

Abolishing the higher education Research Excellence Framework (the REF)

Summary

- The Research Excellence Framework (REF) assesses the research generated by UK universities. Most recently
 conducted in 2014, it is used by the national higher education funding councils (HEFCE in England) to help in
 allocating Quality Research (QR) money.
- It is likely that the REF directly influences the distribution of less than £1.5 billion, representing between one fifth and one quarter of total government research funding (most of the rest being allocated by the Research Councils). Resources distributed according to REF criteria account for only around 4 per cent of the total turnover of the higher education sector and less than 0.2 per cent of government spending.
- The REF shows that most high-quality research is concentrated in a limited number of leading universities, which receive the bulk of government funding. Even amongst this group, the impact of the REF outcome is relatively minor. For example, at University College London, the funding allocated as a direct result of the REF accounts for significantly less than 6 per cent of university incomeⁱ.
- The REF uses significant resources and distorts resource allocation within the higher education sector away from teaching and knowledge dissemination. It involves the appraisal of nearly 200,000 pieces of research and significant bureaucratic costs within universities.
- The REF distorts the allocation of resources towards the particular type of research encouraged by the REF.
- The REF also raises academic salaries as universities seek to improve their REF ranking by hiring key academics who score highly on REF criteria and depriving competing universities of those key academics.
- Despite the relatively low levels of funding distributed as a result of the REF, universities allow their behaviour to be distorted by the process because, as a government-backed kitemark, a REF rating provides signals that are useful to universities from a marketing perspective. However, there is a wide range of other, much more effective, indicators of quality of higher education institutions. Furthermore, no other country conducts an exercise quite like the REF.
- In relation to research funding, the same or better result in terms of the allocation of funds could be achieved by different means.
- The REF no longer serves a useful purpose and should not be repeated. We should gradually move away from institution-based funding towards project-based funding via the Research Councils. Any remaining need to allocate research support to institutions, for instance for capital purposes, should rely on available metrics rather than the REF. More generally, there is a strong case for reducing the total amount of government subsidy for research and expecting universities to generate their own funds for research and scholarship or support it by reducing overhead costs.

Research Funding in UK Higher Education

The Research Excellence Framework assesses university research in order to inform the allocation of Quality Research Funding, part of the 'dual system' of government support for research. Distributed through the national higher education funding councils (HEFCE in England), it provides direct but mainly non-specific support for higher education institutions' research efforts, based largely on a backward look at achievements in a reporting period of several yearsⁱⁱ. The Research Councilsⁱⁱⁱ are the other part of the system: they allocate funds largely to support particular projects which researchers propose to conduct in the future. These are often grouped into priority programmes determined from time to time by the Councils.

Slightly different systems exist in Scotland, Northern Ireland and Wales, but in England HEFCE will this year allocate around £1.6 billion QR funding, which comes from the Department for Business, Innovation and Skills as part of an annual budget settlement. This amount has been static in nominal terms for several years, and is lower in real terms than at the time of the 2008 Research Assessment Exercise. However, a large proportion of this £1.6 billion is not distributed according to REF criteria but, for example, is allocated on the basis of research degrees awarded.

The main Research Councils allocate a larger sum, over £2.6 billion this year, although some of this goes to research organisations outside the HE sector. The government also supports a number of bodies such as the UK Space Agency, the Royal Society and the British Academy, some of whose work is contracted to universities. In total the government is spending about £5.8 billion on research this year, including capital funding, a large part of which goes to higher education institutions. Universities also receive a large but variable amount of private research funding from charities and businesses.

In 2013-14 total (government and private) research grants and contracts accounted for about 16 per cent of university income. Only 6 per cent of this income came from QR and related funding^{iv} with about only 4 per cent of university funding being allocated directly based on the outcome of the REF.

The Research Excellence Framework

REF 2014 was the latest in a series of exercises previously conducted in 1986, 1989, 1992, 1996, 2001 and 2008. These went by different names, were administered by different bodies, using different eligibility criteria and different grading systems – which makes their outcomes difficult to compare with any degree of precision.

The 2014 REF involved submissions from 154 higher education institutions, covering 52,061 academic staff, 191,150 research 'outputs' (mainly papers in peer-reviewed academic journals) and 6,975 'impact case studies'. These, an innovation in 2014, were intended to show how the research conducted by institutions has a value outside academe. The submissions were assessed by 36 subject-based 'sub-panels', grouped under four main panels 'research users' took many months to read and review the submissions. At the end of their deliberations they classified submissions into four categories. The classification was based on subjective judgements relating to the quality (65 per cent weighting), impact (20 per cent), and the research environment (15 per cent).

The classifications were as follows: 30 per cent of all research submitted was adjudged to be 'world-leading', 46 per cent 'internationally excellent', 20 per cent 'recognised internationally' and 3 per cent 'recognised nationally'. These were startling results; although, as suggested above, comparability between successive exercises is difficult: submissions classified in the top category rose from 14 per cent in 2008 (i.e. more than doubled in six years). Given that more staff were submitted, and that government funding for research had fallen in real terms, this was trumpeted as a major triumph for the UK's researchers, though cynics may have seen this as rather reminiscent of education secretaries hailing ever-better GCSE results as evidence of underlying improvement in schools. Quality judgments, though leavened by some input from assessors from non-UK universities and the use of rankings of journals in which articles are published, were still basically the subjective views of British academics who had a collective interest in 'bigging up' the UK's performance'.

How QR funding currently works in England

HEFCE has the lion's share, around £1.6 billion, of QR funding. It uses a slightly different system of allocation of funding from the other UK nations. Of this, £1.0 billion is to be allocated this year to 'Mainstream QR', based directly on the REF. Funding only goes to submissions rated as 'world leading' or 'internationally excellent', with more funding going to the former. A complex calculation involves the subject rating, the volume of research (number of staff submitted), the subject cost weighting (with high cost lab or clinical work, for example, rated as costing 1.6 times the cost of desk-based work) and impact and environmental factors). This funding is passed on to institutions, which can spend it in whatever way they please: there is no guarantee that the funds come back to the research groupings whose efforts have generated the money.

The other third of QR funding allocations goes mainly to support research degree students and to subsidise research work conducted for charities, plus other minor expenditure on national research libraries and business research. None of these allocations depends directly on the REF: nor does the separate Research Capital Funding administered by HEFCE. This latter funding is based on a different set of criteria to do with, for example, income from Research Councils.

Thus the total amount of research funding which universities receive as a direct result of their REF submissions is significantly lower than the 'headline' figures often quoted for QR funding. In total, the REF is probably responsible for the allocation of about 4 per cent of the turnover of higher education institutions.

Evaluating the REF

The first attempts in the 1980s to assess the quality of university research was driven by the awareness that university staff were usually contractually required to conduct research, and were funded in the block grant under the old University Funding Council (UFC) system on the assumption that part of their time was spent doing research, but there was no mechanism for monitoring what was being done. The Research Selectivity Exercise, as it then was, aimed to provide a rational basis for the allocation of part of the block grant associated with research.

There is no doubt that the introduction of research funding selectivity had a salutary effect on universities, making them much more aware of the way in which funding was being used and leading to serious internal discussions about how to organise and support research. However we would argue that there have been diminishing returns to successive iterations of assessment exercises. The REF has taken on a life of its own, and has come to dominate thinking about university research in a narrow and unhelpful manner. The impact of the REF on higher education institutions is probably one of the best examples in public finance of a tail wagging a dog.

Unfairness and gaming

As with all crude target measures of performance, the REF can easily be gamed. For instance, against a rising UK trend of staff being submitted to REF 2014 compared with RAE 2008, Cardiff University sharply reduced the number of staff submitted (from 1,038 FTE to 738). By omitting staff with weaker research records it boosted its 'Grade Point Average' and thus became the UK's sixth-ranked university in terms of quality ratings. In England the funding gain from this higher quality rating would have been offset by a loss of funding from the volume measure. In Wales, however, funding allocations are not linked to staff numbers in the same way. Cardiff was thus able to pursue a strategy which was not open to its English counterparts.

Even in England, such gaming is often worthwhile. Because of the relatively small sums of money allocated to most institutions by the REF, the marketing value of a high ranking can be worth more than the funds allocated through including a higher proportion of established staff. As such, potential students would be significantly confused about the true research strength of institutions. Across the UK, of 194,000 academic staff in post in 2013-14, only 52,000 were submitted to REF 2014. Within some universities this selectivity can be carried to absurd lengths, with cases of departments with more than a hundred staff being represented by fewer than ten individual submissions. Quality scores for handfuls of staff are used misleadingly to advertise the research strength of departments and universities.

It is costly and distorts priorities

The REF costs significant amounts of money. An official estimate for HEFCE of the total cost of the 2008 RAE to England put it at £47 million. This is now considered to have been an underestimate. More recently, Rand Europe estimated the cost of the Impact Assessment element of the 2014 REF alone at £55 million. Updating the 2008 costs to allow for inflation, and adding in the costs incurred in Scotland, Wales and Northern Ireland, gives a UK total for the REF of £121 million. However a Technopolis report^{vi} for HEFCE, published in July 2015, now puts the total cost of REF 2014 for the UK as a whole at £248 million. Even this figure may be too low: one estimate^{vii}, applying full-cost methodology, puts the real cost at over £1 billion. While this may be a top-end estimate it seems plausible that the real costs of the REF are higher than has yet been officially admitted.

Two things are likely, moreover: firstly, that these costs fall disproportionately on smaller institutions, and secondly, that some, perhaps many, institutions will gain less in resource from the funding councils than they have expended in preparing submissions.

Moreover, preparation for the REF has distorted priorities within institutions. Academics focus efforts on 'salami-slicing' research to obtain four key journal articles within the submission period, rather than longer work such as books, reports and monographs; and it has led to key staff cutting back on bread-and-butter undergraduate teaching (which has often been covered by casual lecturing staff and doctoral students), and other contributions to university life. The exercise has never been popular with academic staff^{viii}, who argue it distorts their working life and subjects research to excessive interference by university managers.

There has also been an element of 'poaching' of key staff, rather in the manner of Premier League football teams competing for limited talent; this may boost one institution's score at the expense of another, but does nothing to boost the sector's total research output and may bid up and distort academic salaries. Thus the total costs of the REF are not confined merely to the costs of the bureaucracy involved but the costs arising from the misallocation of staff time, especially away from teaching.

In addition to the gaming described above, there has also been some sharp practice. The REF has led to the attribution of work partly conducted by junior researchers on temporary contracts to permanent staff. There has also been a

proliferation of small fractional contracts (0.2 for example) which has enabled staff with limited commitment to a university to be counted on its scoresheet.

The REF is not necessary to assess research quality

As time has gone on, it has become clear that, despite the much-vaunted existence of pockets of high-quality research in most universities, the often uncomfortable truth is that measured research excellence remains highly concentrated in a limited number of institutions^{ix}. The Russell Group, which includes Oxford and Cambridge universities, consists of only 15 per cent of the UK's higher education institutions but is responsible for 68 per cent of what REF 2014 has adjudged to be 'world-leading' research. Within the Russell Group, research excellence is even more concentrated, with Oxbridge, Imperial College, UCL and LSE being clear leaders.

If it were necessary to find alternative criteria to distribute HEFCE funding for research, this could easily be done. Given the relatively small amounts of money involved, ratings based on citations, external research grant funding and research degree awards would generate a pattern of concentration in leading universities sufficiently close to that which the REF produces to make no material difference to the overall funding of universities. Assessing the long tail of institutions which receive small amounts of QR funding does not justify the amount of time and resource spent on the REF. For those institutions outside the key research leaders, the REF is a distraction which can undermine teaching and student support, promotes the vanity^x of a small number of staff, and arguably misleads the public when a few research successes are presented as typical of the institution as a whole.

Abolish the REF

In our view, the REF no longer serves a useful purpose and should not be repeated, as currently projected, in 2020. From the year 2017/18, funds should gradually be switched towards the Research Councils which already allocate the bulk of government research funding (and which have a backlog of alpha-rated, peer-reviewed projects which cannot currently be funded). This would have the incidental benefit of increasing the funds potentially available to non-university research institutions which currently conduct a significant amount of applied research but cannot get support through QR money. Any remaining need to fund institutions, rather than research projects, should be based on publicly-available metrics such as grants received, research degree completions and citations.

There is, separately, a strong case for reducing the total amount of government subsidy for research and expecting universities to generate their own funding for research and scholarship or support it by reducing overhead costs. While there may be external benefits justifying support for some types of research, in many disciplines research has a value largely in developing academic understanding which feeds (or should feed) largely into teaching; at present, for too many academics, research serves as a substitute for teaching – to students' detriment.

Reducing the role of the Funding Councils in research could also lead in the medium term to their abolition. The funds they control are already sharply in decline with the withdrawal of teaching support since the institution of full-cost fees. HEFCE's total grant in 2015-16, at just under £4 billion, is down from £7.3 billion in 2007-08, yet their most recent annual report shows that they still employ the same number of staff. In classic bureaucratic style they have invented various new regulatory roles, for instance oversight of the charitable status of universities. Most of these roles, in what is a heavily over-regulated sector, should be abolished or passed to other bodies.

Professor J. R. Shackleton and Professor Philip Booth, 15 July 2015

References

il is impossible to determine exactly how much is allocated as a result of the REF. However, in 2013-14 HEFCE allocated around £115 million research funding to UCL. Only around 62 per cent of the money available to HEFCE to support research is directly linked to the REF. The rest is allocated to support research degree students, charitable research, business research etc, calculated according to other metrics. UCL will also have received extra to support London weighting. UCL's total income from all sources was £1,022 million in 2014.

"REF 2014 assessed work published between 1 January 2008 and 31 December 2013.

The Arts and Humanities Research Council, the Biotechnology and Biological Sciences Research Council, the Economic and Social Research Council, the Engineering and Physical Sciences Research Council, the Medical Research Council, the Natural Environment Research Council and the Science and Technology Facilities Council.

iv Source: Higher Education Statistics Agency.

^v Aggregate figures may be misleading in any case. English Language and Literature (which we ought to be quite good at) submitted more outputs than either Physics or Chemistry, and had a markedly higher proportion assessed as 'world-leading'. Communications, Cultural and Media Studies received a higher proportion of top ratings than Clinical Medicine.

vi Technopolis Group *REF Accountability Review: Costs, benefits and burden,* available at: http://www.hefce.ac.uk/media/HEFCE,2014/Content/Pubs/Independentresearch/2015/REF,Accountability,Review,Costs,benefits,and,burden/2015_refreviewcosts.pdf

vii 'Academic estimates 'real' cost of REF exceeds £1bn' Times Higher Education 12 February 2015.

viii See for instance: http://timesonline.typepad.com/dons_life/2011/09/fed-up-with-the-ref.html and http://blogs.lse.ac.uk/impactofsocialsciences/2014/10/06/perceptions-and-impacts-of-the-ref/

ix According to one study 'exceptional achievement is in significant part the result of the outstanding performance of a very small number of individuals in an even smaller number of institutions. The majority of the research done in this country – throughout the sector, from the most exalted institutions to the least, and from those that have received the most research funds to the least – is very much more modest' Jonathan Adams and Karen Gurney (2010) Funding selectivity, concentration and excellence – how good is the UK's research? Paragraph 39. Available at http://www.rin.ac.uk/system/files/attachments/Funding_selectivity_concentration_excellence_-Exec_Summ.pdf

^xMany of the impact case studies in the 2014 REF are cringeworthy and reminiscent of the worst CVs submitted by young jobseekers.