Creating the conditions for UK research to remain world leading

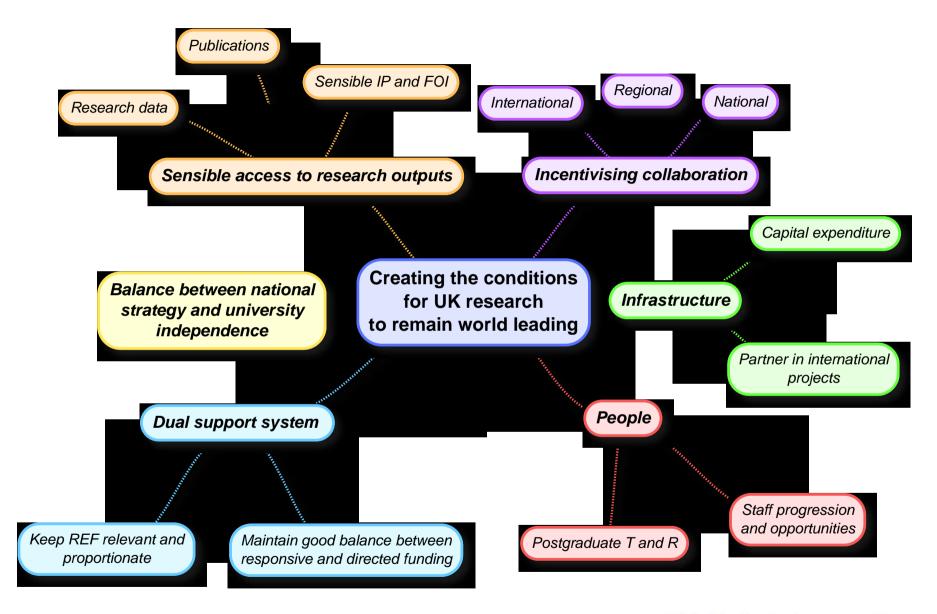
Professor Trevor McMillan

17 September 2012

www.1994group.ac.uk

Introduction

- The UK leads the world in terms of research productivity
- But the landscape for research is changing –
 we must avoid complacency
- A holistic vision of research excellence will be necessary



Funding

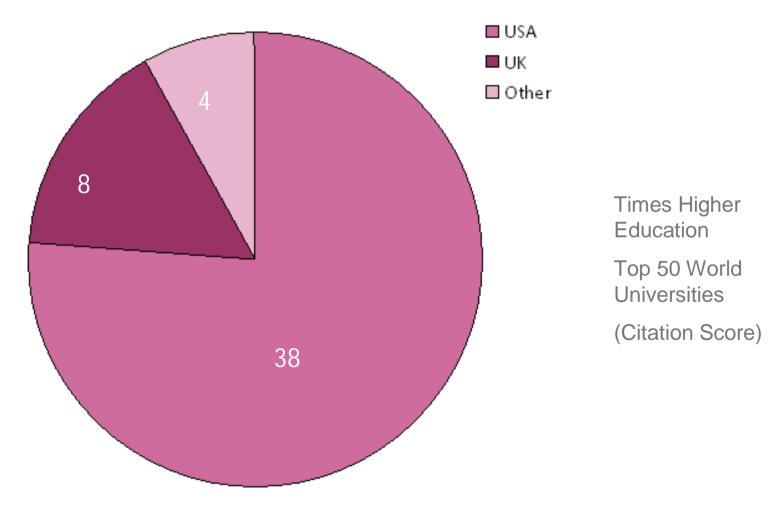
Dual support

- Comparisons with other nations block funding vs.
 Distributive approach
- No 'correct' way to fund research
- UK 'punches above its weight'
- Dual support allows UK to be multi-specialist

Flexibility is key

- Balance between HEFCE and Research Council funding
- Balance between responsive/direct mode funding
- Don't strangle disciplines
- Encourage non-government funding

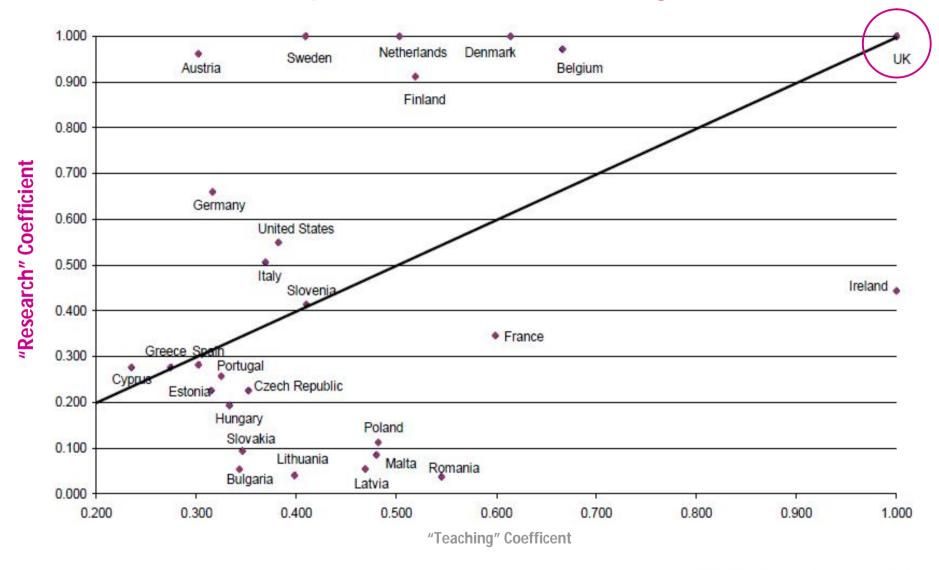
UK 'punches above its weight'



Source: THE (http://www.timeshighereducation.co.uk/world-university-rankings/2011-2012/top-400.html#score_CI|sort_ind|reverse_false)



UK 'punches above its weight'





Funding

Relevant and proportionate REF2014

- Recognise role of both readily-transferable and curiositydriven research
- Recognise the importance of a viable and vital research environment
- Results will be an important window on UK research

Creating the right incentives:

- Impact accelerator grants
- Encouraging collaboration
- Supporting participation in international projects

Generating Research Excellence:

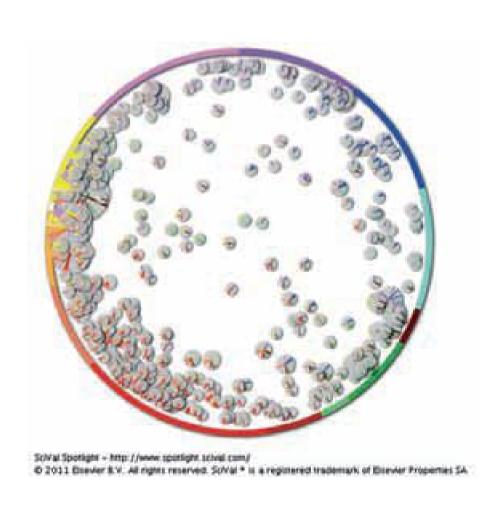
Gross expenditure on research and development (GERD) by performing sector 2008 (%)

Country	Business Enterprise Sector	HE Sector	Government Sector	Private not for profit sector
UK	62.0	26.5	9.2	2.4
USA	72.6	12.8	10.6	3.9
Australia	60.8	24.2	12.3	2.7
Japan	78.5	11.6	8.3	1.6
China	73.3	8.5	18.3	-
Germany	69.2	16.7	14.0	-
Group Average	69.4	16.7	12.1	2.7

Source: OECD Main Science and Technology Indicators Volume 2010/2, 2008 figures



Discipline distribution of competencies in the UK

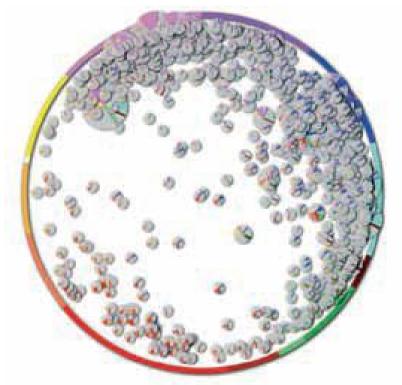


Subject Areas

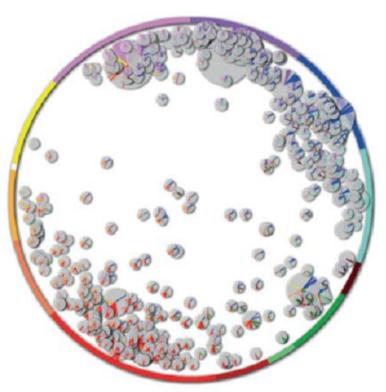
- Maths & Physics
- Chemistry
- Engineering
- Earth Sciences
- Biology
- Biotechonology
- Infectious Diseases
- Medical Specialities
- Health Sciences
- Brain Research
- ☐ Humanities
- Social Science
- Computer Science
- Other

... in China

Japan



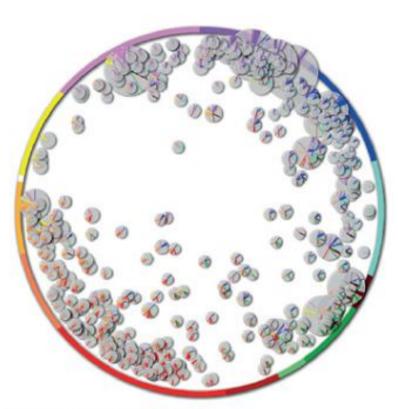
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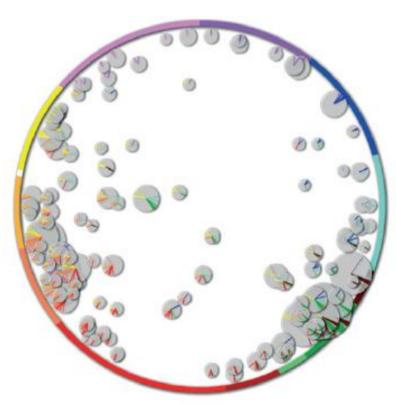
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Germany

Australia

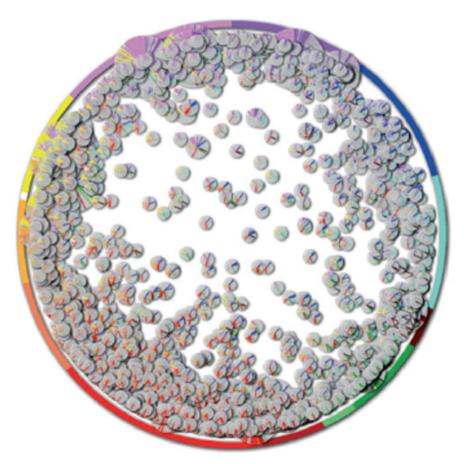


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Wide access to outputs and data indisputably desirable

Free access to publications

Government policy on data access and FOI responses

Outstanding issues:

- A diluted funding pot?
- How to allocate support for Open Access
- International competition
- FOI and IP

Physical Infrastructure

- Capital budgets not ring fenced in CSR
- Welcome occasional release of capital funds
- Encourage and facilitate sharing

Risks

- Need to be realistic about expectations from industry
- Increased uncertainty in HEI forward budgets (surpluses)
- Strategic investment/facilities v core low level equipment

Infrastructure

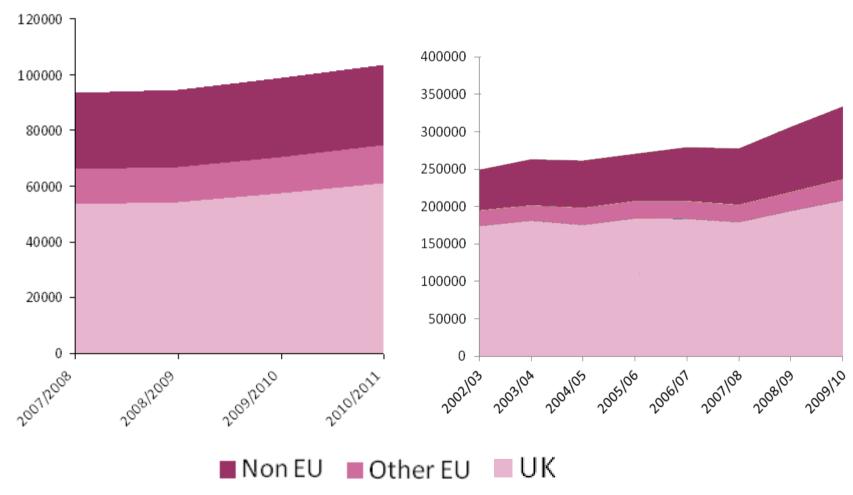
Risk to disciplines due to fees regime and deregulation of student numbers.

People

- Attractiveness of postgraduate study across broad range of disciplines.
- Supporting development of appropriate skill base in postgraduates and early career researchers.
- Benchmark academic career opportunities against global comparators.
- Make the UK a destination of choice for international researchers.



Number of first year postgraduate students (PGR and PGT)



Source: HESA 2007-2011 PG Students by Domicile; HESA, postgraduate research and taught students, full person equivalent (FPE)

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