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Higher Education Funding Council for England





Assessing research quality, impact and environment

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Content of the presentation

- Assessment in context: the UK environment
- The Research Excellence Framework: overview
- Elements of assessment: quality, impact and environment
- Some conclusions

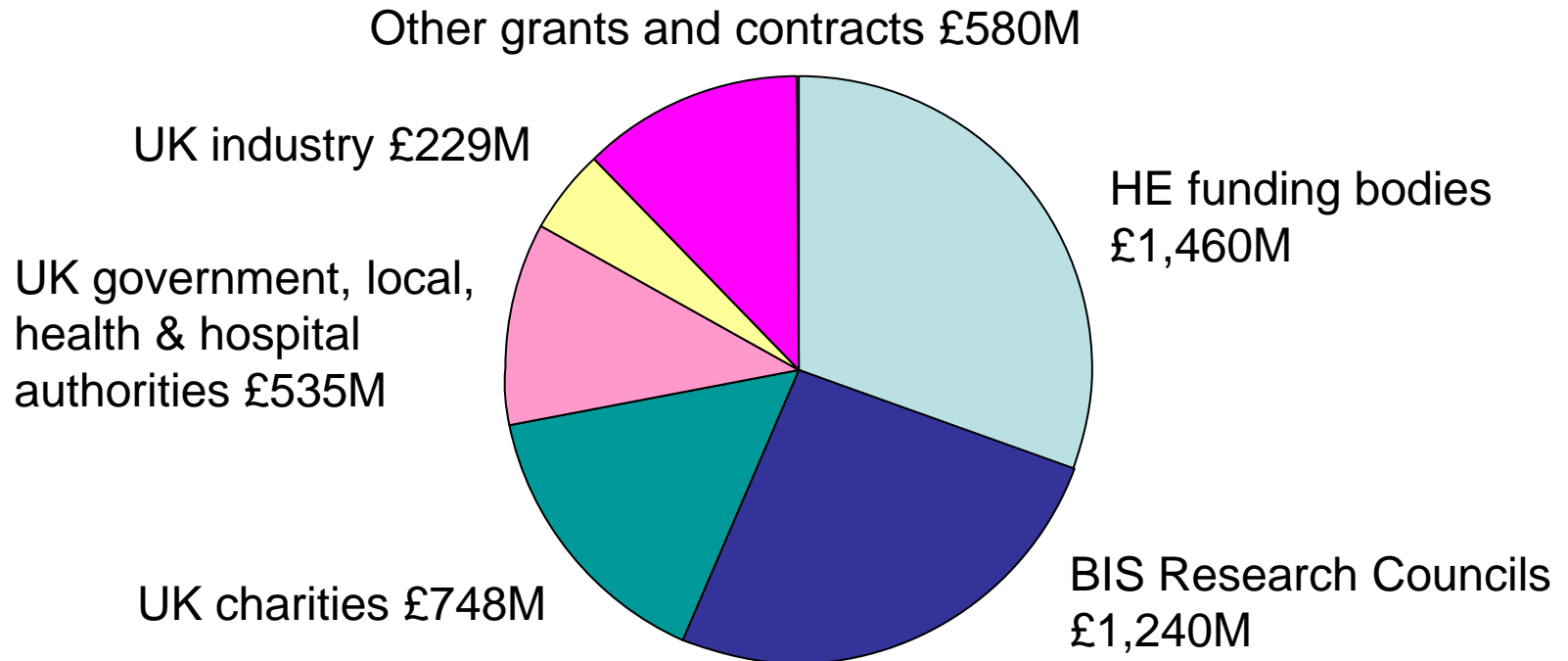
Assessment in context: the UK environment

Policy and structure:

- Excellent research is a driver of economic growth and social wellbeing: this justifies public investment
- Publicly funded research undertaken mostly within universities, not in separate institutes
- Universities are autonomous bodies receiving substantial public funding

Sources of research income for English HEIs 2008-09

Total=£4,793 million



Source: HESA Finance Statistics Return 2008-09

The UK environment: funding for research

The science and research budget is allocated as two funding streams of roughly equal size (“dual support”):

- Research council grants for projects and programmes, largely specified by the councils
- Funding council grants to cover basic infrastructure and “blue skies” research, and to underpin work funded from other sources
- Further important funding streams are allocated by research charities and by the National Health Service

Principles of HEFCE funding

- Funding is allocated as a block grant. We fund whole institutions.
- Funding is selective by reference to robust quality judgments
- We fund the capacity to produce research of the highest quality wherever it is found
- Our process is robust, transparent and based on clearly defined criteria

HEFCE research funding

We allocate grant to some 130 universities and colleges in England.

But the allocation is highly concentrated:

- 35% goes to 5 Universities
- Another 36% to the next 15%
- The last 8% is shared by 50 institutions

Objectives of the REF

The primary objective of the REF is to inform selective allocation of our grant.

But it has other important functions:

Benchmarking and information: establishing reputational yardsticks

Encouraging and rewarding the application of research findings

Accountability: demonstrating that public investment in research is effective

The REF – key features

- A process of expert review, based on written submissions and informed by indicators.
- Assessment conducted by panels of experienced researchers (mainly UK) and research users
- All panels have the same evidence set and the same basic approach to assessment

REF – key features (2)

- Assessment of all research, at the level of coherent bodies of work (units of assessment) – 36 panels in 4 main groups.
- Each submission describes the research activity of one HEI (or, in a few cases, a collaboration) in one subject field over a 6 year period

REF – key features (3)

- We embrace a wide definition of research:
 - *A process of investigation leading to new insights*
 - Research of all kinds may be submitted – from basic through to applied
- Assessment in three distinct elements:
 - Quality of outputs
 - Economic, social and public policy impact
 - Research environment

The REF framework

Outputs

Quality of all types of research



Expert review
informed by
bibliometrics

Impact

Economic, social, cultural
and quality of life benefits



Narrative
statement and
case studies,
supported by
indicators

Environment

Quality and sustainability of
the research environment



Narrative
supported by
indicators

Building the quality profile

For each submission the panels will award a profile showing proportion of activity reaching “starred” quality levels (1* to 4* and unclassified). Note: this does not require the judgements on the quality of individual staff.

The profile is built by combining sub-profiles for the three elements.

Starred level definitions

Four star: Quality that is world-leading

Three star: Quality that is internationally excellent

Two star: Quality that is recognised internationally

One star: Quality that is recognised nationally

Unclassified: Quality that falls below the standard of nationally recognised work.

Overall Quality Profile

Quality Level	4*	3*	2*	1*	u/c
% of the submission	12	36	42	10	0

Outputs

4*	3*	2*	1*	u/c
12.8	32.5	43.3	11.4	0

65%

Environment

4*	3*	2*	1*	u/c
0	40	40	20	0

15%

Impact

4*	3*	2*	1*	u/c
20	45	35	0	0

20%

Assessing outputs

- For staff selected by the HEI: up to four outputs produced within the assessment period (c. 6 years) are listed for each of them.
- Outputs of all types of outputs eligible if they are the published outcome of research activity
- Staff numbers are the volume measure for funding – requiring four outputs ensures only active researchers are submitted

Assessing outputs (2)

- Core assessment criteria are *Originality, rigour and significance*'
- Statements of user significance are considered where relevant
- Expert review (most panels will read most outputs), informed by citation information (on the cited items only) in certain fields

Assessing Impact

Assessment of research impact:

- Inclusion for the first time of a specific element to assess impact
- This is an essential element in accountability for HEFCE funding
- The aim is to identify and reward the contribution that excellent research has made to the economy and society
- We have consulted widely and have piloted our approach over five fields in a number of universities

The logo for HEFCE (Higher Education Funding Council for England) is located in the bottom right corner. It consists of the lowercase letters 'hefce' in a blue, cursive-style font.

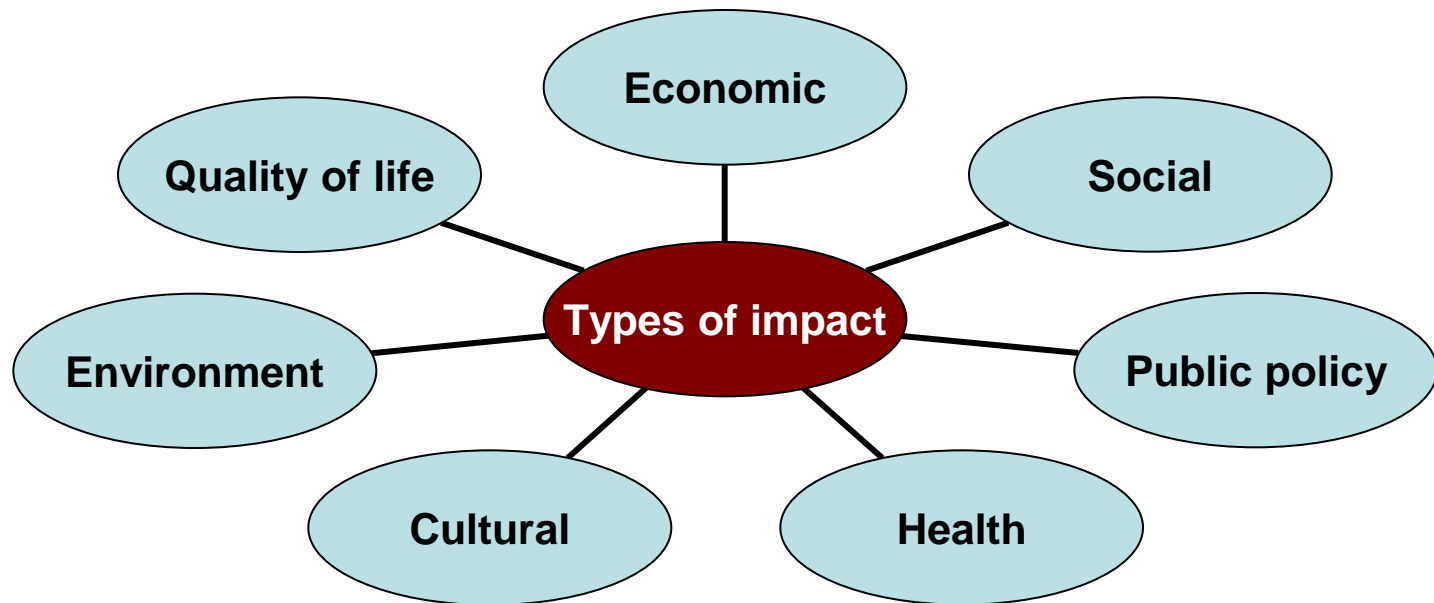
Assessing impact

By “impact” we mean:

How far and in what ways a university has built upon its excellent research to achieve outcomes of demonstrable benefit beyond the academic sphere

We interpret this inclusively...

Impact



Assessing impact

The evidence set for assessing impact:

- Case studies (number in proportion to staff submitted)
- Information about how the unit has supported and enabled impact (may include some statistics)

Assessment approach:

- Criteria of *Reach and Significance*
- Assessment panels augmented by additional “users”

Principles of assessing impact

- Impact built on high quality research
- A rounded assessment at the level of whole units (not individual outputs or researchers)
- Impact from curiosity-driven and long term research as well as work with more immediate application
- Impacts that are visible during the assessment period: the underpinning research could have taken place 10 to 15 years ago
- Showcasing the success of UK research in contributing to the economy and society

Challenges of assessing impact

- Time lags
- Attribution
- Ensuring the quality of underpinning research
- Corroboration
- Diverse range of impacts across the spectrum of disciplines
- Burden – on institutions and users
- Recruiting user representatives across all panels

Assessing research environment

The evidence set:

- A structured template to describe:
 - Overview
 - Strategy
 - People (research staff and research students)
 - Income, infrastructure and facilities
 - Collaboration and contribution
- Standard data on research income (by source), research doctoral degrees awarded, and early career researchers

Criteria of *Vitality and Sustainability*

The UK approach: summary

- Periodic whole system assessment focussed on identifying the very best research
- A large population: RAE 2008 considered 55,000 staff in 1850 departments in 130 institutions (England)
- Peer review based on written submissions: no visiting, no additional “metrics”
- Output is graded quality profiles for all submitted departments used to drive funding allocations for six years

The UK experience: some conclusions

- Performance based funding (or to a lesser extent systematic whole system assessment with public outcomes) is an effective way of driving up quality and influencing how researchers and research managers behave
- But it will always have unintended outcomes too and we must be aware of these

Some conclusions (2)

- The assessment approach must be tailored to *what we want to achieve* and to national systems and cultures
- The assessment approach must carry the confidence of the researchers: ideally, done *by them* not *to them*
- We consider that peer review remains the strongest approach to assessment giving a rounded picture of the achievements both of a national system and of departments within universities.

Some conclusions (3)

- But peer review is expensive and burdensome - and in smaller systems will need to be conducted over larger subject fields and possibly with more external reviewers
- “Metrics” are promising –especially at whole system level - but not yet sufficiently robust, comprehensive or well accepted to replace peer review.
- We can assess quality and impact. We cannot measure them .