Exploring the value of QR in supporting researcher-scale activities

Briefing note

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Background

In this project, we examined how Quality-related Research (QR) funding contributes to university research. We piloted methods to assess the value that QR contributes through activities at the scale of individual researchers and tested those methods at the University of Cambridge.

QR is the block grant awarded to universities for recurrent research expenses. It is one leg of the dual support system of research in higher education in the UK. The other leg is proposal-based research grants and contracts which are awarded to carry out specific research projects or programmes. Project, programme and fellowship grant funding is awarded to specific teams. In contrast, QR is awarded to institutions who can decide to spend it in whatever way they think will most effectively support their research. Figure 1 shows the relative sizes of Research Council and QR funding.

QR has its origins in the funding given by the University Grant Committee that was set up in the aftermath of World War 1. At the outset, universities were given almost complete discretion about what research to support and how to support it. Nowadays, the government provides many streams of funding for research which are often directed toward specific objectives or subject areas. QR is the element of funding that is most closely linked to that original funding and recognises the value of a university’s expertise and discretion on how it is spent.

Approach

We examined researcher-scale activities and effects – a central aspect of the devolved and discretionary nature of QR – which have been less well studied than larger scale institutional strategic activities.

Importantly, we did not attempt to assess the overall value of QR but rather to investigate only this previously understudied area: how the flexibility of QR can be used by individual researchers.

Findings

We found that QR supports individual researchers in a variety of ways and identified QR’s three most significant contributions at a researcher-scale as supporting:

A foundational environmental for nurturing new ideas

This was true in all disciplines, and there were three particular contributions we identified:
• researchers described how sabbaticals allowed the effective combination of teaching and research and how this kept their research expertise broad and current;
• researchers told us about how reducing teaching commitments and providing start-up funding helped establish new researchers;
• using Human Resources (HR) and finance data, we showed that most researchers, even in grant-intensive disciplines, have breaks during which they are not leading grants. The data also allowed us to link QR funding to contracts that bridged research assistants and technicians between periods of grant based employment, providing increased employment stability and retaining their expertise. Figure 3 shows that over a ten year period, up to 8% of posts are bridged between grants.

"Teaching has required that I covered a much wider range of theoretical issues than I might otherwise have done, [thereby] becoming interested in those open new avenues."

“I think having a period of two or three years after the PhD to mature your ideas is very helpful [without that it would have been difficult] to really come up with sort of mature ideas of my own.”

The incubation of new ideas

This was also true in all disciplines and we identified four particular contributions of QR as:

• Providing uninterrupted time allowing the exploration of new subject areas and testing of novel ideas. These novel ideas may lead to research programmes in new areas. Figure 4 shows an increase in the relative rate of publication of working papers in the months after the start of a sabbatical.
• Providing a valuable protected incubation phase for new ideas allowing them to become competitive for external grant support.
• Providing time to situate research findings in their context; to synthesize, re-examine and finalise previous research; or to map the current state of a research field allowing researchers to identify appropriate next steps. Researchers described these benefits and we can just see the suggestion of an increase in book and chapter publication rate in Figure 4 soon after the start of sabbaticals.
• Providing a counterweight to the discipline-specific structure of university departments and external funding; and supporting interdisciplinary collaboration.

“[Without sabbaticals] I don’t get uninterrupted spells of time to think. My day is just broken up into one-hour or two-hour slots of doing stuff, and it’s very targeted. The value of just uninterrupted time to read and go follow down rabbit holes and expand...”

The entire lifecycle of research in areas throughout research

This was true primarily in the arts, humanities, some social sciences, and also in other theory-based disciplines such as mathematics and computer science, and in pockets of research in other disciplines. Figure 5 shows all the publications from Cambridge over the last ten years and illustrates that while most papers in the clinical and biological sciences acknowledge external funding, there are still papers being published without external funding across all disciplines.
Methodological reflections and limitations

This pilot project concentrated on the University of Cambridge as, although somewhat atypical, it has a huge range of research activities across nearly all disciplines and a culture of delegation of decision making increasing the significance of research-scale activities in comparison to institutional strategic initiatives.

Our efforts to trace the effects of QR funding were complicated by the diverse nature of the benefits – requiring us to combine and triangulate using both qualitative and quantitative approaches. Our investigations were also complicated by the nature of university administration systems which are often unhypothecated and do not delineate which incoming funding supports which activities. We took the approach of looking at institutional discretionary funding and asking whether activities could be expected to increase with increased QR, or decrease with reductions in QR.

Our work was enormously facilitated by access to institutional records and the ability to weave those records together – for example combining sabbatical timings and publications records.

Closing thoughts

Our interviews included nine researchers who were selected because they had written publications that did not acknowledge research funding (one researcher had two such papers selected). The research presented in these papers reflected combinations of all three key contributions of QR outlined above:

- The two papers from the medicine, health and life sciences (where there was the least non-acknowledging research) were an editorial and a primary research study. The first required only the researchers’ time, and the second was enabled by the time to return to data collected with external funding many years previously.
- In the physical sciences, engineering and mathematics panel, one publication comprised of the work of a Master's student using standard equipment in the 'well found laboratory'; and the second was supported by contributions from an industrial partner who was not acknowledged (reflecting a more relaxed attitude to acknowledgement in the past).
- In social sciences, one publication was a chapter of a new edition of a handbook requiring solely researcher time, and the two other publications were re-examinations of data that had been previously collected with external funding where only time was needed to produce the new papers, one for a policymaking audience.
- Both publications in the arts and humanities required only time and library access so could be completed without external funding.

The range of support for these interviewees' publications is illustrative of the ways we outlined throughout this report that QR supports research more broadly as a complement to external funding.

One of the key reasons QR plays such an important role in supporting the generation and incubation of new ideas is that it allows individual researchers the space to think and gives them discretion over what to investigate. This freedom allows a wider range of ideas to be explored and tested than would be the case if external selection occurred at an earlier point. It enables the idea that initially seemed mad to others, but turns out to be transformative, the chance to grow.

Project information

This project was supported by a grant from Research England and in-kind support from the University of Cambridge.

For more information on the project visit: www.bennettinstitute.cam.ac.uk/QR

The full report is available from: https://www.bennettinstitute.cam.ac.uk/value-qr/ & doi.org/10.17863/CAM.72755

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