Research in the higher education sector is funded primarily by the Government, with additional support from charities (particularly for biomedical research), international sources and the private sector. Public funding comes from a range of Government Departments with research budgets at their disposal, but the bulk comes from the Department for Business, Innovation and Science (BIS), which funds research from its science and higher education budgets.

Most of the funding BIS provides for research in higher education institutions (HEIs) is delivered either through non-departmental public bodies such as Research Councils, or through the Higher Education Funding Council for England (HEFCE). The devolved administrations support equivalent funding bodies in other parts of the UK (see boxes 1 and 2).

The dual support system
This division of labour between funding bodies and Research Councils constitutes an organising principle for research funding known as ‘dual support.’ With its origins in the 19th Century, it rests on an idea (known as the ‘Haldane Principle’) that Research Councils and universities should be able to choose which research to support themselves, at arm’s length from any political control. It has evolved into a system that provides multiple points of decision-making about what research should be supported and where resources should be concentrated.

• Higher Education funding bodies provide core funding as block grants to HEIs for research infrastructure and to support their strategic research priorities. The bulk of their recurrent quality-related (QR) funding is allocated through a formula that takes account both of institutions’ volume of research activity and an assessment of the quality of their research over the previous period.

• Research Councils provide grants to specific research projects and programmes of research. Awards are made, after expert peer review of applications submitted by individual researchers and teams, on the basis of research excellence and potential, and on the importance of the proposed topic.

• Each Research Council seeks to achieve a balance between ‘responsive mode’ awards made in response to proposals submitted by researchers in any area they choose, and awards for proposals...
that relate to strategic priorities for which councils may earmark funds. Councils’ priorities are set out in their strategic plans, which are developed through extensive consultation with the academic community and other stakeholders.

Ensuring the full costs of research are funded
The dual support system came under strain in the 1980s and 1990s as core funding declined markedly in relation to the amount provided as project grants. The two funding streams were not meeting the full costs of the research and the UK research base was running a large recurrent deficit. In 2002 the Government reviewed the dual support model and concluded that changes were required to address under-investment in infrastructure. In its 10-year Science and Innovation Investment Framework (2004), the Government reiterated its commitment to a dual support system, but signalled that HEIs would be asked to recover more of the full economic costs (FEC) of research and to manage their research portfolios in a more sustainable way (see box 3). The FEC regime attributes costs to projects under the three headings:

- directly incurred costs: explicitly-identifiable costs arising from the conduct of a project, including equipment, staff, travel and subsistence;
- directly allocated costs: related to resources that are used by a project but shared by other activities, such as accommodation and the contributions of principal investigators;
- indirect costs: non-specific costs charged across all projects, including administrative and library costs.

Directly-allocated and indirect costs are calculated using standard rates established by the university through the Transparent Approach to Costing (TRAC) methodology that underpins the FEC regime. Universities then use the results of their calculation of project costs under all three headings to set the price for the research projects.

Box 1: Funding bodies
There is a devolved system of funding for higher education. The funding councils for England, Scotland and Wales are the:

- Higher Education Funding Council for England (HEFCE)
- Scottish Funding Council (SFC)
- Higher Education Funding Council for Wales (HEFCW)

BIS supports HEFCE, while the Scottish and Welsh equivalents are supported by the Scottish Government and Welsh Assembly Government respectively. In Northern Ireland, funding comes directly from the Department for Employment and Learning (DELN). Over £2.2bn was allocated in 2008/09 by the four funding bodies in recurrent and capital funding; the largest share of this, £1.9bn, came from HEFCE.

Box 2: Research councils
The UK’s Research Council system is supported by the Government’s Science Budget. BIS has statutory control of the councils, supported by the Director General of Science and Innovation. There are currently seven Research Councils:

- Arts and Humanities Research Council (AHRC)
- Biotechnology and Biological Sciences Research Council (BBSRC)
- Engineering and Physical Sciences Research Council (EPSRC)
- Economic and Social Research Council (ESRC)
- Medical Research Council (MRC)
- Natural Environment Research Council (NERC)
- Science and Technology Facilities Council (STFC)

They are collectively represented by an umbrella organisation, Research Councils UK (RCUK).

The Research Councils’ expenditure for 2008/09 totalled nearly £3.4bn (ranging from the AHRC’s £122m to the EPSRC’s £796m), almost all of which comes from the Science Budget. A large part of that money is distributed to universities, but significant sums also go to institutions run by the Research Councils, to large-scale international collaborations and to independent research organisations in the UK.
they wish to undertake. The proportion of the FEC that universities recover will depend on the price that they set. Research Councils currently pay 80% of the FEC of the research projects they fund, which is intended to rise to 100% in the next few years. Government Departments, however, are now expected to pay 100% of the FEC.

There is a broad consensus in the sector that the move towards the FEC approach is beneficial, but some concerns persist as to whether Research Councils’ increased contributions are causing them to fund less research, about the use of funding body money to meet the balance of support, and about how money is dispensed to departments through university administrations.

* Wherever possible, the figures in the diagram are for the latest available year, 2008–09; figures from earlier years (2006–07 or 2007–08) have been used otherwise. Information about sources for this financial data can be found at www.rin.ac.uk/making-sense-funding

Box 3: TRAC sustainable management

The guidance document *An overview of TRAC* defines sustainable management as follows:

‘An institution is being managed on a sustainable basis if, taking one year with another, it is recovering its full economic costs across its activities as a whole, and is investing in its infrastructure (physical, human and intellectual) at a rate adequate to maintain its future productive capacity appropriate to the needs of its strategic plan and students, sponsors and other customers’ requirements.’
From RAE to REF
QR funding is another area undergoing major reform. The purpose of the Research Assessment Exercise (RAE), first conducted in 1989, was to enable funding bodies to derive a formula through which to allocate funds to institutions selectively and for extensive periods to promote stability. The system’s focus on rewarding performance is claimed to have had a positive effect on the volume and quality of research outputs. However, so profound has been the influence of RAE scores on universities’ reputation and ranking that immense time and effort has been put into maximizing scores. Concerns about the intensiveness of the system also played into fierce debates around the funding bodies’ policies, including the degree of selectivity in funding (how much is awarded to top research universities as opposed to others).

In 2006 the Government announced its intention that the RAE should be replaced after 2008 with a new assessment system to be termed Research Excellence Framework (REF). This was intended to reduce the administrative burden on HEIs, make less use of academic panels to judge research quality and more use of statistics, including the number of times research is cited by other researchers (known as bibliometrics) and departments’ external research income. Following two rounds of public consultation in 2007 and 2009, and a series of pilot projects, HEFCE significantly modified the proposal: the use of bibliometric indicators will feature less prominently than initially suggested; instead, the REF will be essentially a process of expert review, informed by indicators where appropriate; it will thus bear much similarity to the RAE. However, one important innovation will be the incorporation into the new assessment system of measures aimed at evaluating the impact of research on the UK economy, society, public policy, culture and quality of life. Further pilot projects are being run to test and develop the approach to impact evaluation; these will conclude in the autumn of 2010. On that basis, it is anticipated that the REF will be introduced in 2014.

Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIS</td>
<td>Department for Business, Innovation and Science</td>
</tr>
<tr>
<td>FEC</td>
<td>Full economic costs</td>
</tr>
<tr>
<td>HEFCE</td>
<td>Higher Education Funding Council for England</td>
</tr>
<tr>
<td>HEIs</td>
<td>Higher education institutions</td>
</tr>
<tr>
<td>QR</td>
<td>Quality-related [funding]</td>
</tr>
<tr>
<td>RAE</td>
<td>Research Assessment Exercise</td>
</tr>
<tr>
<td>REF</td>
<td>Research Excellence Framework</td>
</tr>
</tbody>
</table>

About the Research Information Network
The Research Information Network has been established by the Higher Education funding bodies, the Research Councils and the National Libraries in the UK. We investigate how efficient and effective the information services provided for the UK research community are, how they are changing and how they might be improved for the future. We help to ensure that researchers in the UK benefit from world-leading information services so that they can sustain their position among the most successful and productive researchers in the world.

We provide policy, guidance and support, focusing on the current environment in information research and looking at future trends. All our publications are available on our website at www.rin.ac.uk

Useful resources

- Research Assessment Exercise website www.rae.ac.uk
- Research Excellence Framework website www.hefce.ac.uk/Research/ref
- Research Councils UK www.rcuk.ac.uk
- The financial information in this document is derived from a variety of sources, which are detailed at www.rin.ac.uk/making-sense-funding