpose. Such an appraisal finds endorsement in Soh’s comprehensive statistical analysis which revealed that ‘world university ranking systems used the weight-and-sum approach to combine indicator scores into overall scores This approach assumes that the indicators all independently contribute to the overall score in the specified proportions. ... this assumption is doubtful as the indicators tend to correlate with one another and some highly’ (Soh, 2015, 158). Soh’s findings corroborate previous tests of the statistical validity of university rankings as composite measures by Paruolo *et al.* (2013, 630), who concluded that they ‘have serious shortcomings. ... Still these measures are pervasive in the public discourse and represent perhaps the best-known face of statistics in the eyes of the general public and media’.

Inevitably, the proliferation of university rankings, and the criticisms raised about their validity, led to demands for greater consistency. In consequence, in 2004 the UNESCO European Centre for Higher Education founded the



International Ranking Expert Group, which produced the 2006 Berlin *Principles on Ranking of Higher Education Institutions*, which were designed to promote continuous improvement and refinement of the methodologies used to calculate rankings. Despite criticisms of the Berlin Principles (see Barron, 2017), such developments encouraged those institutions compiling rankings to improve their scope, sophistication and mode of calculation, and adopt a more transparent approach. Indeed, Baty (2014, 126), reviewing improvements in the *Times Higher's* World University Rankings for the period 2004–2012, acknowledged that '[i]n retrospect, the old THES-QS system now looks hopelessly crude by today's standards'. In consequence, as Moed (2017, 986) points out, '[d]evelopers of world university ranking systems have made enormous progress during the past decade. Their systems are currently much more informative and user friendly than they were some 10 years ago'. Such developments do much to endorse Rauhvargers (2013, 26) prognosis that '[r]ankings are here to stay. Even if academics are aware that the results of rankings are biased and cannot satisfactorily measure institutional quality, on a more pragmatic level they also recognise that an impressive position in the rankings can be a key factor in securing additional resources, recruiting more students and attracting strong partner institutions'.

Academic Freedom as an Indicator of Excellence

Attempts at analysing academic freedom encounter a surprising, yet formidable, problem, namely that the concept (despite its apparent importance to universities and the academics who work in them) lacks clarity of definition and a strong theoretical basis. For example, Åkerlind and Kayrooz's (2003, 328) opine that '[d]espite the wide ranging debate about academic freedom in recent times, there is little consensus between parties as to what academic freedom actually means. ... the concept is open to a range of interpretations and has been used at times to support conflicting causes and positions'. Similarly, Latif (2014, 399) notes 'the lack of a clear definition of academic freedom ... academic freedom seems to be a vague term with no defining characteristics'. In a like vein, Altbach (2001, 206) relates that '[a]cademic freedom seems a simple concept, and in essence it is, but it is also difficult to define'. This is a long-standing problem – 20 years has elapsed since Barnett (rightly) called for 'a theory of academic freedom which does justice to the actual relationship between higher education and society rather than an imaginary relationship' (Barnett, 1988, 90).

However, drawing on a series of definitive texts, such as the UNESCO (1997) *Recommendation on the Status of Higher Education Teaching Personnel*, the American Association of University Professors' (AAUP) (1940) *Statement of Principles on Academic Freedom and Tenure*, and the Council of Europe (2012) *Academic Freedom Declaration*, it is possible to identify the following commonly



agreed substantive and supportive elements of the concept (for a more detailed description of the salient features of the concept, see Karran, 2009). The substantive elements are firstly, freedom to teach. This freedom will normally include some (may be all) of the following. Freedom to determine: what shall be taught (course content); how it shall be taught (pedagogy); who shall teach (via transparent selection procedures); whom shall be taught (the right to determine and enforce entry standards); how students' progress shall be evaluated (assessment methods); whether students shall progress (via marking criteria and grade determination). Secondly, freedom to research and, as with teaching, this element has associated liberties which will include freedom to determine: what shall be researched; the method of research; the purpose of their research (and, thereby, possible refusal to undertake research considered unethical); the avenues and modes (conference presentations, journal articles) of disseminating research findings to one's peers, and the wider world. The extent to which these liberties are enjoyed by academic staff is dependent on the interpretation of the *de jure* (legal and constitutional) protection and the operation of *de facto* (normative) protection; within the UK, the interplay of these can give rise to considerable variation in the freedoms enjoyed by individual staff.

These two substantive elements are buttressed and sustained by two supportive elements: self-governance and tenure. Self-governance consists of the rights to: voice an opinion on the running of the university; participate in decision-making within the university; be able to appoint people to, and dismiss them from, positions of managerial authority within the university. Tenure comprises the right to some form of job security within the university, via an agreed procedure involving a peer-reviewed assessment of academic accomplishments, following the successful completion of a probationary period of employment. However, university tenure was abolished in the UK by the 1988 Education Reform Act and although there may be some staff who were awarded tenure before the act, they are likely to be very small in number.

There is a further enabling element that warrants consideration within the UK context, that of autonomy. Individual autonomy and institutional autonomy are often conflated under the heading of 'academic freedom'. Indeed, Rabban (2001, 17) has noted that academic freedom has been used to refer to 'both the freedom of the academy to pursue its ends without interference from the government... and the freedom of the individual teacher (or in some versions – indeed in most cases – the student)'. Although these two concepts are linked, they are different. Wolff's study makes this distinction explicit, viz. 'academic freedom is the privilege individual academics may claim as the freedom to question and test received wisdom, to put forward new ideas and controversial or unpopular opinions without placing themselves in jeopardy of losing the jobs or privileges they may have at their institutions. Academic autonomy applies to the institution. It may be defined as the right of academic institutions to decide freely and independently how to perform their tasks' (Wolff, 2000, 198).



Academic freedom for teaching and learning, and its supportive elements of autonomy, shared governance and tenure, is not utilised in the compilation of university rankings tables. To those conversant with the concept, such an omission might be surprising, for the following reasons. First, academic freedom is considered to be a defining characteristic of the quality of universities – hence Manan (2000, 255) declares that '[a]cademic freedom is a precondition for academic excellence'. Supportive justifications for academic freedom as an essential prerequisite for institutional excellence and world-class status come from past Presidents of universities considered globally pre-eminent in terms of their research and teaching. For example, Kingman Brewster, President of Yale from 1963 to 1977 (and later Master of University College, Oxford) asserted that: 'academic freedom within the university has a value which goes beyond protecting the individual's broad scope of thought and enquiry. It bears crucially upon the distinctive quality of the university as a community' (1972, 382). Additionally, research into the characteristics of world-class universities undertaken by Altbach (2011, 16) conceded that '[w]ithout academic freedom, a research university cannot fulfill its mission, nor can it be a *world-class* university' (original author's emphasis), while Rosovsky (2014, 58) found that 'all the institutions at the top of the American educational pyramid share six characteristics closely associated with high quality', two of which were shared governance and academic freedom for research and teaching.

Secondly, on close examination, individual universities known to possess unquestioned research and scholastic excellence tend to overtly embrace academic freedom, such that it becomes a distinctive hallmark of the ethos of these institutions. For example, Oxford currently occupies the first place in the *Times Higher's* World University Rankings Table. Oxford explicitly recognises the importance of academic freedom in its current Mission Statement, viz.: 'the value we accord to the principle of academic freedom, enabling the pursuit of academic enquiry subject to the norms and standards of scholarly undertaking, without interference or penalty. This freedom to seek out truth and understanding, whether through theoretical or empirical means, will ensure that our strong core disciplines flourish' (University of Oxford, 2013, 5). Similarly, Harvard University, which is invariably ranked in the top 5 in the *Times Higher* and other comparable world university rankings, has a *Statement on Rights and Responsibilities* which proclaims that 'freedom of speech and academic freedom, freedom from personal force and violence, and freedom of movement' are essential to its nature as an academic community, such that '[i]nterference with any of these freedoms must be regarded as a serious violation of the personal rights upon which the community is based' (University of Harvard, 1970). Harvard has two governing bodies, the Board of Overseers and the Corporation. The Board of Overseers has 30 members, all drawn from, and elected by, Harvard alumni for a six-year term. The Corporation comprises twelve members, six from the private sector, six from the public sector (four have been Professors at other USA universities) and the President, all bar two



of whom have Harvard degrees. In essence, Harvard is governed by its alumni. As institutions like Oxford and Harvard demonstrate, academic freedom is both a hallmark of, and a prerequisite for, research, scholastic and institutional excellence, befitting a ‘world-class university’.

Measurements, Methods and Results

In order to assess whether high-ranked universities are more likely to protect academic freedom, data were obtained from two sources. First, as part of work commissioned by the University and College Union, an online survey on academic freedom aimed at all UK academic staff teaching HE courses was created and launched in December 2016, which resulted in 2239 responses from UCU members working in UK universities. The analysis excluded private HE providers in the UK which, although small in number, are growing in terms of student numbers. Given that private for profit universities in the USA are frequently censured by the AAUP for their failure to protect academic freedom, it would have been interesting to compare the de facto protection for academic freedom in private HE providers with that enjoyed by staff in publicly funded universities in the U.K. Clearly, future analyses of academic freedom in the UK will need to take account of private provision, if it continues to maintain its current growth. Second, data supplied by the *Times Higher* from its World University Rankings (which include 981 universities) enabled the rank positions of UK publicly funded universities to be calculated. On the basis of these rankings, the 91 eligible UK universities were divided into five equally sized cohorts, although the uneven number of institutions ranked meant that the last cohort had one more institution than the other four. The UCU data were then examined, and all responses from staff in the eligible institutions extracted. SPSS was used to calculate ANOVA and Chi-square (χ^2) statistics to make comparisons between the cohorts with respect to the responses to questions in the academic freedom survey. Following Salkind (2004), one-way ANOVA tests were carried out to determine the F statistic and the statistical significance of the difference between the means of the different ranked cohorts. In line with standard statistical practice, the null hypothesis is accepted if there is no statistical difference between the means of the groups, where $p > 0.05$. The decision to use a 5% (as opposed to a 1 or 10%) significance level is arbitrary, but as Gall *et al.* (2007) and Cowles and Davis (1982) report, a 5% significance level is invariably used in studies of this kind, and across the social sciences.

Additionally, where appropriate, the nonparametric χ^2 test was employed, as it has an advantage over one-way ANOVA, in that whereas the one-way ANOVA is based on the comparison of means between the two independent groups, χ^2 compares the actual counts within the categories with the expected data that would be obtained according to a specific hypothesis (for a summary see, Onchiri, 2013).



This test was appropriate to analyse categorical data which had been counted and divided into categories according to the cohorts. Hence, the χ^2 test was used to compare responses of the groups to individual questions, thereby determining whether there exists a significant difference between them as categorical variables.

Table 1 shows the results obtained when respondents were asked to score the level of protection for academic freedom within their institution on a scale of 1 (very low) to 9 (very high). As can be seen, there are stark differences between the different cohorts. For example, 5.3% of respondents in Cohort 1 (containing the universities with the highest *Times Higher World University Rankings*) rated the protection for academic freedom in their institutions as very low. The comparable figure for Cohort 5 (containing the universities with the lowest World University Rankings) was 18.0%. At the other end of the scale, 5.3% of the respondents in Cohort 1 rated the protection for academic freedom in their institutions as very high, compared with only 0.9% with respect to the respondents in Cohort 5. Not surprisingly, perhaps, the use of ANOVA reveals that these differences are statistically significant at the 1% level.

Calculating the mean scores reveals similar differences – the mean scale score for Cohort 1 was 5.5 out of 9, i.e. above the central scale point, while that for the Cohort 5 was 4.0, i.e. below the central scale point. Similarly, collapsing the nine-point scale into three categories produces an enhanced picture of the difference between the different cohorts, as shown in Table 2. Over a third of the respondents in Cohort 5 believe that there is a below average level of protection for academic freedom in their institutions, which is twice the figure (17.2%) for Cohort 1.

Table 1 What do you think is the level of protection for academic freedom in your institution?

| Response | Highest | Times Higher World University Ranking | | | Lowest |
|-----------------------------------|---------------|---------------------------------------|---------------|---------------|---------------|
| | Cohort 1 | Cohort 2 | Cohort 3 | Cohort 4 | Cohort 5 |
| 1 = very low level of protection | 5.3 | 11.4 | 8.1 | 13.3 | 18.0 |
| 2 | 4.1 | 6.0 | 10.2 | 7.1 | 10.7 |
| 3 | 7.8 | 8.5 | 10.2 | 12.0 | 8.2 |
| 4 | 8.2 | 10.9 | 10.2 | 8.3 | 11.2 |
| 5 = average level of protection | 25.5 | 32.4 | 34.9 | 31.1 | 33.5 |
| 6 | 12.3 | 9.4 | 10.8 | 8.7 | 8.2 |
| 7 | 16.2 | 14.0 | 6.5 | 10.4 | 5.6 |
| 8 | 15.2 | 5.1 | 6.5 | 6.6 | 3.9 |
| 9 = very high level of protection | 5.3 | 2.4 | 2.7 | 2.5 | 0.9 |
| All (n = 1561) | 100 (n = 487) | 100 (n = 414) | 100 (n = 186) | 100 (n = 241) | 100 (n = 233) |

N.B. % figures may not sum to 100% owing to rounding
One-way ANOVA: F = 25.458 4 df significant at 1% level



Table 2 Level of protection for academic freedom in respondents' institutions: collapsed categories

| Response | Highest | Times Higher World University Ranking | | | Lowest |
|------------------------------------------------------------|-----------------------|---------------------------------------|-----------------------|-----------------------|-----------------------|
| | Cohort 1 | Cohort 2 | Cohort 3 | Cohort 4 | Cohort 5 |
| Categories 1–3 Generally low level of protection | 17.2 | 25.8 | 28.5 | 32.4 | 36.9 |
| Categories 4–6 Average level of protection | 46.0 | 52.7 | 55.9 | 48.1 | 52.8 |
| Categories 7 to 9 Generally high level of protection | 36.8 | 21.5 | 15.6 | 19.5 | 10.3 |
| All (<i>n</i> = 1561) | 100 (<i>n</i> = 487) | 100 (<i>n</i> = 414) | 100 (<i>n</i> = 186) | 100 (<i>n</i> = 241) | 100 (<i>n</i> = 233) |

$\chi^2 = 93.769$, 8 *df* [C.V. 5% = 15.5070], $p < 0.001$, Cramér's $V = 0.173$.

Conversely, the proportion of respondents in Cohort 1 who consider the level of protection in their institutions to be generally high (36.8%) is more than three times that of their counterparts in Cohort 5 (10.3%). The calculation of the χ^2 value for the aggregated raw data for these collapsed categories shows these differences between the different cohorts to be significant at the 1% level.

To examine the situation in greater depth, respondents were asked to reflect whether the protection for academic freedom at their institution and department had risen, fallen or remained constant in recent years. The results are shown in Table 3. Summing across all cohorts reveals that one-third of respondents were unable to say, or did not know, whether the protection for academic freedom had changed (34.0%). Similarly, more than half (52.9%) of all respondents thought that the protection for academic freedom had diminished or greatly diminished, while only 1% thought that that protection for academic freedom had increased or greatly increased. The differences between the cohorts were statistically significant at the 1% level ($\chi^2 = 45.665$), although the picture was mixed – 14.5% of respondents in Cohort 1 believed that protection had greatly diminished, compared with 25.4% of those in Cohort 5; however, 33.9% of those in Cohort 1 thought that academic freedom had diminished, compared with 25.0% in Cohort 5. Respondents in the higher-ranked cohorts were also more likely to think that the level of protection had remained unchanged. Overall, staff in institutions occupying the highest ranks of the *Times Higher's* World University Rankings were more likely to report a higher level of protection and a lower level of decline for academic freedom than those institutions in the lowest rankings.

Having considered opinions on the general protection for academic freedom, the individual elements of academic freedom for teaching and research will now be examined. Table 4 details responses that participants gave to the statement



Table 3 How has the protection for academic freedom changed in your institution?

| Response | Highest | Times Higher World University Ranking | | | Lowest |
|-------------------------|---------------|---------------------------------------|---------------|---------------|---------------|
| | Cohort 1 | Cohort 2 | Cohort 3 | Cohort 4 | Cohort 5 |
| Greatly diminished | 14.5 | 21.7 | 24.3 | 25.8 | 25.4 |
| Diminished | 33.9 | 34.3 | 32.8 | 29.9 | 25.0 |
| Remained unchanged | 16.2 | 12.3 | 10.6 | 7.8 | 9.3 |
| Increased | 0.8 | 0.7 | 1.1 | 0.8 | 0.0 |
| Greatly increased | 0.0 | 0.2 | 0.5 | 0.8 | 0.0 |
| I don't know/cannot say | 34.6 | 30.7 | 30.7 | 34.8 | 40.3 |
| All (n = 1572) | 100 (n = 489) | 100 (n = 414) | 100 (n = 189) | 100 (n = 244) | 100 (n = 236) |

$\chi^2 = 45.665$, 16 *df* [C.V. 5% = 26.296], $p < 0.001$, Cramér's $V = 0.085$.

'academic freedom for research has declined in recent years'. As can be seen, the χ^2 statistic demonstrates, once again, a statistically significant difference between the different cohorts at the 1% level. In this instance, 40.4% of staff from Cohort 1 agreed/strongly agreed with this statement, as opposed to 48.7% of staff from Cohort 5; at the other end of the scale, 18.5% of Cohort 1 staff disagreed/strongly disagreed, with this statement, the comparable figure for Cohort 5 being 7.4%.

With respect to university research policy in the UK, the major change in the last 40 years has been the introduction of the national periodic evaluations of research (Research Assessment Exercises in 1986, 1989, 1992, 1996, 2001, 2008, and the Research Excellence Framework in 2014), under which the quality of research is evaluated, and the rankings used to allocate research funding. Table 5 provides a breakdown of responses to the statement 'the Research Excellence Framework has

Table 4 Academic freedom for research has declined in recent years

| Response | Highest | Times Higher World University Ranking | | | Lowest |
|---------------------------|---------------|---------------------------------------|---------------|---------------|---------------|
| | Cohort 1 | Cohort 2 | Cohort 3 | Cohort 4 | Cohort 5 |
| Strongly agree | 13.0 | 16.5 | 20.1 | 19.2 | 21.1 |
| Agree | 27.4 | 35.5 | 28.6 | 24.7 | 27.6 |
| Neither agree or disagree | 41.0 | 35.8 | 37.6 | 43.9 | 44.0 |
| Disagree | 14.0 | 9.5 | 9.5 | 10.0 | 6.6 |
| Disagree strongly | 4.5 | 2.7 | 4.2 | 2.1 | 0.9 |
| All (n = 1562) | 100 (n = 485) | 100 (n = 411) | 100 (n = 189) | 100 (n = 239) | 100 (n = 232) |

$\chi^2 = 39.565$, 16 *df* [C.V. 5% = 26.296], $p < 0.001$, Cramér's $V = 0.080$.



Table 5 Research excellence framework has diminished my academic freedom for research

| Response | Highest | Times Higher World University Ranking | | | Lowest |
|---------------------------|-----------------------|---------------------------------------|-----------------------|-----------------------|-----------------------|
| | Cohort 1 | Cohort 2 | Cohort 3 | Cohort 4 | Cohort 5 |
| Strongly agree | 26.0 | 31.3 | 33.3 | 33.1 | 32.9 |
| Agree | 26.3 | 26.7 | 28.0 | 26.0 | 27.4 |
| Neither agree or disagree | 30.3 | 28.9 | 29.0 | 32.2 | 32.1 |
| Disagree | 11.6 | 10.2 | 9.1 | 7.9 | 6.8 |
| Disagree strongly | 5.2 | 2.9 | 0.5 | 0.8 | 0.8 |
| All (<i>n</i> = 1559) | 100 (<i>n</i> = 482) | 100 (<i>n</i> = 412) | 100 (<i>n</i> = 186) | 100 (<i>n</i> = 242) | 100 (<i>n</i> = 237) |

$\chi^2 = 30.665$, 16 *df* [C.V. 5% = 26.296], $p < 0.05$, Cramér's $V = 0.70$.

diminished my academic freedom for research' and reveals a statistically significant difference between the different cohorts at the 5% level. The majority (57.3%) of respondents across all cohorts agreed/strongly agreed that the Research Excellence Framework exercise had diminished their academic freedom, and although over 30% were undecided as to its effect, only 12.3% thought that the REF had not adversely affected their academic freedom. Staff in universities in the lower-ranked cohorts were more likely to perceive that these evaluation exercises had limited their academic freedom for research. Hence, 60.3% of staff in Cohort 5 (with the lowest *Times Higher's* World Rankings) agreed/strongly agreed that the Research Excellence Framework had diminished their academic freedom, compared with 52.9% of respondents in Cohort 1 (with the highest rankings). Similarly, 16.8% of staff in Cohort 1 disagreed/strongly disagreed that the Research Excellence Framework had diminished their academic freedom, which was more than twice the comparable figure (7.6%) for staff in Cohort 5. In sum, staff in the highest ranked universities are less likely to report that their academic freedom for research has declined and that this freedom has been adversely affected by the national evaluation of university research.

The impact of this periodic process of research evaluation on academic freedom has been debated widely within academia and beyond. Murphy and Sage (2015, 36), for example, report that '[t]he discussions around the REF ... have tended to be negatively skewed Our analysis here suggests that many academics have genuine concerns about the implications of the REF affecting their morale, their sense of their role and, potentially, their employment within the sector.' Its impact on academic freedom has been more difficult to judge, with some, like Nolan *et al.* (2008), posing the question: 'The Research Excellence Framework (REF): A major impediment to free and informed debate?', and subsequently urging staff to distance themselves from the process. Other scholars, like Smith *et al.* (2011, 1369), have identified 'threats to academic autonomy implied in the definition of



expert review and the delimitation of reviewers, ... and the framing of knowledge translation by the stipulation that impact “builds on” research’. Similarly, endorsing the findings of this paper, Watermeyer’s assessment concluded that the REF ‘is viewed by academics as an infringement to a scholarly way of life; as symptomatic of the marketisation of higher education; and as fundamentally incompatible and deleterious to the production of new knowledge’ (2016, 199). The impact of the REF is problematic to assess, but it would be difficult to argue it has strengthened academic freedom.

The other main element of academic freedom relates to teaching, and Table 6 details responses that participants gave to the statement ‘academic freedom for teaching in my institution has declined in recent years’. As can be seen, the χ^2 statistic demonstrates, once again, a statistically significant difference (at the 1% level) between the different cohorts. In this instance, 37.2% of academic staff from Cohort 1 agreed/strongly agreed that academic freedom for teaching had declined, as opposed to virtually half (49.8%) of staff from Cohort 5; at the other end of the scale, 21.1% of Cohort 1 staff disagreed/strongly disagreed, with this statement, the comparable figure for Cohort 5 being 6.4%, with less than one respondent in 100 among this cohort strongly disagreeing that academic freedom for teaching has declined. Comparison of the Cramér’s V statistics in Tables 4 and 6 reveals that the differences between the cohorts are greater with respect to teaching (Cramér’s V = 0.089) than research (Cramér’s V = 0.080).

Following on from the Research Excellence Framework, in 2017 the UK government introduced a Teaching Excellence Framework (TEF) with the goal of assessing the quality of undergraduate teaching, under which participating institutions were allowed to increase their tuition fees, in line with inflation, if they passed a baseline quality standard. Table 7 provides a summary of the responses that participants gave to the statement ‘the Teaching Excellence Framework will diminish my academic freedom for teaching’. As can be seen, although the respondents from the highest ranked cohort are less likely (66.9%) to

Table 6 Academic freedom for teaching has declined in recent years

| Response | Highest | Times Higher World University Ranking | | | Lowest |
|---------------------------|---------------|---------------------------------------|---------------|---------------|---------------|
| | Cohort 1 | Cohort 2 | Cohort 3 | Cohort 4 | Cohort 5 |
| Strongly agree | 11.2 | 12.8 | 13.4 | 16.5 | 18.3 |
| Agree | 26.0 | 28.3 | 34.8 | 28.1 | 31.5 |
| Neither agree or disagree | 41.7 | 44.7 | 33.2 | 45.0 | 43.8 |
| Disagree | 15.9 | 12.1 | 13.4 | 8.7 | 5.5 |
| Disagree strongly | 5.2 | 2.2 | 5.3 | 1.7 | 0.9 |
| All (n = 1562) | 100 (n = 484) | 100 (n = 414) | 100 (n = 187) | 100 (n = 242) | 100 (n = 235) |

$\chi^2 = 49.408$, 16 df [C.V. 5% = 29.296], $p < 0.001$, Cramér’s V = 0.089.



Table 7 Teaching Excellence Framework will diminish my academic freedom

| Response | Highest | Times Higher World University Ranking | | | | Lowest |
|---------------------------|-----------------------|---------------------------------------|-----------------------|-----------------------|-----------------------|--------|
| | Cohort 1 | Cohort 2 | Cohort 3 | Cohort 4 | Cohort 5 | |
| Strongly agree | 37.6 | 39.9 | 45.2 | 45.7 | 42.8 | |
| Agree | 29.3 | 26.8 | 27.1 | 31.3 | 33.9 | |
| Neither agree or disagree | 26.0 | 26.0 | 22.9 | 18.5 | 19.5 | |
| Disagree | 5.4 | 6.1 | 3.2 | 3.3 | 3.4 | |
| Disagree strongly | 1.7 | 1.2 | 1.6 | 1.2 | 0.4 | |
| All (<i>n</i> = 1562) | 100 (<i>n</i> = 484) | 100 (<i>n</i> = 411) | 100 (<i>n</i> = 188) | 100 (<i>n</i> = 243) | 100 (<i>n</i> = 236) | |

$\chi^2 = 20.630$, 16 *df* [C.V. 5% = 29.296], not significant, Cramér's *V* = 0.057.

strongly agree/agree that the TEF will diminish their academic freedom than the staff in the lowest ranked cohort (76.7%), these differences are not statistically significant at the 5% level. Hence, overall, staff in the highest ranked universities are less likely to report that their academic freedom for teaching has declined and that this freedom will be diminished by the introduction of the TEF. However, across all cohorts, 70.6% agreed/strongly agreed that the new TEF would diminish their academic freedom, while only 6.0% disagreed/strongly disagreed. This universal condemnatory perception may be a reflection of suspicion, rather than experience, and it may turn out that the impact of the TEF on academic freedom is less corrosive than the respondents' fear it will be. According to the Green Paper which preceded the TEF, an avowed intention of the reform was 'protect the institutional autonomy and academic freedom that has underpinned the success of English higher education' (DBIS, 2015, 58). However, unlike the REF, which has been in place for the 30 years, the long-term impact of the new TEF on academic freedom has yet to be ascertained, although academic publications in advance of the reform were generally critical. Frankham (2017), for example, refers to 'the follies of the "Productivity Challenge" in the Teaching Excellence Framework', while Wood and Su's empirical study of academics' perspectives of the concept of 'teaching excellence' in higher education concluded that teaching excellence was 'a complex concept with many layers of meaning and not easily captured by metrics' and found that '[t]he potential for polarisation of teaching and research through a separate TEF and a REF is concerning' (Wood and Su, 2017, 463).

Discussion

The results reveal that staff in UK universities occupying high positions in the *Times Higher's* World University Rankings report higher levels of protection for academic freedom in their institutions and lower diminishment of their academic



freedom generally, and also specifically with respect to academic freedom for both teaching and research, when compared with staff in universities occupying lower positions in the rankings. Additionally, staff in the higher-ranked institutions are less likely to ascribe reductions in the academic freedom to the government’s national quality evaluations of university research and teaching.

In the top 200 universities listed in the 2017 *Times Higher* World rankings (<https://www.timeshighereducation.com/world-university-rankings/2017/world-ranking>), there are 32 universities from the UK; all (bar one) members of the Russell Group (which is widely perceived as representing the best universities in the country) appear in this cohort, while there are no entrants from among the UK’s post-1992 (ex-polytechnic) universities – the highest ranked post-1992 institution is Anglia Ruskin University, which is in the 301–350 group. Table 8 shows the distribution of Russell Group, pre- and post-1992 universities, in accordance with their placement within five *Times Higher*’s World University Rankings cohorts, from the highest to the lowest. As can be seen, the Russell Group institutions dominate the cohort with the highest rankings which, as this study has shown, are more likely to provide stronger protection for academic freedom. Cohorts 2 and 3 largely comprise the other pre-1992 universities, while most of the institutions in the lowest ranked Cohorts 4 and 5 (in which levels of, and protection for, academic freedom were relatively low) are post-1992 universities.

These differences are, perhaps, surprising, given that it is now 25 years since the polytechnics were granted university status and that, in many respects, the UK higher education sector is relatively homogenous. Hence, the pre- and post-1992 institutions are very similar in terms of: the awards they provide (at EQF Levels 6, 7 and 8); their structures of faculties and departments; the portfolios of courses they offer (although post-1992 universities are less likely to provide courses in the STEM subjects and medicine); the manner in which they teach (lectures and seminars); and the fees they charge to students. Moreover, in some cities (e.g. Leeds, London, Manchester) pre- and post-1992 institutions are often in close physical proximity and may share student support facilities, for example, the Leeds

Table 8 *Times Higher* World University Rankings and Russell Group, Pre- and Post-1992 Universities’ Cohorts

| Response | Times Higher World University Ranking | | | | |
|-----------------------------|---------------------------------------|--------------|--------------|--------------|-----------------|
| | Highest Cohort 1 | Cohort 2 | Cohort 3 | Cohort 4 | Lowest Cohort 5 |
| Russell group | 94.4 | 38.9 | 0.0 | 0.0 | 0.0 |
| Other pre-1992 universities | 5.6 | 61.1 | 83.3 | 27.8 | 10.5 |
| Post-1992 universities | 0.0 | 0.0 | 16.7 | 72.2 | 89.5 |
| All (91) | 100 (n = 18) | 100 (n = 18) | 100 (n = 18) | 100 (n = 18) | 100 (n = 19) |

$\chi^2 = 92.825$, 8 df [C.V. 5% = 15.507], $p < 0.001$, Cramér’s V = 0.761.



Student Medical Practice serves students from both Leeds and Leeds Beckett Universities. One major difference, however, between these two institutional types is their mode of governance, which has ramifications for academic freedom.

The vast majority of the pre-1992 institutions were established by Royal Charter, the first such being granted to Oxford in 1248. These institutions' governance structures are specified in their Statutes, usually at the time of foundation via the granting of the charter. For example, Durham University, which is a Russell Group institution, has Statutes that specify that the university 'shall be governed by a Visitor, Chancellor, Vice Chancellor, Convocation, Council, Senate and Boards of Studies' (University of Durham, 2011). Convocation comprises all members of the university, i.e. the Chancellor, Vice Chancellor, Pro Vice Chancellors, the teaching staff, the heads of colleges and halls of residence, and all Durham alumni. It meets annually to hear the Vice Chancellor's Address and debate any business relating to the university, but can call additional meetings if a minimum of 50 members so desire. Its powers are limited to appointing the Chancellor (on the nomination of Council and Senate) and making representations to the university on any business debated. University Council is the executive body of the university and has 24 members, maximum: the Chancellor, the Vice Chancellor, the Deputy Vice Chancellor, up to 12 external lay members, seven members of the University staff (five of whom are academic staff with research and teaching responsibilities), the Dean of Durham and the President of the Students' Union. The Council is the university's governing and executive body, which has the authority to review the work of the University and take such steps as necessary to advance the University's interests. Council has the power to fix the salaries and conditions of tenure of posts to which they appoint, and to establish budget centres within the University for the efficient management of resources. Senate is the supreme governing body of the university in academic matters. It comprises 7 staff from the Vice Chancellor's office, 16 Heads of College, 23 Heads of Department, 3 Student's Union representatives, 17 members elected by the Academic Electoral Assembly, 6 co-opted members, the librarian and the head of IT. It nominates the Vice Chancellor and Pro Vice Chancellors to Council and recommends the establishment of Faculties and Boards of Studies. Senate grants degrees, but may also revoke them. Hence, in pre-1992 universities like Durham, the powers of governance are shared between Convocation, Council and Senate, and their compositions are such that academic staff have an input into all the decisions that these bodies make.

By contrast, the post-1992 institutions were established as higher education corporations by the 1988 Education Reform Act and granted university status by the 1992 Further and Higher Education Act. Leeds Beckett University is a post-1992 institution; it has two governance bodies (Leeds Beckett University, undated). The Board of Governors is the University's governing body, responsible for determining the university's educational character and mission, for overseeing all



of its activities (including appointing the Vice Chancellor), and for the effective, efficient and economical use of the University's funds. The Board has 20 members, the Vice Chancellor, 12 independent lay governors, 3 co-opted governors (one from the academic staff), 2 academic board nominees and 2 student representatives. The Academic Board is the University's principal academic authority and is responsible for overseeing and regulating all academic activities, maintaining the academic standard of awards and enhancing the quality of educational provision. The Board has a membership of 40: the Vice Chancellor and 8 Deputy and Pro Vice Chancellors, 13 Deans of Schools, the university's Secretary, Librarian and Director of Research, all of whom are ex-officio. The remaining minority are 4 nominated student representatives and 11 elected from among the Professors (2), research staff (1), academic staff (2), service staff (3) and course directors (3).

It is evident that, in terms of the composition of governance bodies, the input of academic staff into the decision-making process is noticeably greater in the pre-1992 universities. However, the extent to which academics elected to governance bodies may act independently of (or even oppose) university management is unknown, but in most such elections the University and College Union has a preferred list of candidates, such that the Union is frequently well represented on such bodies. Clearly, the presence of elected members on governing bodies in pre-1992 universities makes more likely greater collegiality in decision-making and better protection for academic freedom, than exists in the post-1992 universities, which have decision-making structures that are managerial, rather than collegial. Nevertheless, irrespective as to whether the institutions are pre- or post-1992 institutions, it is likely that the distribution of administrative authority will favour what Altbach (1999, 118) describes as the 'administrative estate' who have 'have little direct relation to the professoriate and do not owe their jobs to them. ... a self-perpetuating group that is central to the operation of the institution'. However, the pre-1992 universities are likely to be those described by Shattock (1999, 281) as 'probably mostly the most academically successful, which have developed a strong organizational culture that effectively marries academic and managerial structures to provide both effective decision-making machinery and a strongly self-motivated academic community. Such a structure is likely to be able to resist the worst aspects of... managerialism and to be able to preserve a robust academic ethos'. Additionally, Shattock (2002, 240) found little hard evidence that more managerialist approaches (which appear more evident in post-1992 universities) have been 'particularly successful in delivering academic success', and that 'where improprieties and breakdowns have occurred, they have centred on governing bodies and the executive and not on the academic community. Indeed, in nearly all such cases... attention was drawn to the difficulties by concern in the academic community'. This conclusion is endorsed by Brown's survey of governance in UK universities, which found that



[i]f there is one common feature running through these reports it is the difficulty which these institutions had in controlling the behaviour of a strong chief executive who was often closely associated with a small group of key Governors who may have bypassed a largely supine Governing Body, many of whom were not sufficiently knowledgeable either about higher education matters or about their own rights and responsibilities as members of the supreme decision making body of a higher education institution. (Brown, 2001, 44).

Conclusion

The study has shown that, within the UK context, staff in pre-1992 universities that occupy the highest positions in the *Times Higher's* World University Rankings are more likely to enjoy greater levels of academic freedom in their teaching and research and greater participation in university governance, than their counterparts in post-1992 institutions, suggesting that a change in the governance procedures of the latter group might be beneficial. Moreover, for national governments (like China and Finland), seeking invest heavily to create new universities with high rankings, this research demonstrates that increased funding is unlikely to be cost effective, unless it is accompanied by governance structures which facilitate academic freedom and a scholarly ethos conducive to institutional excellence. Similarly, these results undermine university reforms by national governments which have increased and centralised managerial control, and diluted involvement by academics in governance, by replacing them with external members appointed on the basis of their business acumen, rather than an understanding of higher education. For example, in Denmark the University Act 2003 replaced elected university senates with governing boards, of which the majority of members and the chairman are externally appointed. The Board sets the university's priorities, agreeing a development contract with the government, and hiring the Rector to ensure that the university's budget is disbursed to achieve their priorities. This legislation's impact on research was profound, as Departmental Heads can direct academic staff to perform certain research activities; thus, individual academics still have the nominal freedom to conduct scientific research, but their liberty is circumscribed by the University Board's research strategic framework, as specified in the Achievement Contract drawn up with the Ministry. Indeed, Wright (2014, 309) describes how, following the introduction of this new system, Danish university staff were 'marked by very high levels of stress. ... [a]mong ... members of the department One had collapsed lifeless in the corridor at work, ... Two had experienced the same kind of collapse at home and described how they suddenly could not function at all – they could not read, mark exam papers, write reports, or do anything at all'.



Additionally, this research indicates that ranking organisations like the *Times Higher* could usefully consider broadening the range of indicators they use, to include parameters relating not just to outputs, but managerial processes, such as governance. The results of this analysis, supported by case study evidence from the likes of Oxford and Harvard, demonstrate that the teaching and research output measures used in the calculation of rankings are enabled by, and arise from, the operation of academic freedom, facilitated by participative governance structures and processes, within scholarly communities (departments and units). It appears likely that a virtuous circle operates, whereby academic freedom in universities like Oxford and Harvard enables the development of ‘world-class’ university profiles for these institutions, which makes them able to continue to attract both the leading teachers and researchers in the field and the best qualified students. These scholars and students, in turn, are imbued with a strong belief in the need for, and benefits of, academic freedom, and thus pass this ethos down to successive entrants to academia, thereby perpetuating a high level of scholarly excellence. However, it is worth noting that institutions like the National University of Singapore and Tsinghua University in China occupy high positions in the *Times Higher* Rankings (22 and 30, respectively) despite the fact that their nations do not protect academic freedom in law, which suggests that academic freedom may be a necessary condition for academic excellence, but it is not a sufficient condition. Clearly, further case study research into such institutions needs to be undertaken to shed further light on their apparently anomalous situations.

Moreover, in the light of the critical analysis by Birnbaum (2000) of the waste of resources occasioned by management fads in academia, of some concern is that this obsession (among national governments and rectors alike) with securing high rankings within world-class university tables has uneasy parallels with the fixation, during the dot com boom in the late 1990s, of creating ‘virtual universities’, many of which devoured huge resources, yet produced little of lasting consequence. For example, the UK e-university project, which was wound up in 2004, spent £50 million of public money but succeeded in attracting only 900 students (House of Commons Education and Skills Committee, 2005, 3). It remains to be seen whether projects attempting to achieve world-class rankings for universities, via more directive managerial processes (which undermine academic freedom) allied to considerable financial resources, will follow the same dismal trajectory and waste public money while simultaneously sacrificing academic freedom, which is recognised as a core value of higher education and a prerequisite for scientific endeavour and the advancement of knowledge.



References

- Aarrevaara, T., Dobson, I. and Elander, C. (2009) 'Brave New World: Higher Education Reform in Finland', *Higher Education Management and Policy* 21(1): 1–18.
- Åkerlind, G. and Kayrooz, C. (2003) 'Understanding academic freedom: the views of social scientists', *Higher Research and Development* 22(3): 327–344.
- Altbach, P. (1999) 'The logic of mass higher education', *Tertiary Education and Management* 5(2): 107–124.
- Altbach, P. (2001) 'Academic freedom: International realities and challenges', *Higher Education* 41(1/2): 205–219.
- Altbach, P. (2011) 'The Past, Present, and Future of the Research University', in P. Altbach and J. Salmi (eds) *The Road to Academic Excellence: The Making of World-Class Research Universities*, Washington: The World Bank, pp. 11–32.
- Amsler, S. and Bolsmann, C. (2012) 'University ranking as social exclusion', *British Journal of Sociology of Education* 33(2): 283–301.
- Barnett, R. (1988) 'Limits to Academic Freedom: Imposed-Upon or Self-Imposed?', in M. Tight (ed.) *Academic Freedom and Responsibility*, Buckingham: SRHE/OU Press, pp. 88–103.
- Barron, G. (2017) 'The Berlin Principles on Ranking Higher Education Institutions: Limitations, legitimacy, and value conflict', *Higher Education* 73(2): 317–333.
- Baty, P. (2014) 'The Times Higher Education World University Rankings, 2004–2012', *Ethics in Science and Environmental Politics* 13(1): 125–130.
- Birnbaum, R. (2000) 'The Life Cycle of Academic Management Fads', *The Journal of Higher Education* 71(1): 1–16.
- Bowden, R. (2000) 'Fantasy Higher Education: University and college league tables', *Quality in Higher Education* 6(1): 41–60.
- Brewster, K. (1972) 'On Tenure', *Academe* 58(4): 381–383.
- Brown, R. (2001) 'The governance of the new universities: Do we need to think again?' *Perspectives* 5(1): 42–47.
- Cowles, M., and Davis, C. (1982) 'On the origins of the .05 level of statistical significance', *American Psychologist* 37(5): 553–558.
- Department for Business, Innovations and Skills (2015) *Fulfilling our Potential: Teaching Excellence, Social Mobility and Student Choice* (Cm 9141), London: Department of Business, Innovations and Skills: Open Government License (OGL).
- Frankham, J. (2017) 'Employability and higher education: the follies of the "Productivity Challenge" in the Teaching Excellence Framework', *Journal of Education Policy* 32(5): 628–641.
- Gall, M., Gall, J. and Borg, W. (2007) *Educational research: An introduction*, Boston, MA: Pearson Education.
- Harvey, L. (2008) 'Rankings of Higher Education Institutions: A Critical Review', *Quality in Higher Education* 14(3): 187–207.
- Harwell, M., Rubinstein, E., Hayes, W., and Olds, C. (1992) 'Summarising Monte Carlo results in methodological research: the One and Two factor fixed effects ANOVA cases', *Journal of Education Statistics* 17(4): 315–339.
- House of Commons Education and Skills Committee (2005) *UK e-University: Third Report of Session 2004–05* (HC489), London: The Stationery Office.
- Karran, T. (2009) 'Academic Freedom in Europe: Time for a *Magna Charta*?', *Higher Education Policy* 22(2): 163–189.
- Latif, M. (2014) 'Academic freedom: problems in conceptualization and research', *Higher Education Research and Development* 33(2): 399–401.
- Leeds Beckett University (undated) accessed from: <http://www.leedsbeckett.ac.uk/governance/> [accessed 20th July 2017]



- Manan, W. (2000) 'Academic freedom: Ethical implications and civic responsibilities', in G. Neave (ed.) *The universities' responsibilities to society: International perspectives*, Kidlington: Elsevier Science, pp. 253–270.
- Marginson, S. (2007) 'Rankings: Marketing Mana or Menace? The Big Picture'. Paper presented at the 16th Annual New Zealand International Education Conference; 8–10 August, Christchurch, New Zealand.
- Moed, H. (2017) 'A critical comparative analysis of five world university rankings', *Scientometrics* 110(2): 967–990.
- Murphy, T., and Sage, D. (2015) 'Perceptions of the UK's Research Excellence Framework 2014', *Australian Universities Review* 57(2): 31–36.
- Nolan, M., Ingleton, C., and Hayter, M. (2008) 'The Research Excellence Framework (REF): A major impediment to free and informed debate?', *International Journal of Nursing Studies* 45: 487–488.
- Onchiri, S. (2013) 'Conceptual Model on Application of Chi Square Test on Education and Social Sciences', *Educational Research and Reviews* 8(15): 1231–1241.
- Paruolo, P., Saisana, M., Saltelli, A. (2013) 'Ratings and rankings: voodoo or science?', *Journal of the Royal Statistical Society, Series A*, 176(3): 609–634.
- Pusser, B., Marginson, S. (2013) 'University Rankings in Critical Perspective', *The Journal of Higher Education* 84(4): 544–568.
- Rabban, D. (2001) "Academic Freedom, Individual or Institutional?", *Academe* 87(6): 16–20.
- Rauhvargers, A. (2013) *Global University Rankings And Their Impact — Report II*, Brussels: EUA.
- Rosovsky, H. (2014) 'Research universities: American Exceptionalism?', *Carnegie Reporter: Special Issue* 7(3): 57–61.
- Salkind, N. (2004) 'Two groups too many? Try analysis of variance', in L. Shaw, M. Crouppen, D. Axelsen, and L. Lech (eds.) *Statistics for people who think they hate statistics*, Thousand Oaks, CA: Sage Publications Inc., pp. 193–211.
- Salmi, J., and Saroyan, A. (2007) 'League Tables as Policy Instruments: Uses and Misuses', *Higher Education Management and Policy* 19(2): 31–68.
- Shattock, M. (1999) 'Governance and management in universities: The way we live now', *Journal of Education Policy* 14(3): 271–282.
- Shattock, M. (2002) 'Re-balancing modern concepts of university governance', *Higher Education Quarterly* 56(3): 235–244.
- Shin, J., and Toutkoushian, R. (2011) 'The Past, Present, and Future of University Rankings', in J. Shin, R. Toutkoushian and U. Teichler (eds.) *University Rankings: Theoretical Basis, Methodology and Impacts on Global Higher Education*, Dordrecht: Springer, pp. 1–16.
- Smith, S., Ward, V. and House, A. (2011) "'Impact" in the proposals for the UK's Research Excellence Framework: Shifting the boundaries of academic autonomy', *Research Policy* 40(10): 1369–1379.
- Soh, K. (2015) 'Multicolinearity and Indicator Redundancy Problem in World University Rankings: An Example Using Times Higher Education World University Ranking 2013–2014 Data', *Higher Education Quarterly* 69(2): 158–174.
- University of Durham (Undated) accessed from: <https://www.dur.ac.uk/resources/university.calendar/StatutesUniversityofDurham2011.pdf> [Accessed: 20th July 2017]
- University of Harvard (1970) *University-Wide Statement on Rights and Responsibilities*, accessed from: <http://provost.harvard.edu/university-wide-statement-rights-and-responsibilities> [Accessed 20th July 2017]
- University of Oxford (2013) *Strategic Plan 2013 to 2018*, accessed from <https://www.ox.ac.uk/about/organisation/strategic-plan?wssl=1> [Accessed 20th July 2017]
- Watermeyer, R. (2016) 'Impact in the REF: issues and obstacles', *Studies in Higher Education* 41(2): 199–214.



- Wood, M. and Su, F. (2017) 'What makes an excellent lecturer? Academics' perspectives on the discourse of "teaching excellence" in higher education', *Teaching In Higher Education* 22(4): 451–466.
- Wolff, K. (2000) "Academic Freedom and University Autonomy", in G. Neave (ed.) *The Universities' Responsibilities to Society: International Perspectives*, Oxford: Elsevier Science, pp. 196–205.
- Wright, S. (2014) 'Knowledge that counts: points systems and the governance of Danish universities', in D. Smith and A. Griffith (eds.) *Under New Public Management: Institutional Ethnographies Of Changing Front-Line Work*, Toronto: University of Toronto Press, pp. 294–338.
- Zhang, H., Patton, D., Kenney, M. (2013) 'Building global-class universities: Assessing the impact of the 985 Project', *Research Policy* 42: 765–775.