
***Competing and thriving in
the new HE Environment:***

***Challenges to the HE
Business Model***

Welcome

Chair

Professor Mark E. Smith, Vice-Chancellor, Lancaster University

FSSG's Aim

'To contribute to the higher education sector by improving its understanding, management and communication of its sustainability. It will also support and enhance the understanding and development of management, governance and risk processes in the new regulatory and funding environment for higher education'

FSSG – Aims for today

- Discuss the findings and recommendations of the three research projects:
 - Understanding income cross flows, changes and challenges to the HE business model
 - How institutions fund and sustain medium scale research facilities
 - Different by design – exploring alternative delivery of undergraduate provision, benefits and opportunities

Agenda (1)

10:00 Chair's Welcome / Opening Remarks

10:15 Keynote Speaker – Rebecca Endean, Director of Strategy, UKRI
Challenges for Research Sustainability

11:00 Coffee break

11:20 Session 1 (The John Major Suite)
Understanding income cross flows, changes and challenges to the HE business model

12:40 Lunch

Agenda (2)

13:40 Session 2

Different by Design : Understanding the resourcing of different models for delivering undergraduate teaching

- The John Major Suite

How institutions fund and sustain medium scale research facilities

- The Debenture Lounge (1st Floor)

14:50 Coffee break

15:10 Panel Discussion on the risks and challenges to the HE business model

15:45 Reflections from Breakout sessions

16:00 Chair's Close

Housekeeping

- Emergency exits signposted
- Refreshments and lunch will be provided at the back of the hall
- Wi-Fi is available register on The Cloud

What do we mean by financial sustainability?

‘Planning to help the organisation thrive and allowing it to continue to thrive in the long term’

OfS – ‘...judges that the provider’s plans and protections show that it has sufficient financial resources to fulfil.....the courses advertised and that it has contracted to deliver..... for five years’

Office for
Students 

‘Higher education providers should carefully consider the findings from this report and consider how they can improve transparency and clarity about fees and the cost of going to university’

Nicola Dandridge, Office for Students Chief Executive

How? And what about the sustainability of Research?

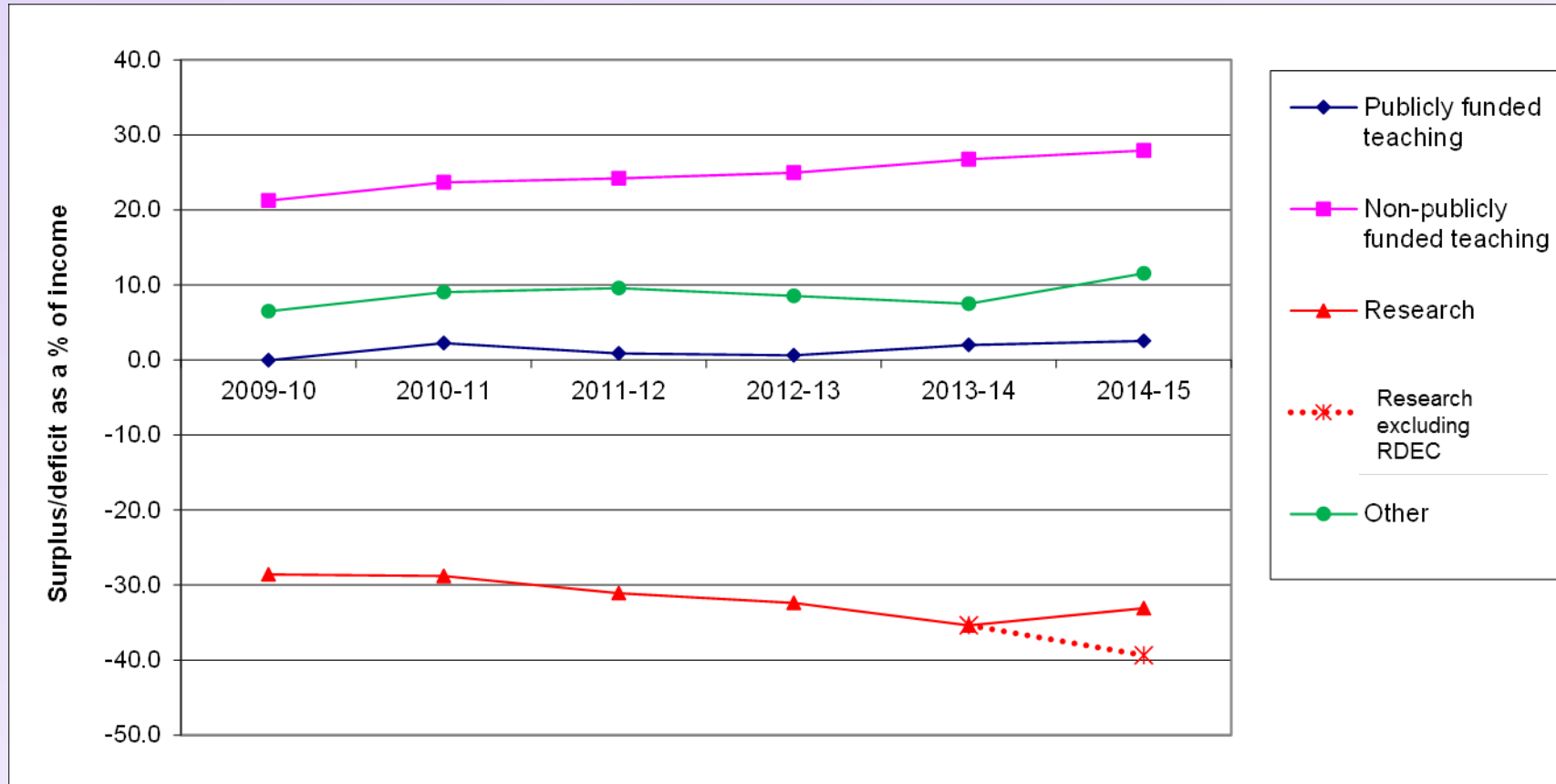
Risks and uncertainty facing the sector

'There continues to be a wide variation in the financial performance and position of individual HEIs'
(Financial health of the higher education sector -2016-17 financial results (HEFCE March 2018))

- Impact of BREXIT
- Changing Policy Agenda
- Upward Pressures on Operating Cost e.g. Pensions
- Recruitment
 - Decline in 18 year old population
 - Overseas
- Increasing Competition
 - Global
 - Domestic
 - Alternative Provision – Degree Apprenticeships

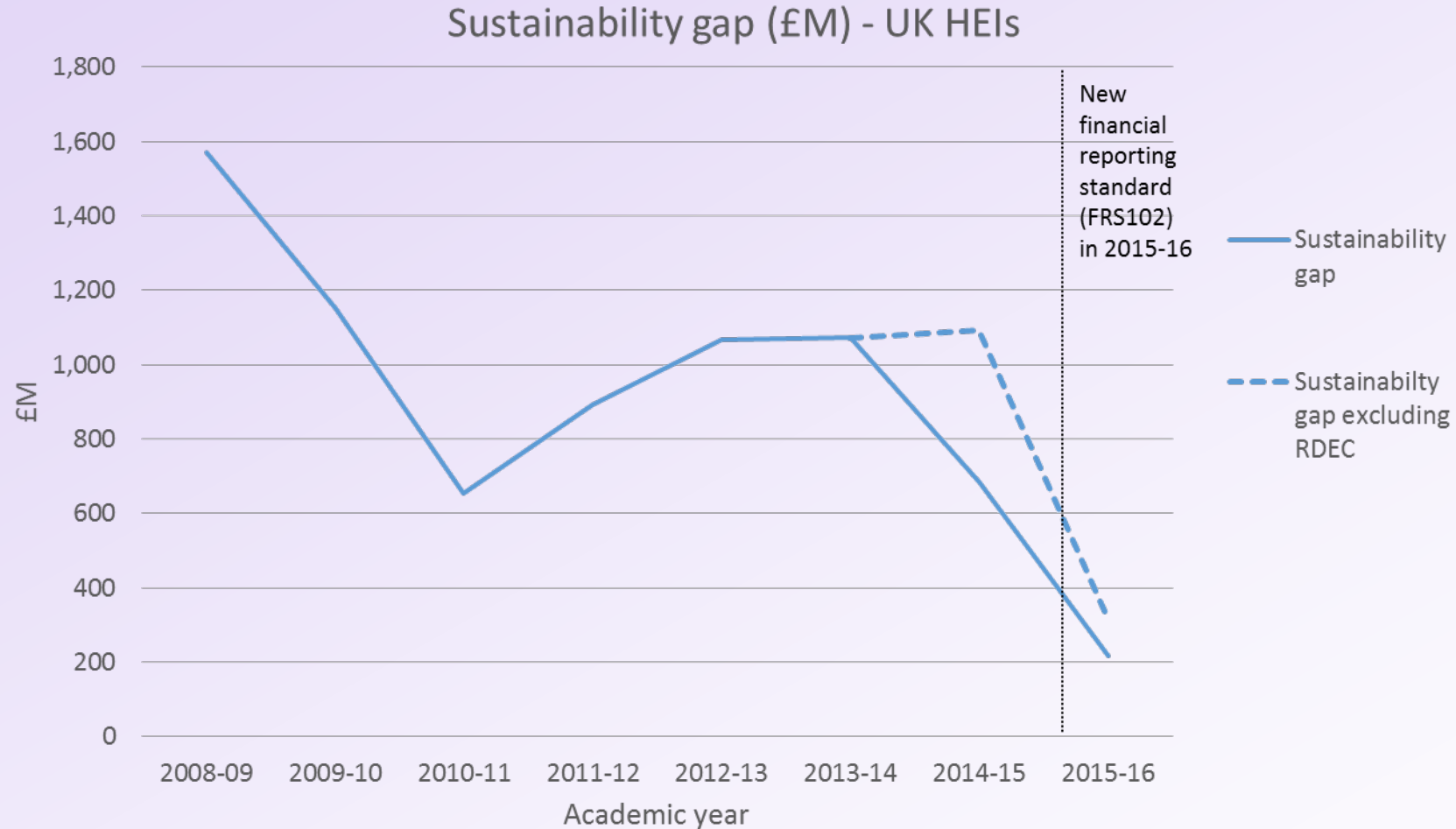
Sector finances by activity

TRAC results trends data for English HEI 2009-10 – 2014/15



Source: HEFCE Financial health of the HE sector 2014/15. 2016/04

Sustainability – what is the issue? (1)



Source: Annual TRAC data, HEFCE\OfS

Rebecca Endean, Director of Strategy, UKRI
'Challenges for Research Sustainability'



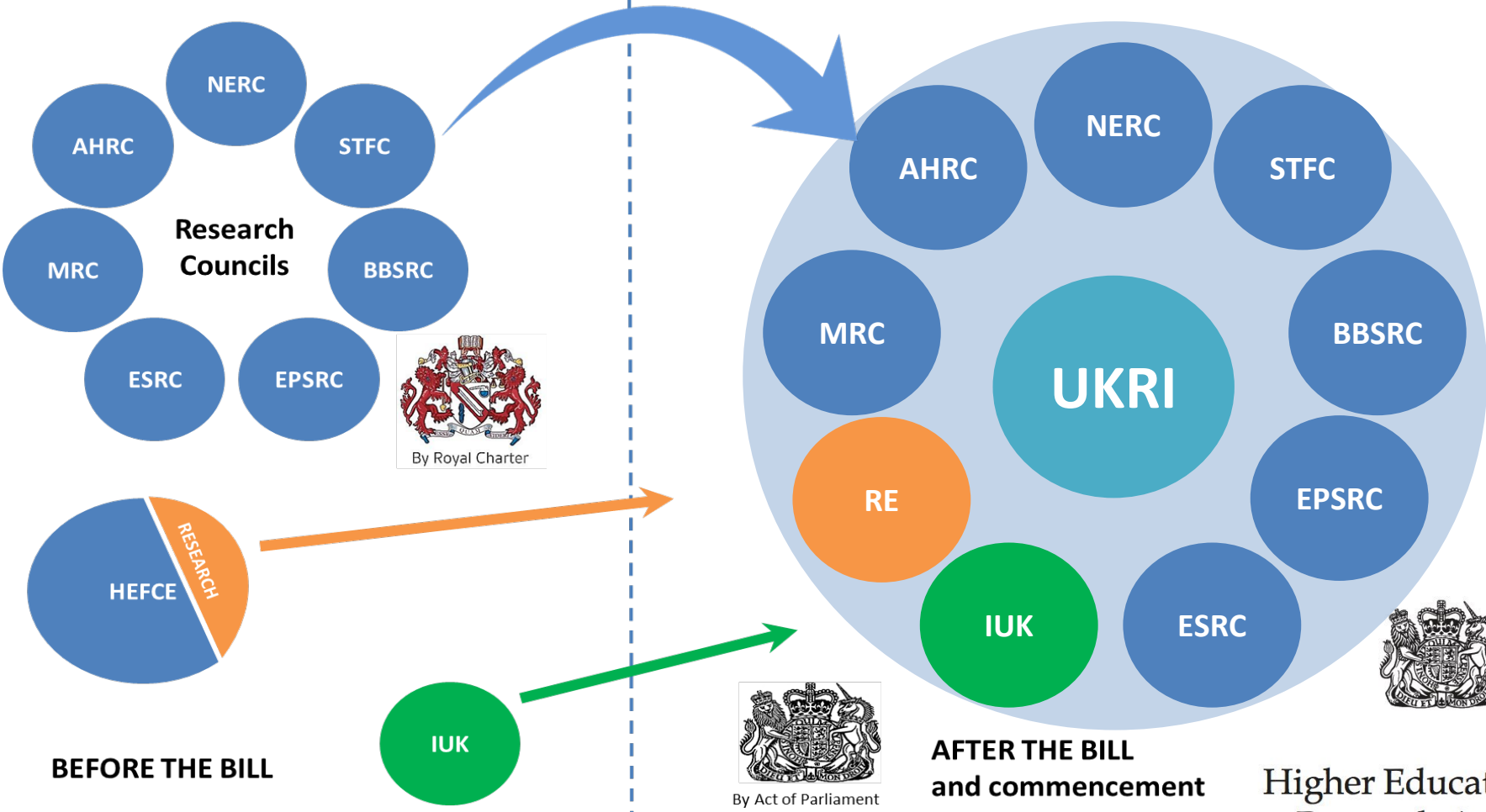
Challenges for Research Sustainability

Rebecca Endean – Director of Strategy, UKRI

Conception of UKRI

Ensuring a successful UK research endeavour

A Review of the UK Research Councils by Paul Nurse



BEFORE THE BILL

AFTER THE BILL and commencement

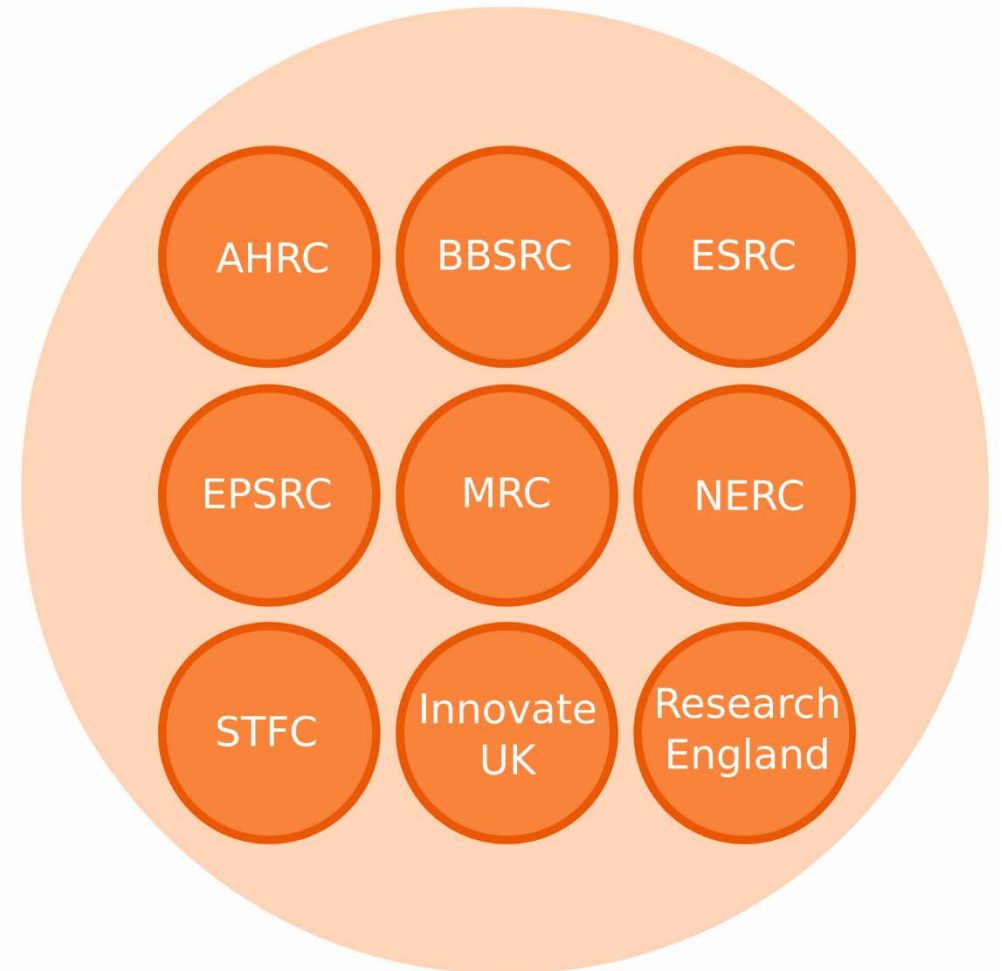
Higher Education and Research Act 2017

What is UK Research and Innovation

UK Research and Innovation, launched on the 1st April 2018, is the new funding organisation for research and innovation in the UK.

It brings together the seven UK research councils, Innovate UK and a new organisation, Research England, working closely with its partner organisations in the devolved administrations.

UK Research and Innovation



The Numbers

- **More than £6.5 billion** in combined budget per year
- **3,900** research and business grants issued every year
- **151** universities receiving research funding
- **38** institutes, laboratories, units, campuses and innovation catapults



Mission

UK Research and Innovation: benefiting everyone through knowledge, talent, and ideas.



Our Values



Collaboration: We will work in partnership with the UK's diverse research and innovation community



Innovation: We will build on international best practice, learn from what doesn't work, innovate and take risks.



Integrity: We will be independent and objective, using rigorous analysis and robust monitoring and evaluation.



Excellence: We will ensure quality, value for money and sustainability are embedded in everything we do.

Foundations for Research and Innovation

To achieve our vision,
we need to get the
foundations right

We will focus on four
key areas:



Leading talent

Nurturing the pipeline of
current and future talent



Openness and transparency

Supporting the development
of a research and innovation
system that is accessible,
transparent and cooperative



A trusted and diverse system

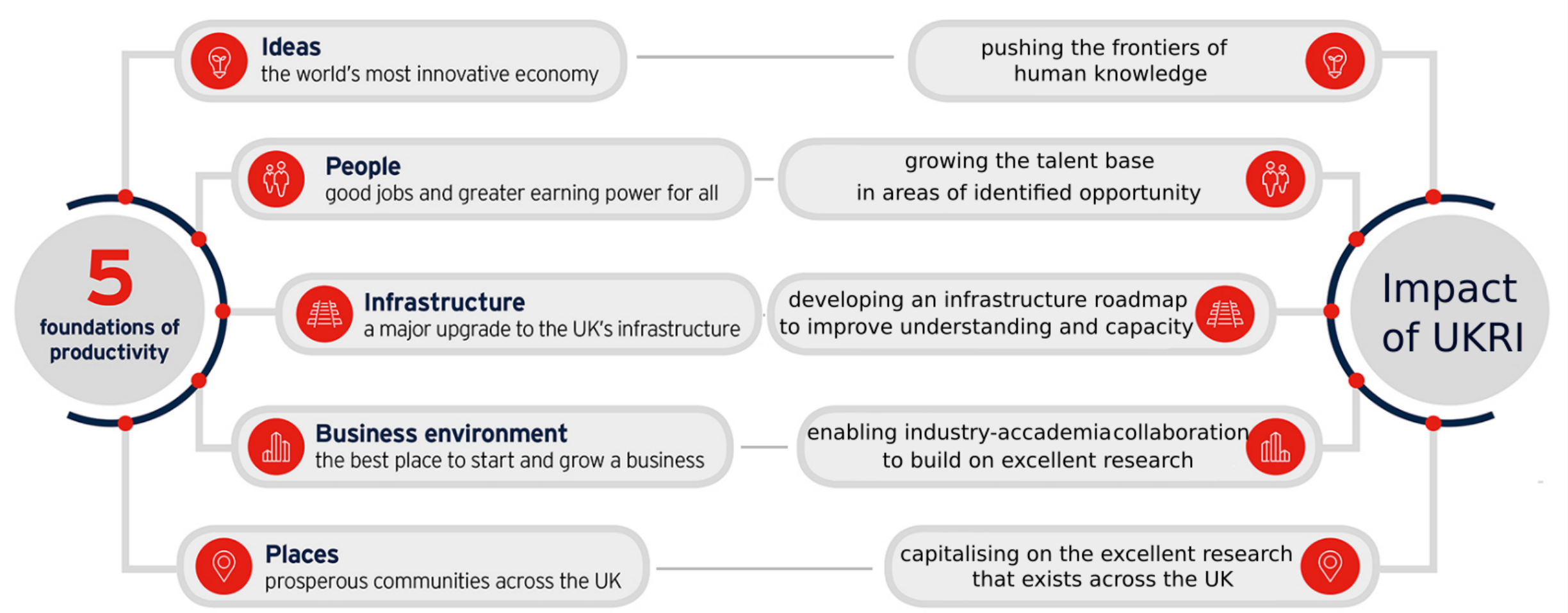
Driving a culture of equality,
diversity and inclusivity providing
the best opportunities for
individuals and teams of people
from all backgrounds to thrive



Research culture

Promoting the highest standards of
research, collaboration and integrity.

Foundations to the Industrial Strategy



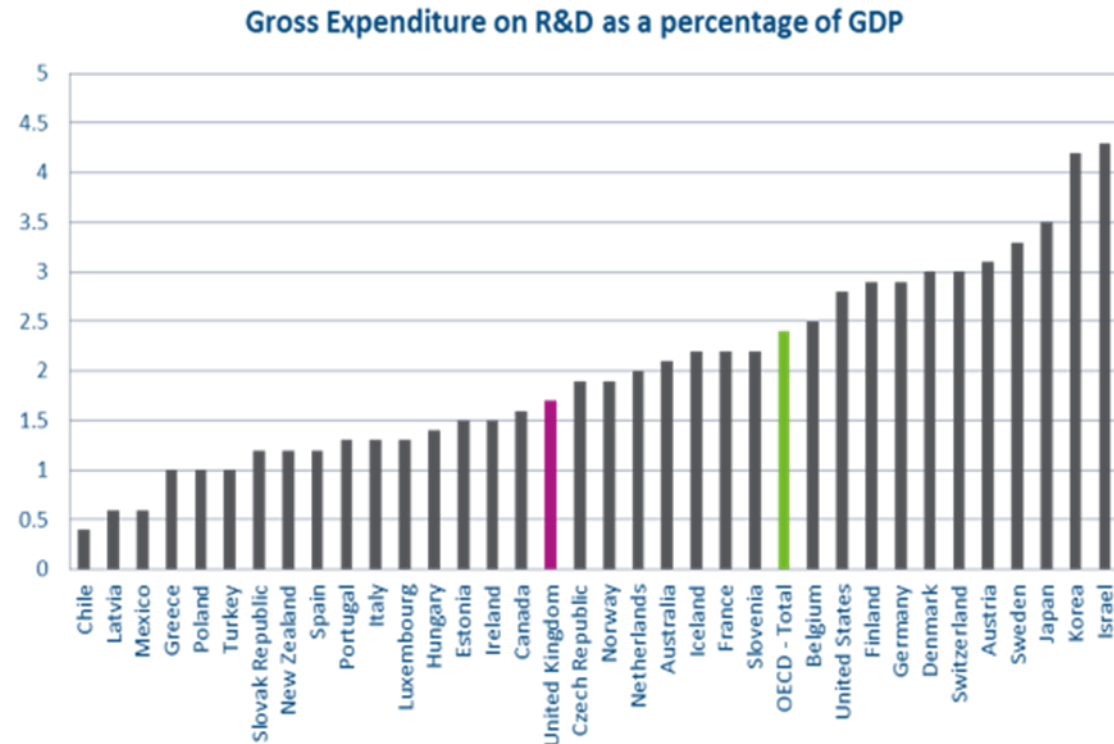
Early priorities for UKRI

- Industrial Strategy Challenge Fund
- Infrastructure Roadmap
- Innovation and Commercialisation
- International Collaboration
- Regional Innovation and Growth
- Strategic Priorities Fund
- Supporting Research and Research Talent
- Supporting Societal Impact
- Working towards 2.4%

Working towards 2.4%

The Government has committed to reaching:

- 2.4% of GDP investment in R&D by 2027
- Reaching 3% in the longer term
- Additional £7bn by 2021/22

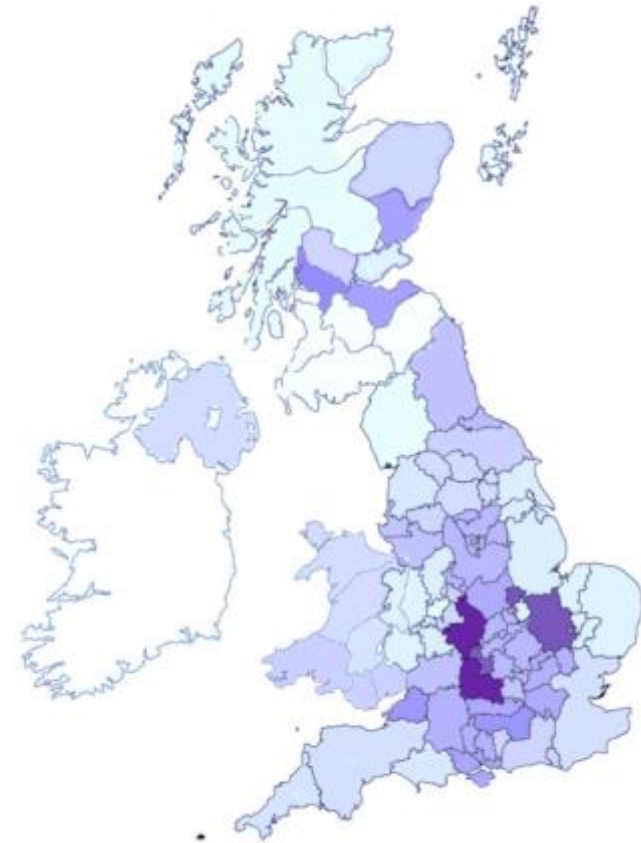


Source: OECD STI. Data is the latest available for each country.

In 2015 UK's expenditure on R&D represented 1.7% of GDP – below the OECD average R&D intensity of 2.4%.

Regional innovation and growth

- £115m Strength in Places Fund
- Supporting regional growth by identifying and supporting areas of emerging R&D strength
- Growing the capacity of existing research excellence and high quality innovation in identified areas



Innovate UK funding intensity per capita in different areas of the UK

Strategic Priorities Fund

- Building on Sir Paul Nurse's vision of a 'common fund'
- Supporting high quality strategic R&D priorities which would have otherwise been missed
- Working with researchers and businesses to identify multi and inter-disciplinary programmes



Supporting research and talent

- Future Leaders Fellowship Scheme - £900 million over the next 11 years, with 6 funding competitions and at least 550 fellowships over the next 3 years.
- New cohorts of PhDs and Knowledge Transfer Partnership positions
- £45m investment to support additional PhDs in AI and related disciplines, increasing numbers by at least 200 extra places a year by 2020-21



Assessing sustainability

We use information from a wide range of sources to understand the health of the HE sector

This is essential for policy design and for making informed decisions on research and innovation funding allocations

The sustainability of the research funding system cannot be understood without understanding the sustainability of the wider sector

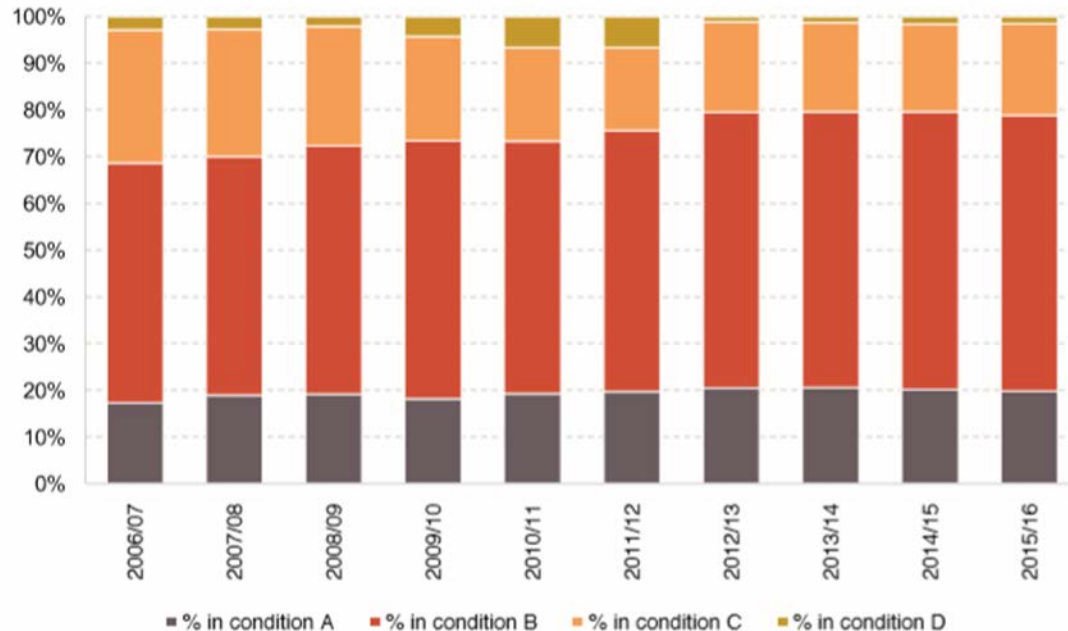
The work of the FSSG has been – and will continue to be – essential for helping us understand these issues!

Estate quality has improved

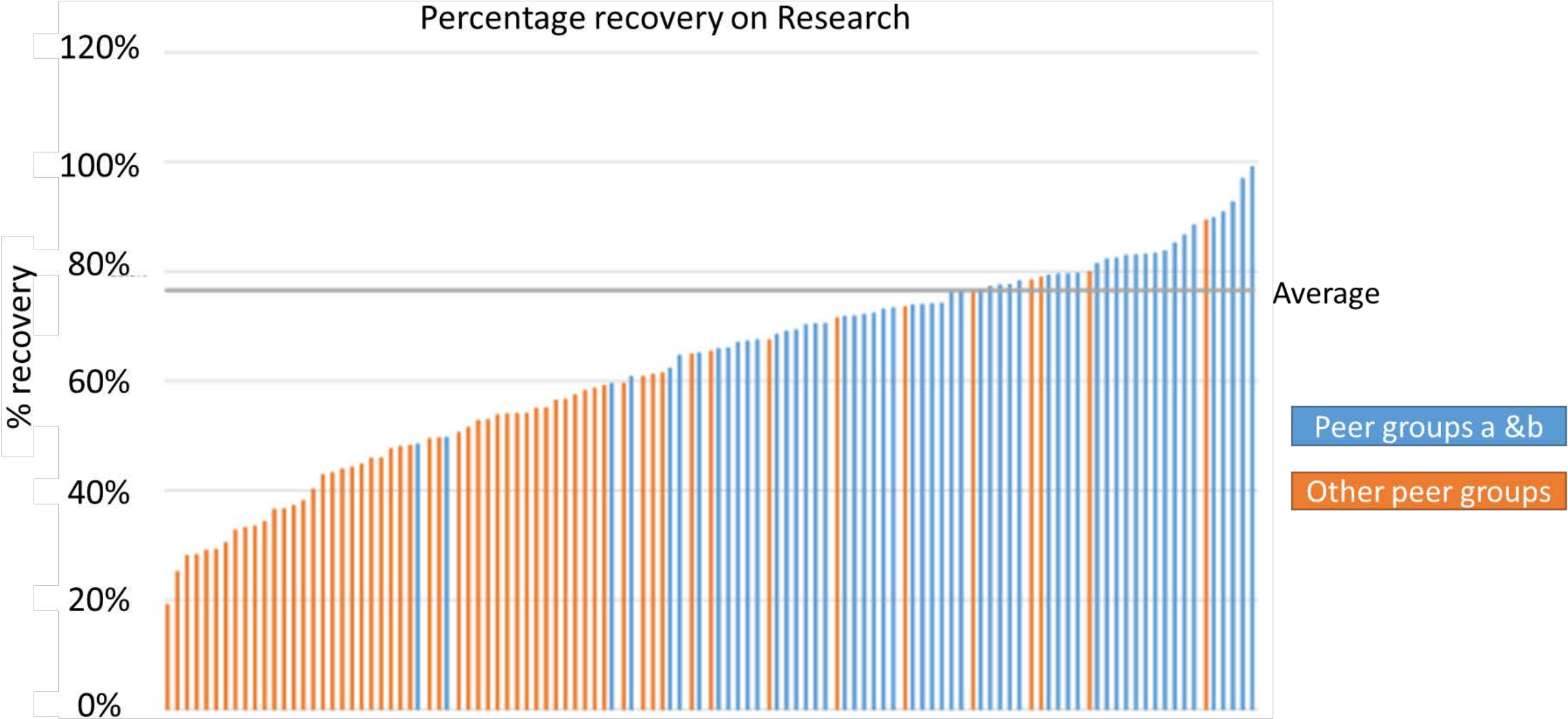
The AUDE Estates Management Report 2017 found **c.9%** annual growth in university capital expenditure in the year to 2015/16, rising to over £3bn p.a. for the first time

Estate quality has remained broadly stable since 2012/13, following previous major improvements that broadly correlated with increases in capital spending.

AUDE KPI - Percentage of GIA in condition A & B



Significant variation exists within the sector

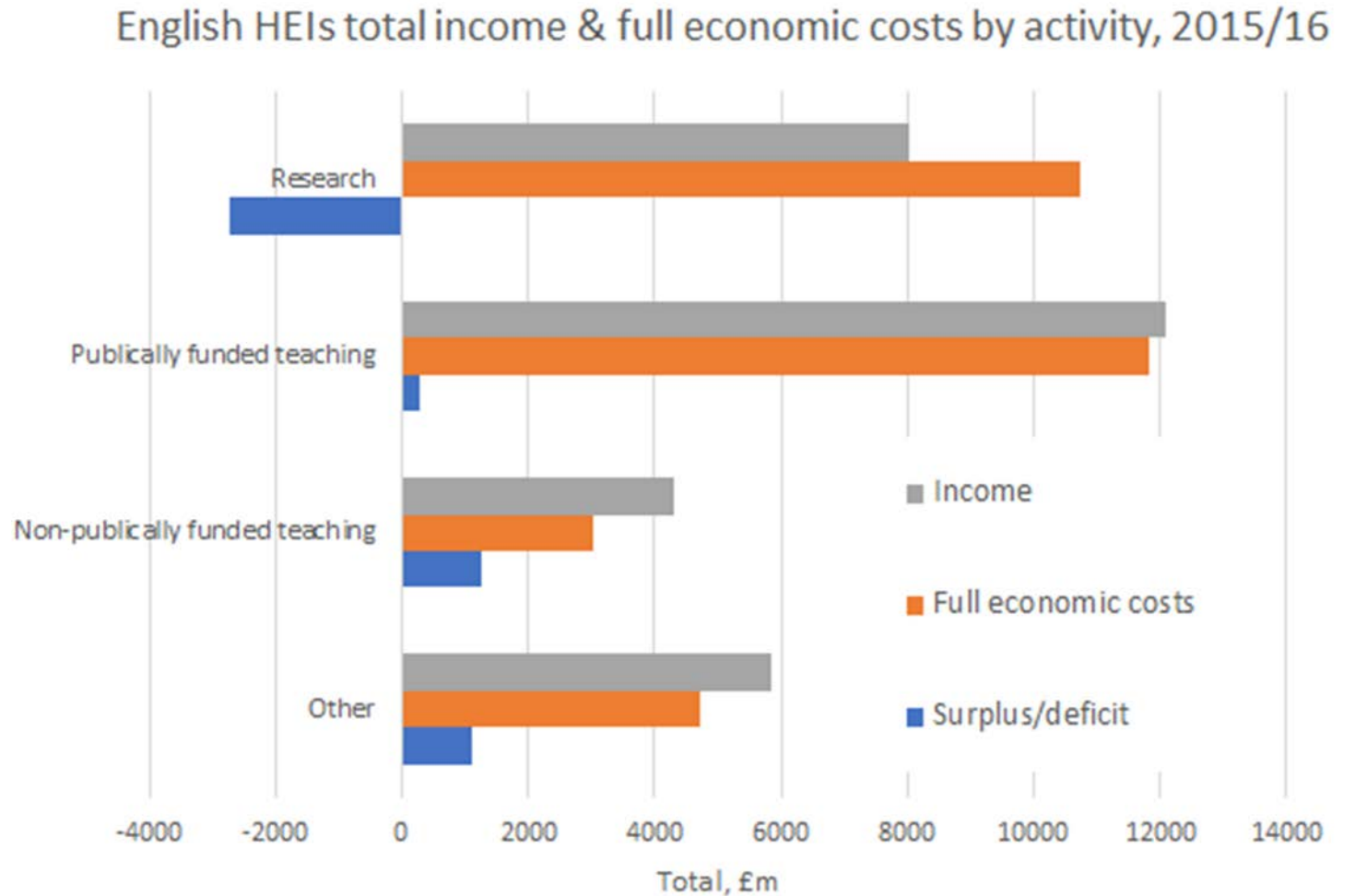


Research depends heavily on cross subsidy

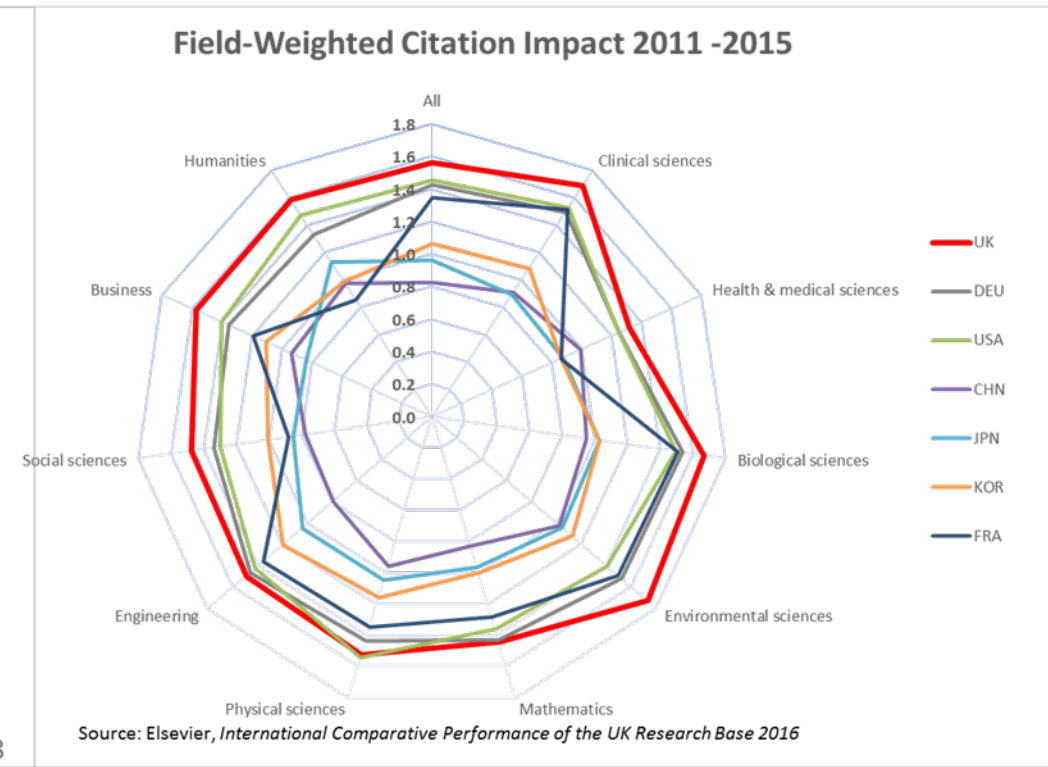
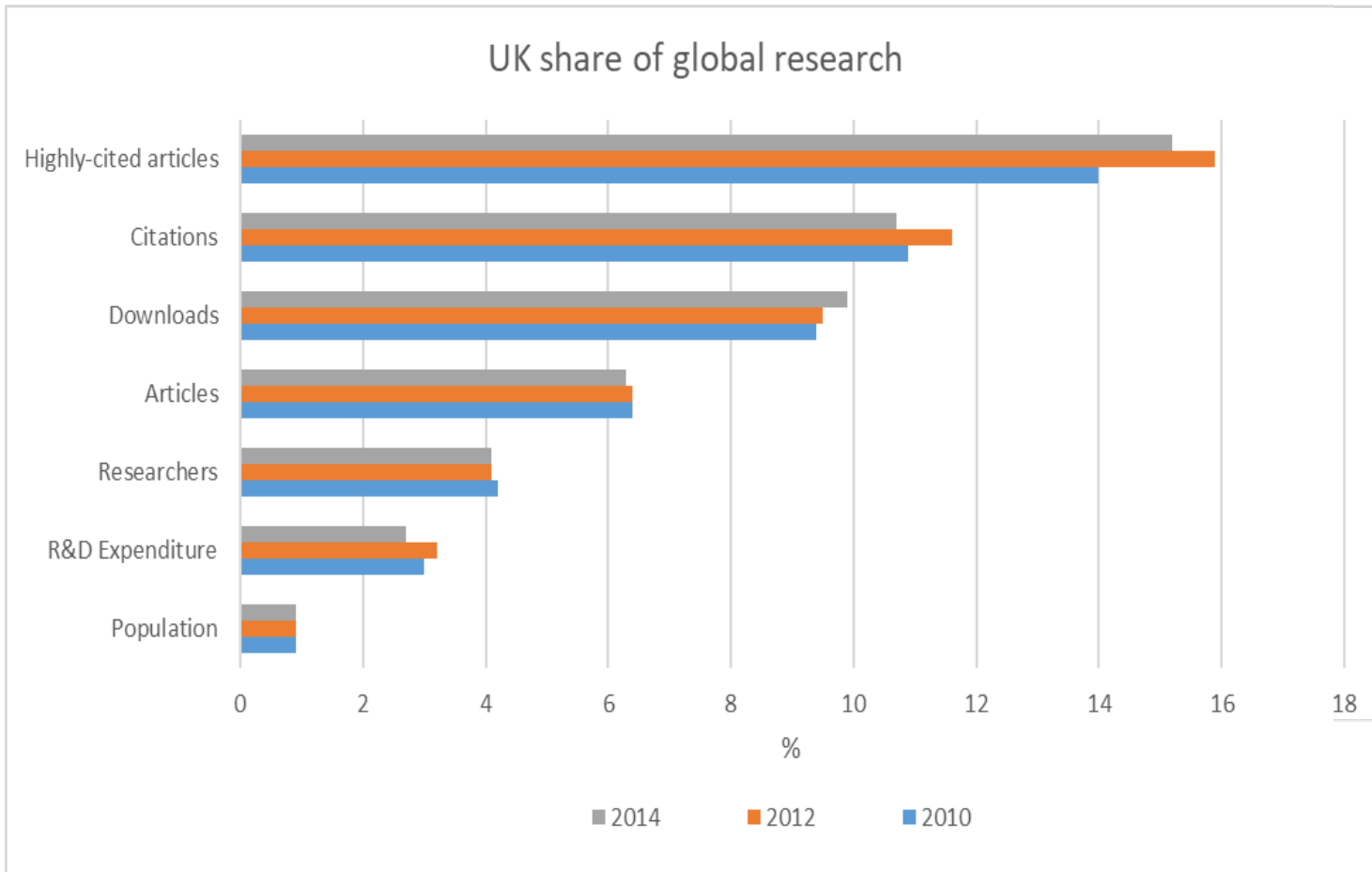
Historically, university research has run at a substantial deficit

The 27% loss on research is largely covered by overseas students

Loss of that cross-subsidy could seriously cut the volume or quality of UK research



The UK delivers an exceptional return on investment



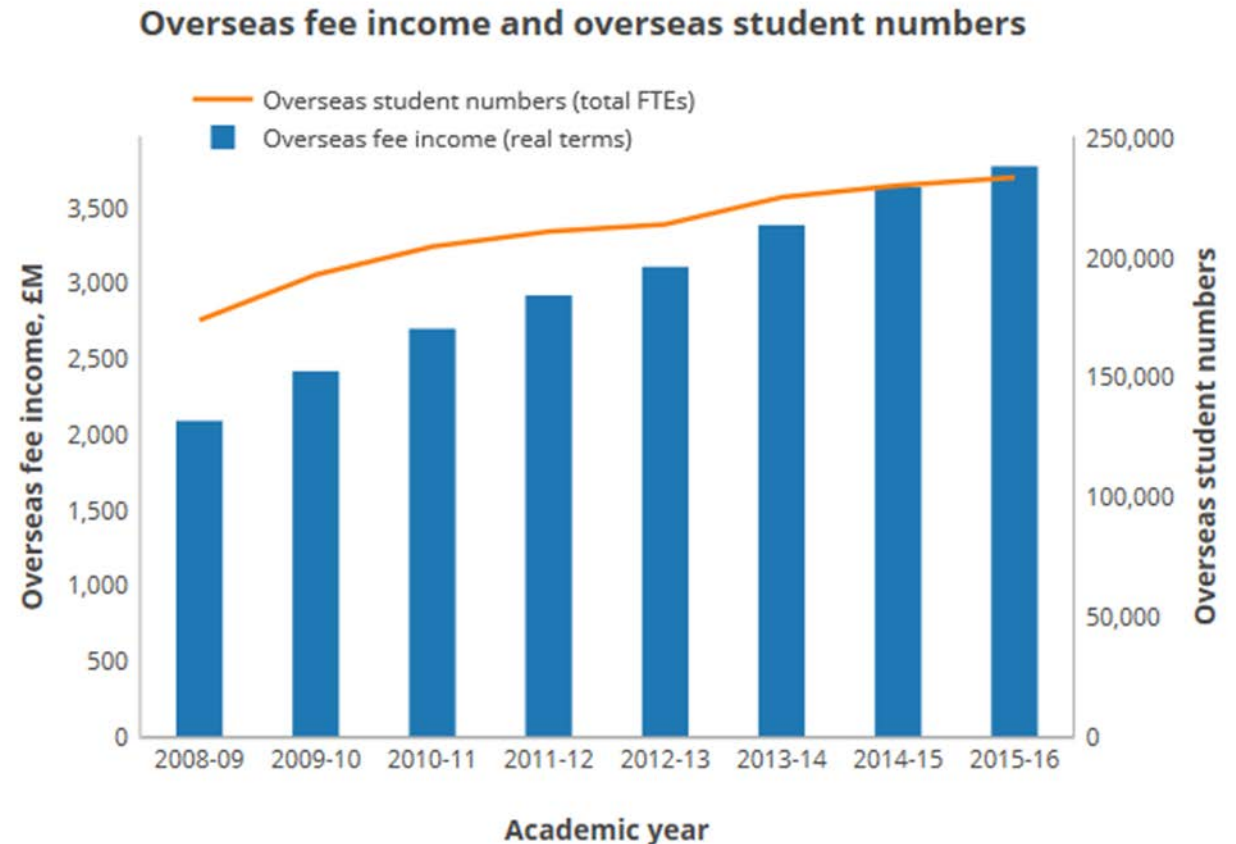
This pattern is the result of a system in which the reputations of universities, and their attractiveness to staff and students, especially overseas students, depends upon quality of the research

Reduction in fee income would increase sustainability risk

There would be sustainability implications from:

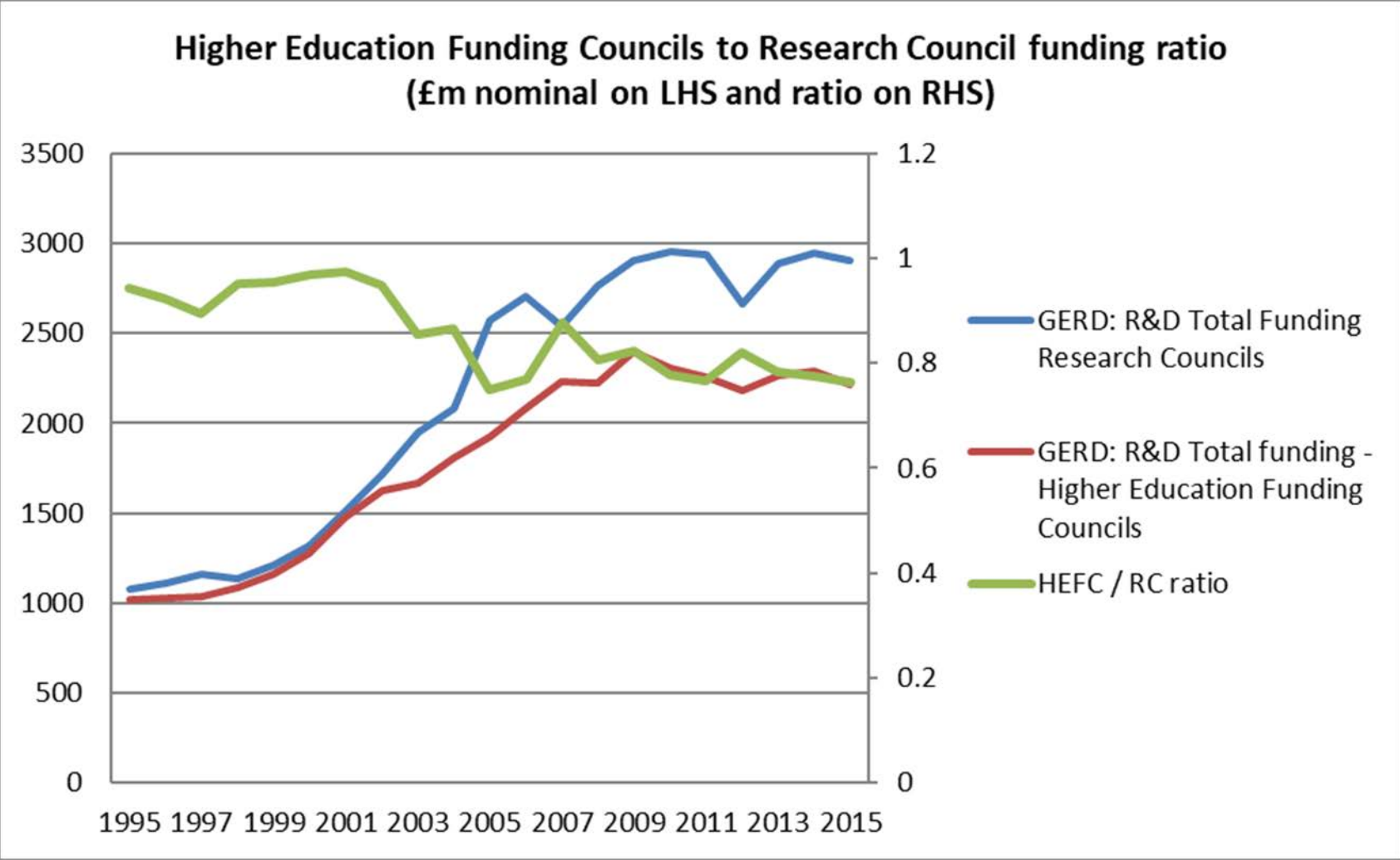
- A reduction in home student fees, or
- from the introduction of new systems of hypothecation that limit cross-subsidisation

This would impact the availability of research funding and put excellence at risk



Dual support review

we are critically assessing what constitutes 'reasonable balance'

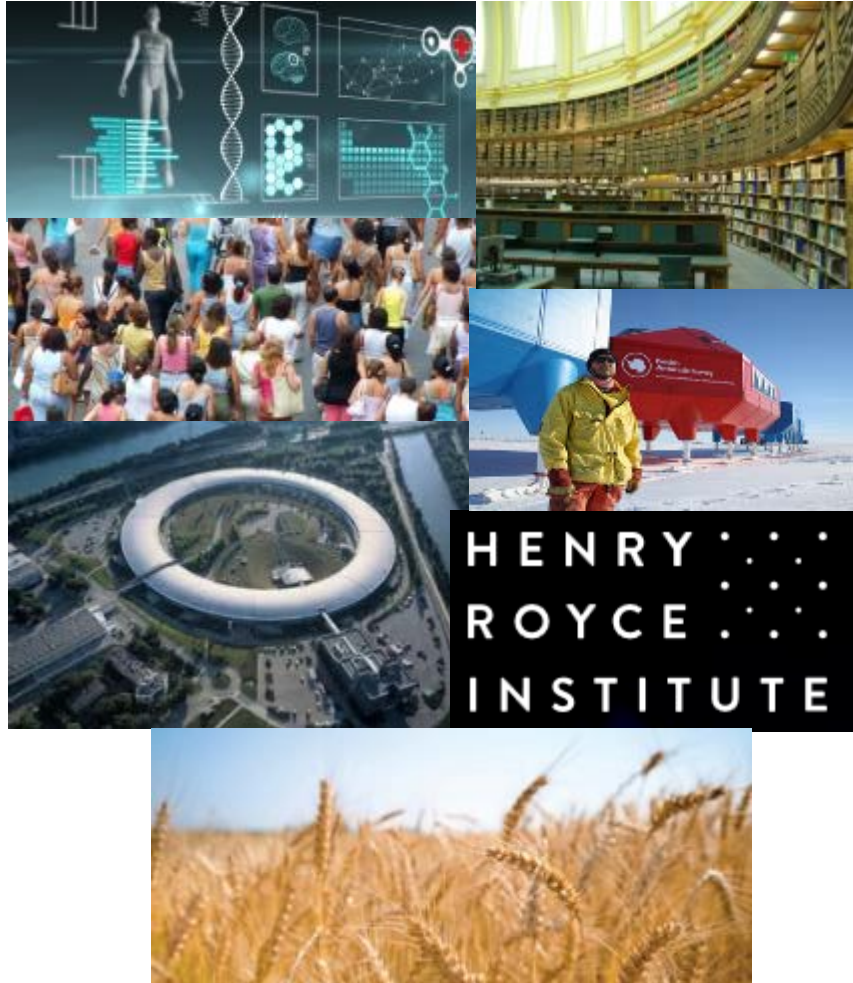


Balanced funding working group

Objectives:

- A. To critically assess and strengthen the evidence base around the strategic case for dual support
- B. To identify and develop early-warning indicators which can signal shifts away from reasonable balance
- C. To review and assess the basis on which England's dual support consequential are calculated
- D. To consider the potential impact of changes to the balance of dual support (e.g. how would classes of institutions respond, would there be a disproportionate effect on some disciplines)
- E. To consider the potential impact of wider changes to HEI funding on what constitutes reasonable balance, in particular in ensuring sustainability

Infrastructure roadmap



- Long-term roadmap based on existing UK infrastructure and future requirements
- Collaborative
- Autumn 2017 to Spring 2019

The roadmap will cover:

- Key assets supporting research and innovation
- Publicly-funded and accessible infrastructure supported by UKRI and beyond
- All disciplines

Programme Objectives

Create a long-term (approximately 2030) research and innovation infrastructure roadmap based on a picture of existing UK infrastructure (including key international facilities in which the UK participates), future requirements (research, economic and social), and resulting investment priorities.

In addition:

- Identify future research and innovation infrastructure capability priorities ;
- Identify opportunities for increasing inter-connectivity;
- Support development of UKRI's overall long-term investment plan;
- Promote the UK capabilities as a global leader in research and innovation;
- Set out the trajectory and major steps needed to reach the long term vision

Landscape Analysis

Currently analysing results of a landscape survey to map UK RIIs

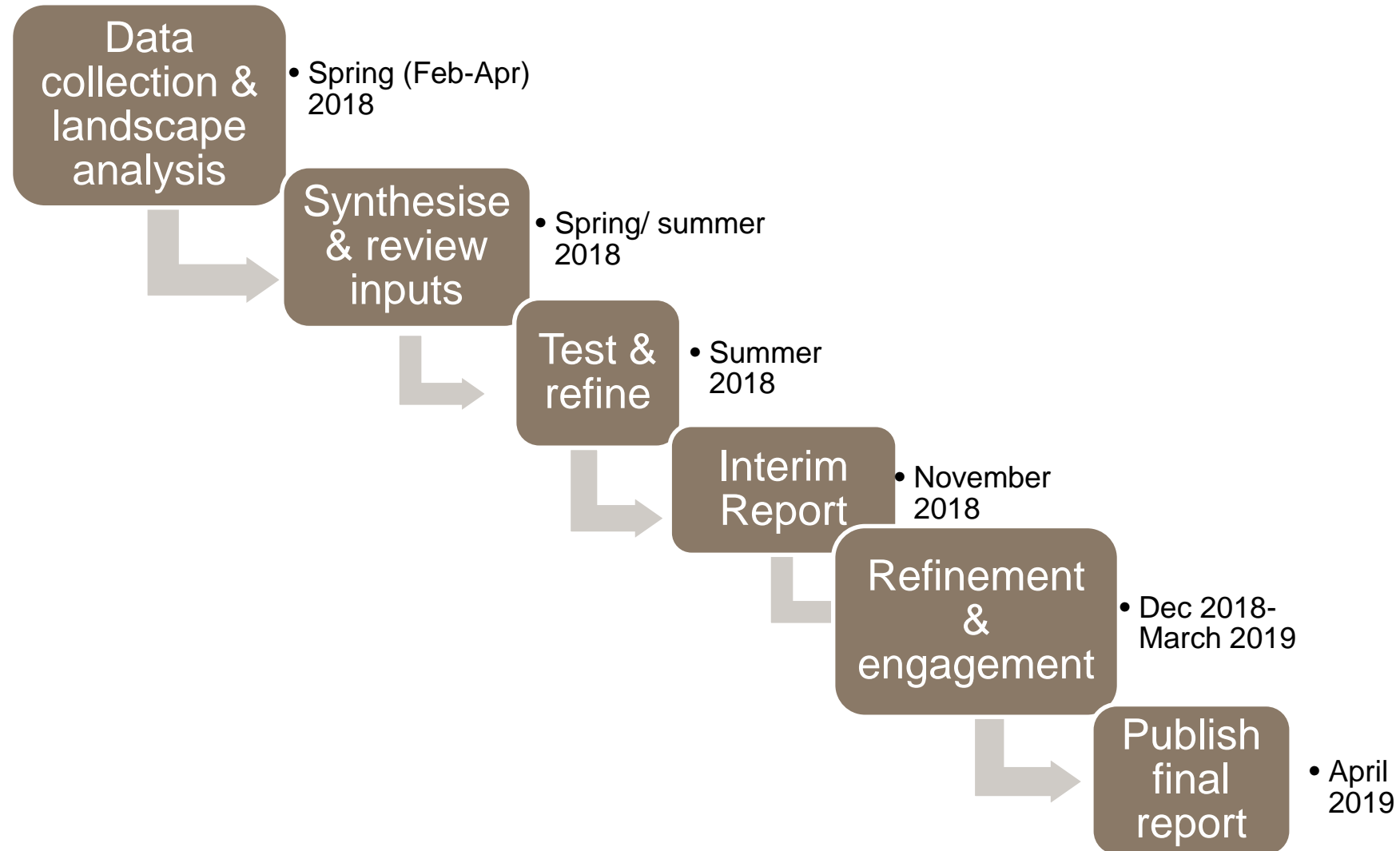
Survey of RIIs in two phases

- Phase 1 – survey closed - identify RIIs, their objectives and scale of operation
- Phase 2 – follow up in progress for additional operational details and explore future needs

Will support decisions on scope, help identify gaps and create database tool of UK capability



Timeline



Pressures

Headwind' sustainability risks facing the HE sector include:

- EU Exit and migration
- Staff and pension costs, rising across the sector (£17.5bn USS deficit reported in 2017)
- Teaching-intensive HEI's fewer alternate income sources to government funding
- HEI debt
- Expectations of falling numbers of student applications
- Non-residential capital expenditure
- HE reform

Looking ahead

Monitoring and understanding these risks and the sustainability outlook and is essential for good decision-making and ensuring the continued success of the HE sector

Continue to look at these issues through the Balanced Funding Working Group and more generally

The work of the FSSG has been and will continue to be essential in helping us to monitor and understand these risks

We want to staying linked in and to join up where we can given our strong shared interests

Coffee Break

Session 1

Understanding income cross flows, changes and challenges to the HE business model

Understanding income cross flows, changes and challenges to the HE business model

Bob Rabone

Member of the Project Oversight Group

Aims of the project

- Assess and understand income cross flows within the Higher Education (HE) sector
- Improve understanding of these cross flows, why they exist, the impact they have on financial sustainability and the benefits or issues that they create.
- Analysis of sector financial data and data produced through the Transparent Approach to Costing (TRAC).
- Undertake case studies to develop current and future practices around income cross flows and management of sustainability.
- Consider how the risks and opportunities that are emerging from the new environment could affect the future sustainability of the activities delivered by institutions.
- The project covers HE providers in the UK, but excludes alternative providers and further education colleges.

What we did

- Formed an Oversight Group with widespread sector representation chaired by Professor Robert Van de Noort (PVC Academic Planning and Resource), University of Reading
- The approach to the project has included desk-based research
- Undertook six case study visits across a range of institutions and over the UK

Phase One – Data Insight



Desk based analysis of the financial performance of institutions, based on TRAC data primarily for 2014-15 financial year.

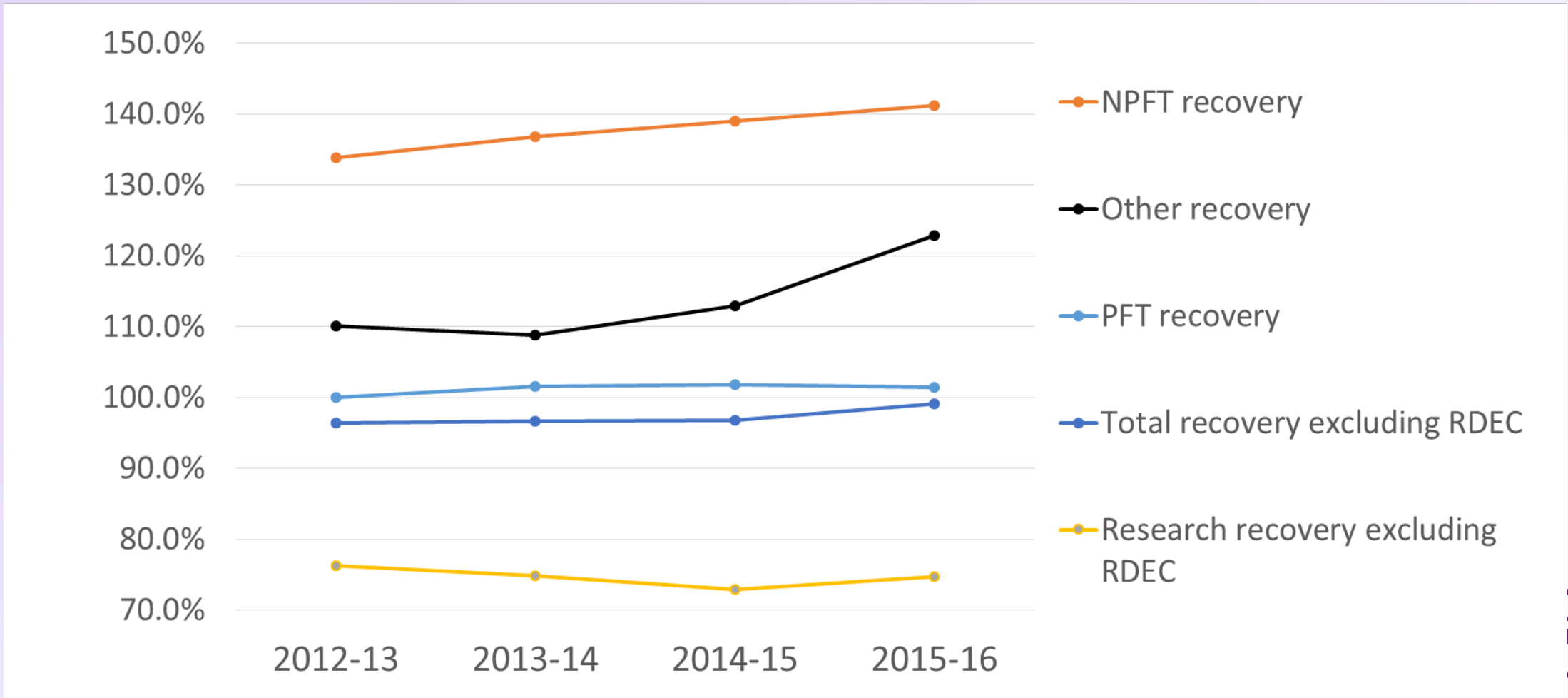
Analysis undertaken of sub-sets of institutions according to:

- balance of international students
- research intensity
- size
- and other risk issues or enablers of sustainability

*Note: The data analysis has been based on the 2014/15 academic year and has been adjusted for income received through the Research Development Expenditure Credit (RDEC) scheme.

Phase One: Trend analysis of full economic cost recoveries

Chart 1: Trend analysis of full economic cost recoveries

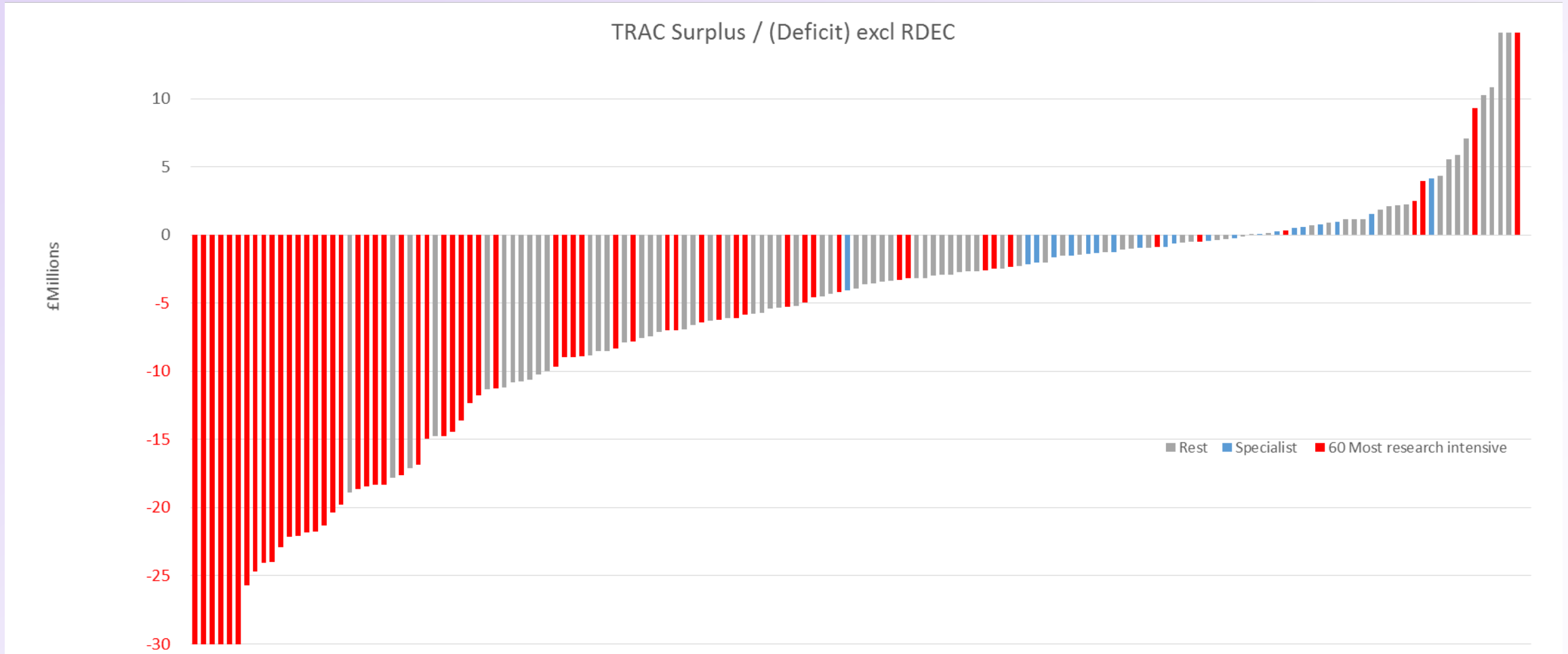


Phase One: Trend analysis of full economic cost recoveries

- TRAC data has consistently shown that the sector as a whole does not recover the full economic cost (fEC) of activities (96.7% was recovered in 2014/15) and is therefore not sustainable as a whole
- Different recoveries are made by different activities in institutions
- fEC on Research has been consistently less than 100% (72.9% in 2014/15, excluding RDEC) with a range of between 11.5% to 96% fEC recovery
- Publicly funded teaching (PFT) has been at, or around break-even
- Non-publicly funded teaching and other activities have achieved a recovery of over 100% (NPFT fEC recovery varies from 30.1% to 256%); and
- 78.9% of institutions had a recovery of less than 100% fEC

Variation of the sector's recovery of full Economic Costing (fEC)

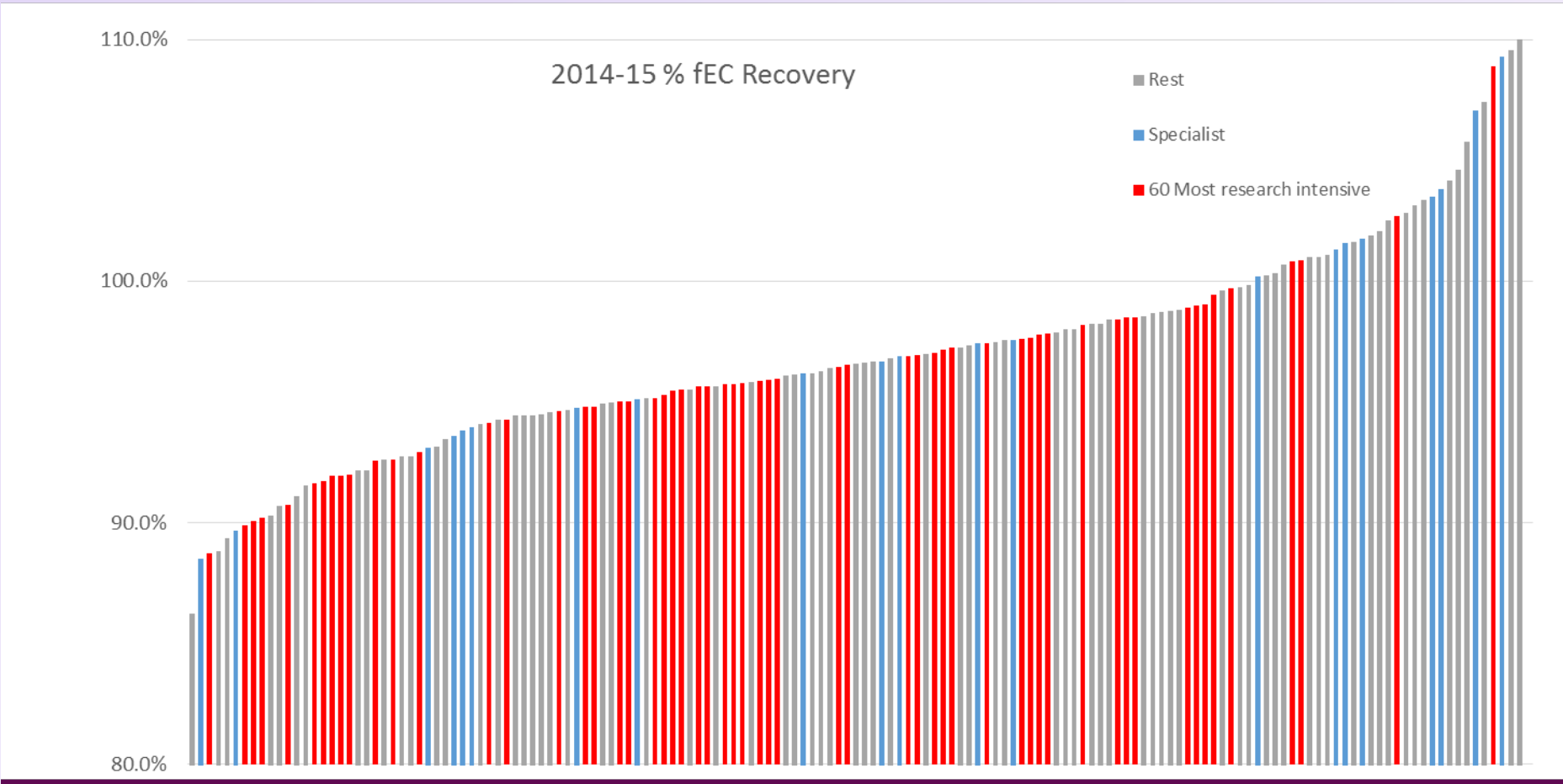
Chart 2: 2014-15 Distribution of overall TRAC surplus/(deficit) excluding RDEC



Source : TRAC Data 2014-15 excl. RDEC

Distribution of the sector's % recovery of full Economic Costing (fEC)

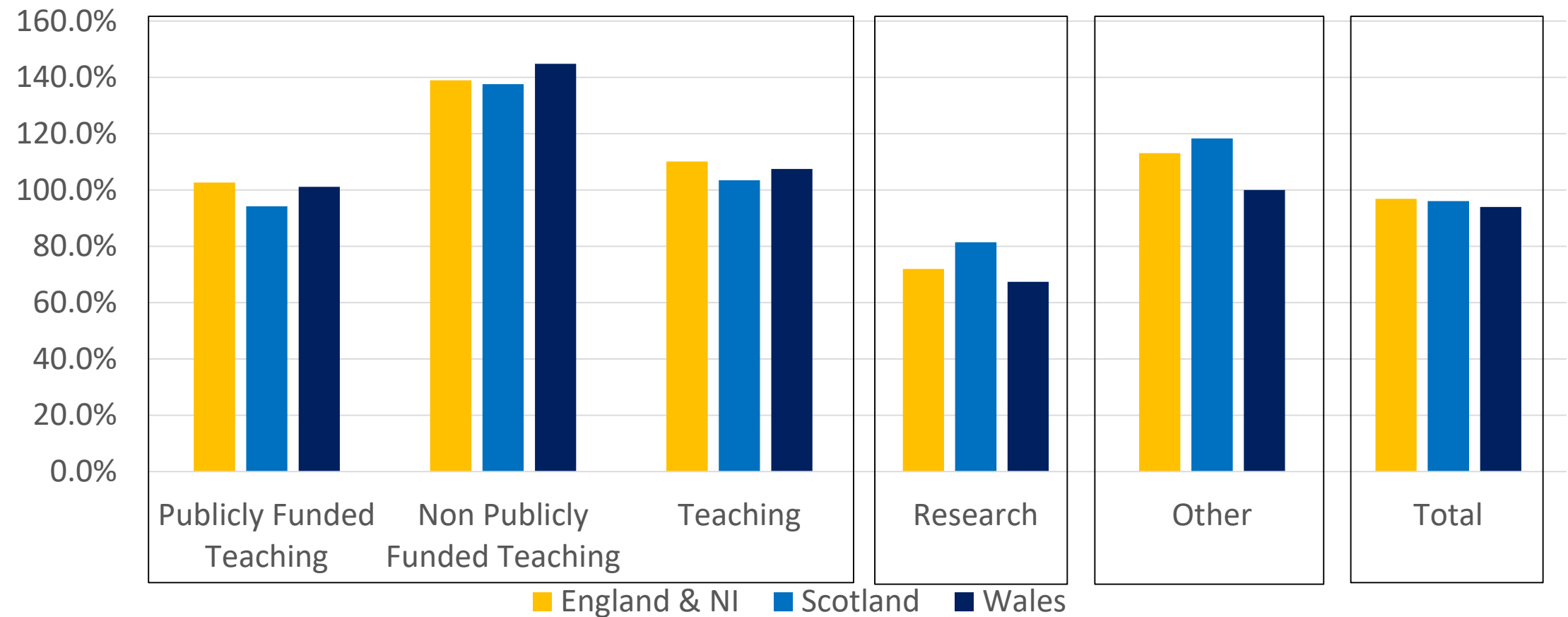
Chart 3: 2014-15 Distribution of overall % fEC Recovery



Source : TRAC Data 2014-15 excl. RDEC

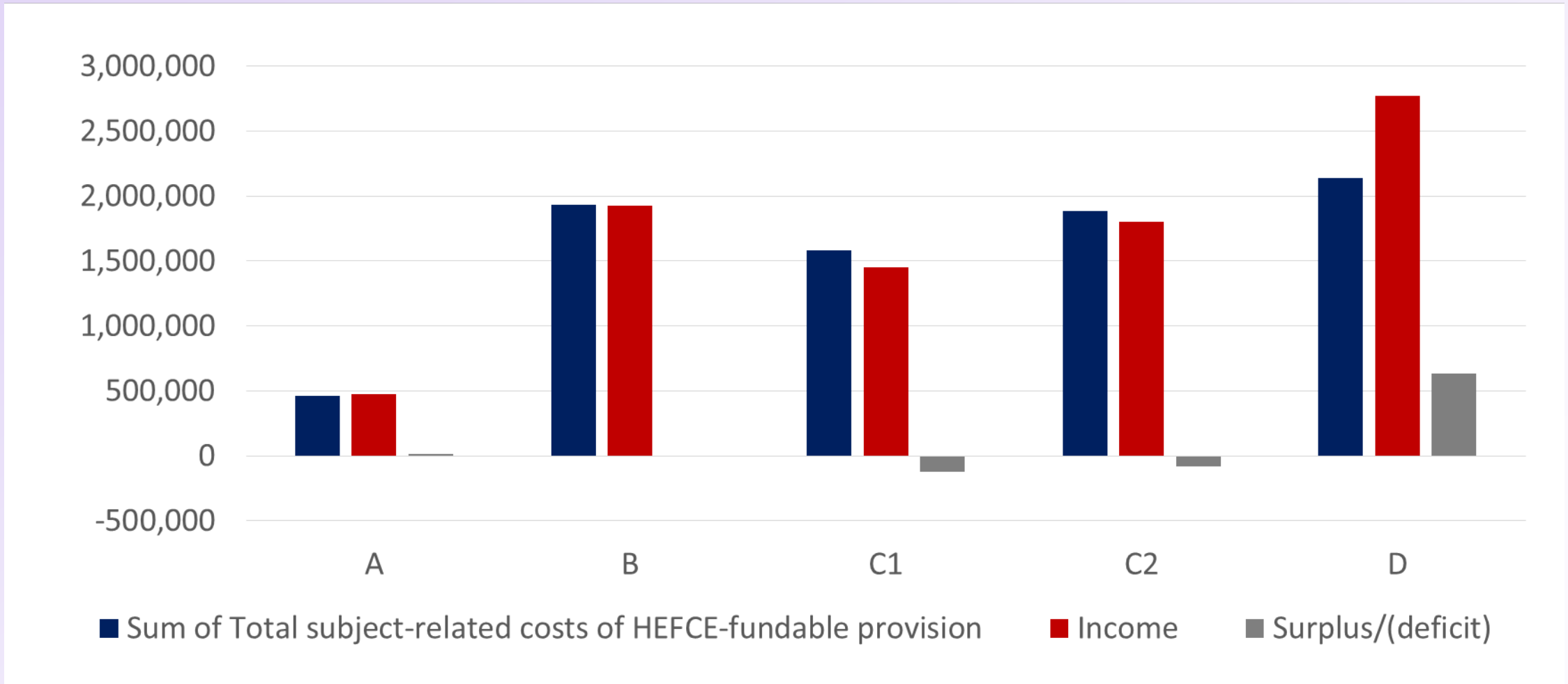
Analysis by Country

Chart 4: 2014/15 fEC recoveries by TRAC category by Country



Income cross flows at activity/discipline level

Chart 5 : Analysis of surplus/(Deficits) by TRAC T teaching price group in England



Income Cross Flows

What influences sustainability ?



- Difficult to isolate specific issues
- Income is not ring-fenced for the activity that generated it, e.g. research activity and output underpins and supports teaching and the whole student experience
- International recruitment supports sustainability, and enables other activities (i.e. Research) therefore any surplus funds are reinvested

Risks and Challenges to Income Cross Flows



- Demographic Changes
- International Recruitment
- Funding Strategies and Borrowing
- Supporting local communities
- Future Risks and Long Term Obligations of the HE Sector e.g. Pensions, Borrowing commitments etc.

Benefits of Income Cross Flows



Enables :

- Delivery of teaching and research programmes that do not attract sufficient funding
- Supports the development of government priorities and policy (i.e. Industrial Strategy and placed based agenda)
- Delivery of the institution's broader role
- Widening participation
- Informs the criteria used to assess business investments

Questions for the tables

- How important is it for you/your institution to understand the extent of income cross-flows at the institutional level (e.g. between Teaching, Research and Other) and within activities (e.g. between different Teaching subjects)?
- How far does the knowledge and awareness of cross flows extend currently in your institution and how far should it extend?
- How would your institution's strategy and plans change if cross flows were not permitted within Teaching and between activities?
- How much or in what circumstance would an income cross-flow be too much?

Lunch

Session 2 Rooms

Different by Design : Understanding the resourcing of different models for delivering undergraduate teaching

The John Major Suite (Green Strip on Badge)

How institutions fund and sustain medium scale research facilities

The Debenture Lounge (Orange Strip on Badge)

(1st Floor)

Different by design - exploring alternative delivery of undergraduate provision; benefits and opportunities

Sarah Randall-Paley

Director of Finance & Chair of the Alternative Delivery Oversight Group

Lancaster University

Aims of the study

- To support institutions in pursuing government priorities in respect of apprenticeship delivery and the diversification of delivery methods for undergraduate teaching
- To support the sustainability of institutions by providing a source of reference for institutions to consider when developing non-traditional delivery methods
- To explore the types of costs and areas of investment involved

What we did

- Formed an Oversight Group with widespread representation
- It oversaw and guided the delivery of the review across five stages:
 - Review of existing research
 - Desktop review of volumes and types of provision currently delivered
 - Survey development and execution
 - Eight case study visits
 - Report drafting and completion
- Case studies focussed on:
 - Degree apprenticeships;
 - Accelerated or condensed degrees; and
 - Distance learning

Observations on alternative delivery methods



Delivery via alternative delivery methods is growing

- Albeit from a relatively low base
 - Distance learning was 8.8%; Degree apprenticeships was less than 1%; Condensed degrees 16.4%*.
- Survey respondents appeared to deliver more non-traditional provision than the sector average. They also appeared to want to do more:
 - Of the 35 respondents to the survey, 69% stated that they delivered some programmes via distance learning
 - Of the 21 institutions without any current apprenticeships, 16 (76%) indicated that they were likely to develop Apprenticeship provision in the future.

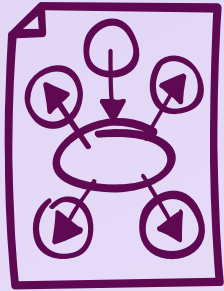
Observations on alternative delivery methods



Drivers for success

- Deliver a clear vision with visible, passionate leadership
- Take a longer term-view
- Communicate clearly on purpose and progress
- Play to your strengths but do not be constrained by traditional models
- Ensure your appetite to risk is clear
- Choose partners that prove culturally alignment and strategic fit
- Invest in teaching, quality materials and technology
- Share success

Observations on alternative delivery methods



Risks and challenges

- Obtaining reasonable estimates of student demand
- Tackling staff concerns
- Keeping up with the pace of change

Observations on alternative delivery methods

Benefits



Many different experiences including:

- Increased growth and reputation
- Improved relationships with businesses
- A catalyst for innovation and a new mind-set
- Constructive challenge to existing systems and processes
- Improved student experience and widening participation

Observations on alternative delivery methods

External support to the sector is needed to:

- Speed up degree apprenticeships approval by the IfA
- Develop more consistent terminology and data collection to help identify, classify and assess alternative delivery methods

Practice examples and considerations from case studies in the report to be launched shortly, for example to help create robust financial plans and business cases

Questions for the tables

- Alternative delivery methods need time and resources to be successful
 - How will you create the necessary capacity and capability to commit to alternative provision?
 - How would you overcome any barriers in your institution?
- Alternative delivery methods challenges the norm in a beneficial way
 - Would this rationale be accepted as a rationale to develop alternative delivery methods? If not, why not?
 - How would you approach seeking broader senior leadership support for developing alternative delivery methods?
- Predicting student demand for alternative provision is challenging
 - What can be done to make this easier?

Sustaining Medium Scale Research Facilities

Professor Lisa Roberts

Chair of the Project Oversight Group

Deputy Vice-Chancellor: Research and Innovation, University of Leeds

About the project

Background

- Research does not recover its full economic costs (72.9% in 2014/15)
- Funding for research facilities comes from a number of sources, often through competitive calls
- Given the increased uncertainty facing the sector, and the challenges this could pose to sustainability, a greater understanding was sought of any issues with the funding and on-going provision of research facilities

Aims

- To research and identify how institutions plan to operate and sustain medium scale research facilities and equipment
- To assess the effectiveness of 'sharing' as an enabler of sustainability

What is a medium scale research facility?

The Oversight Group agreed the following definition of medium scale research facilities:

- The cost of the facility is between £0.5M and £10M;
- Annual running costs of the facility is £50,000 or more;
- Dedicated equipment is not needed in every University;
- There are multiple users of the facility (this may include external users and students);
- Access to the facility is managed;
- Particular expertise is needed to operate the equipment or interpret the results.

Approach

- Oversight Group with widespread sector representation
- Desk-based research on issues relevant to sustaining research facilities
- Survey across HE providers to better understand the approaches and operation of medium scale research facilities
- Eight case study visits across a range of institutions

Key messages – Medium term planning for research facilities

- Few institutions have complete details of all their research facilities
- Only half of the institutions in the survey reported that they had an asset replacement programme for research facilities
- In general, funding for replacing and acquiring research facilities is 'short-term' and subject to an annual 'bidding' process in the planning round
- Some institutions had a medium term replacement programme that was linked into the institutional budget. This was found to provide more stability and enhance sustainability

Key messages – Funding research facilities

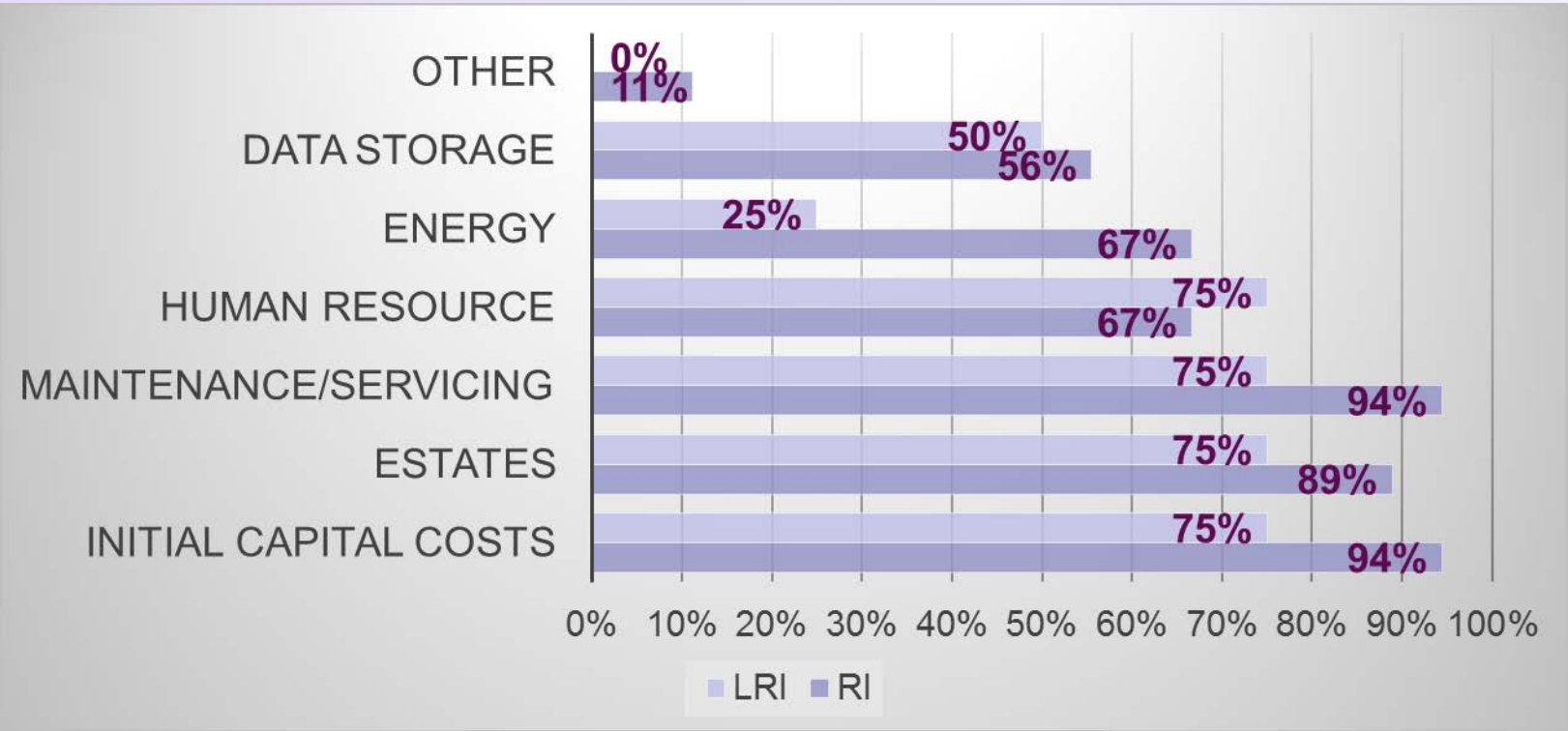
How is the purchase and renewal of research facilities funded?

- Typically, institutions funded the majority of the initial acquisition costs
- Research Councils were the second largest funder
- Funding Councils also contributed to the initial cost
- Other funders included charities, industry and philanthropic donations

Concern was raised over the increased requirement for ‘matched funding’

Key messages – Understanding the whole life costs of research facilities

- Very few institutions assessed whole life costs in the business case for new research facilities. But institutions often fund running costs themselves
- Failing to understand the whole life costs reduces an institutions ability to operate its research facilities sustainably



Key messages – Costing of research facilities is variable

- Costing practice is variable in the sector - fEC, marginal costs, including only selective costs
- Different rates are charged to internal and external users
- Use of research facilities for teaching is commonly not re-charged to teaching
- There is a growing worry about ‘keeping costs down’ in order to appear more competitive in funding calls.
- There is uncertainty around ‘eligible costs’ in funding bids

Underestimating the cost of facilities erodes institutional sustainability and reduces funders’ awareness of the actual costs

Key messages – Indirect benefits provided by research facilities

- To support and enable high quality outputs for the Research Excellence Framework
- Attracting talent to the institution
- Enhancing teaching programmes

Key messages – People and processes

- The quality of utilisation records and booking systems is varied
- Clarity of roles and responsibilities for the operation and management of facilities has a positive impact on sustainability and utilisation
- Technician support was found to be a positive enabler of efficient and well run facilities
- Institutions' policies regarding the allocation and retention of income generated by the research facility can affect the motivation for increasing the use of research facilities

Enablers of sustainability

Factors that enable facilities to operate in a sustainable way

- | | |
|--------------------------------------|--|
| • Having multiple users | • Collaboration with third parties |
| • Demand for facility | • Formal facility policy and procedures/guidelines |
| • Operating as a commercial facility | • Booking systems |
| • Having full costing details | • Strong leadership |
| • TRAC basis for costing | • Experienced research staff |

Barriers to sustainability

Factors that inhibit facilities to operate in a sustainable way

- | | |
|--|---|
| <ul style="list-style-type: none">• Lack of long-term equipment strategy | <ul style="list-style-type: none">• Excessive administrative costs and procedures |
| <ul style="list-style-type: none">• Lack of ownership over facility management | <ul style="list-style-type: none">• Lack of overarching facility strategy |
| <ul style="list-style-type: none">• Lack of direct incentivisation for income generation | <ul style="list-style-type: none">• Inaccurate costing and charging rates |
| <ul style="list-style-type: none">• Lack of knowledge/understanding by users of fEC | <ul style="list-style-type: none">• Lack of research funding |
| <ul style="list-style-type: none">• Lack of commercial opportunities | |

Sharing research facilities

Benefits	Barriers
<ul style="list-style-type: none">• Reduction in capital and operating costs for users	<ul style="list-style-type: none">• Lack of appropriate policies, procedures and systems of the host institution e.g. booking systems
<ul style="list-style-type: none">• The ability to negotiate warranty and service contract savings	<ul style="list-style-type: none">• VAT costs incurred by the user
<ul style="list-style-type: none">• Increased utilisation for the host institution	<ul style="list-style-type: none">• Lack of knowledge re: costing and pricing
<ul style="list-style-type: none">• Encourages collaboration in research beyond using the equipment	<ul style="list-style-type: none">• In some cases the competitive culture amongst academic staff
	<ul style="list-style-type: none">• Availability of management resource within the host institution

Key recommendations (1)

- **Review the medium scale research facility portfolio**
- **Develop a medium term research facility replacement plan**
- Review **complete costings** of research facilities
- **Communicate and engage with the academic community** to improve understanding of “allowable” costs
- Funders to increase clarity around “allowable costs”
- Develop a **sustainable pricing framework** to improve the recovery of fEC
- **Assess the ‘whole life cost’ of facilities** within the business case for replacing/acquiring new facilities

Key recommendations (2)

- More closely **assess the utilisation of facilities** and plan to optimise utilisation
- Consider whether the **income sharing/resource allocation approach incentivises facility managers** to improve utilisation
- **Invest in systems and processes** to support the management and sharing of facilities

Questions for the tables (1)

- Institutions are typically not charging the full economic cost (fEC) for research facilities. As a result, institutions recover less than the cost it incurs, and funders do not have accurate information of the *actual* cost of the facilities. Why do you think this happens and what steps could you take in your institution to move towards charging the fEC for research facilities?
- The project found that some institutions do not have a medium term investment plan for the replacement of medium scale research facilities. What steps would need to be taken in your institution to develop and gain support for such a plan?

Questions for the tables (2)

- The need for medium scale research facilities changes and therefore decisions should be taken about *what* facilities should be replaced/upgraded. How does your institution determine what facilities should and should not be sustained and replaced?
- The project identified that there is some uncertainty around the different types of cost that can be included in bids and therefore institutions have not included certain costs that certain funders would have accepted. What steps can be taken to enable institutions to claims all eligible costs?

Coffee Break

Reflections from Breakout Sessions

Panel Discussion

Chair's Close
