



History of UK third stream (knowledge exchange) funding

Berlin, 27 September 2016

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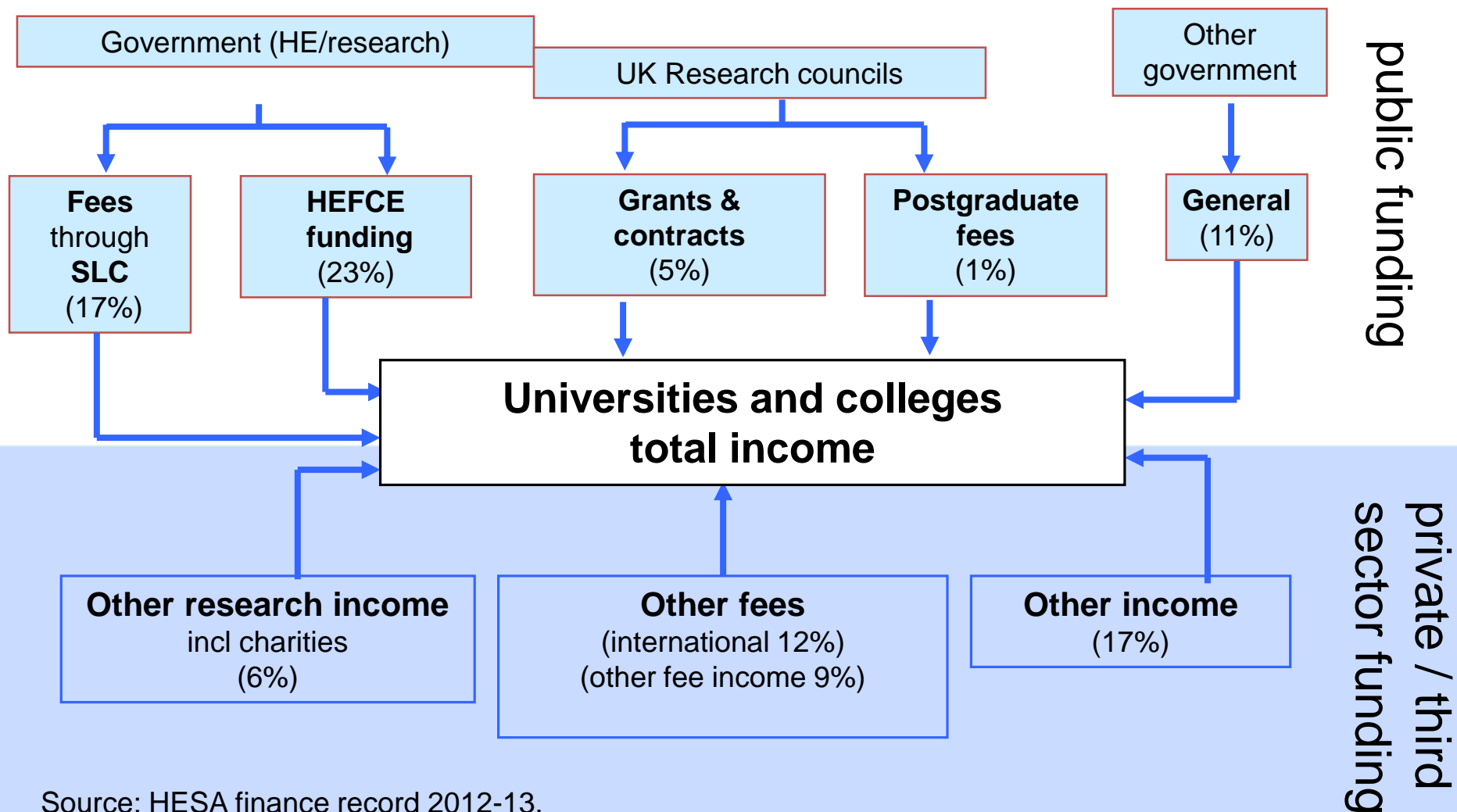
HEFCE Head of Knowledge Exchange (KE) policy

Agenda

- Role of HEFCE
- Background to the third stream agenda/knowledge exchange funding
- How we allocate funding for knowledge exchange
- Issues and tensions

- Role of HEFCE

Sources of income 2012-13



Source: HESA finance record 2012-13,
HEFCE-funded HEIs

Fundamental principles and regulatory building blocks

- In the UK, universities are autonomous – make their own strategic plans (HEFCE, for England), hire and fire staff (UCEA), select students (UCAS), recruit staff and students from across the world (IU), responsible for their own governance (CUC), monitor academic quality and standards (QAA, PSRBs & REF), resolve complaints (OIA), set fee levels (OFFA), develop their staff (LFHE & HEA) and own Intellectual Property (IP)...
- HEFCE is at “arm’s length” from both the government and the sector (an intermediary or buffer body) – not unique in world HE but not many others (similar arrangements in HK, Ireland and some devolved budgets in other countries – Japan, India, ...)

Role of HEFCE

- Established 1992 – Further and Higher Education Act. Governmental non-departmental public body
- ‘Infrastructure’ funder of HE in England (territorial – other bodies for Scotland, Wales and Northern Ireland) – formula funds with discretion to HE heads
- Responsible for Funding Teaching and Research and Assessing Quality of Teaching – funding for third stream/KE falls out of powers to fund teaching and research; assessment of research (REF) falls out of funding powers
- C.4bn annual budget
- Fund universities, HE colleges and HE in FE colleges – but only HE institutions (universities and colleges) for research and KE. Varied types and disciplines.

HEFCE budgets 2014-15 & 2015-16

All figures in £Ms

	2014-15	2015-16	Change
Recurrent teaching	1,582	1,418	-164
Recurrent research	1,558	1,558	0
Recurrent knowledge exchange	160	160	0
Sub-total recurrent	3,300	3,137	-164
Transitional research	N/A	52	52
National facilities & initiatives	143	130	-13
Capital	440	603	+163
NSP and PSS	50 (NSP)	50 (PSS)	0
Total	3,933	3,972	+39

- Background to the third stream agenda/knowledge exchange funding

Models and Missions for Transfer Offices

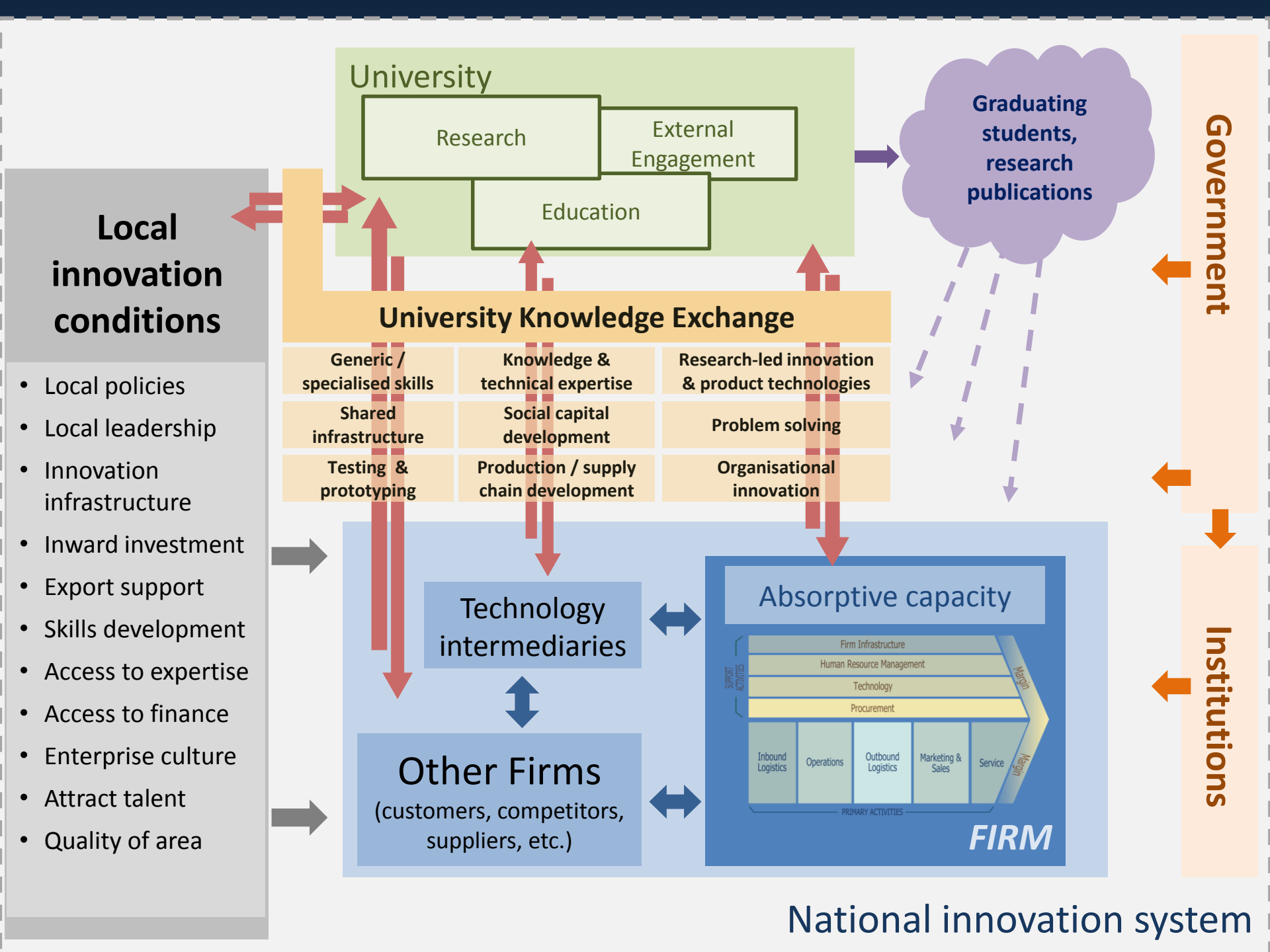
Gilles Capart, Proton Europe, and Jon Sandelin, Stanford OTL 2004

- The Open Science Model: academics publish and industry patents
- The Licence Model: universities license to industry
- The Innovation Model: universities form part of innovation eco-system

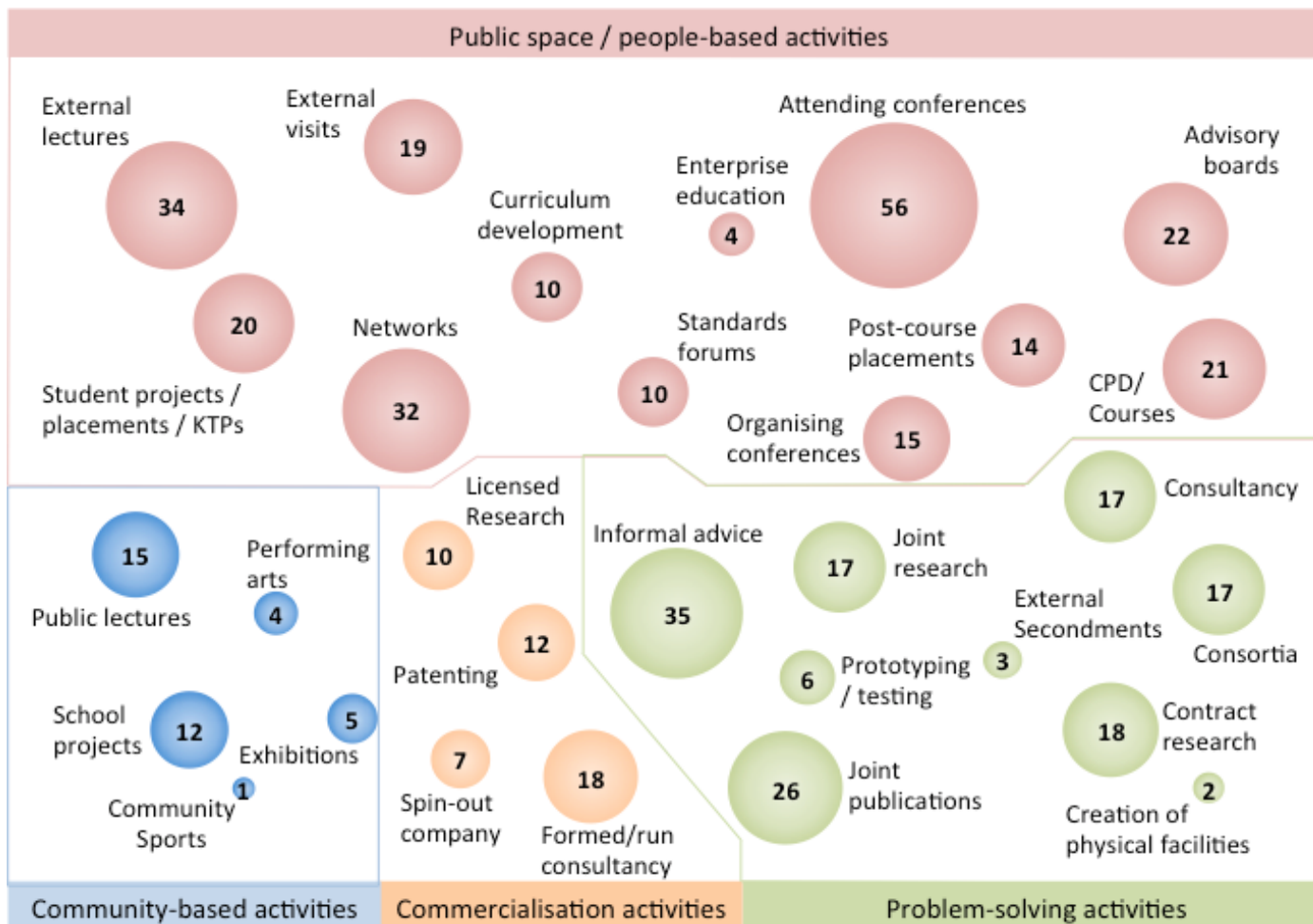
*'It is relatively more difficult to license out a university invention in Europe than in the US. The European market is much more fragmented ..and the density of technology-based companies is less important. **Many licenses from European universities are actually executed with US groups, and do not benefit the European economy.***

*The innovation model is comparatively more developed in certain European countries, notably the UK, Scandinavian countries, Netherlands and Belgium, than in the US. The potential benefits for the public and for the university will also be larger and more regional in character. **The basic difference is that European universities have to be more directly involved in the innovation process than their US counterparts for achieving the same result.***

Models of, and Missions for, Transfer Offices from Public Research Organizations by Gilles Capart and Jon Sandelin (2004)



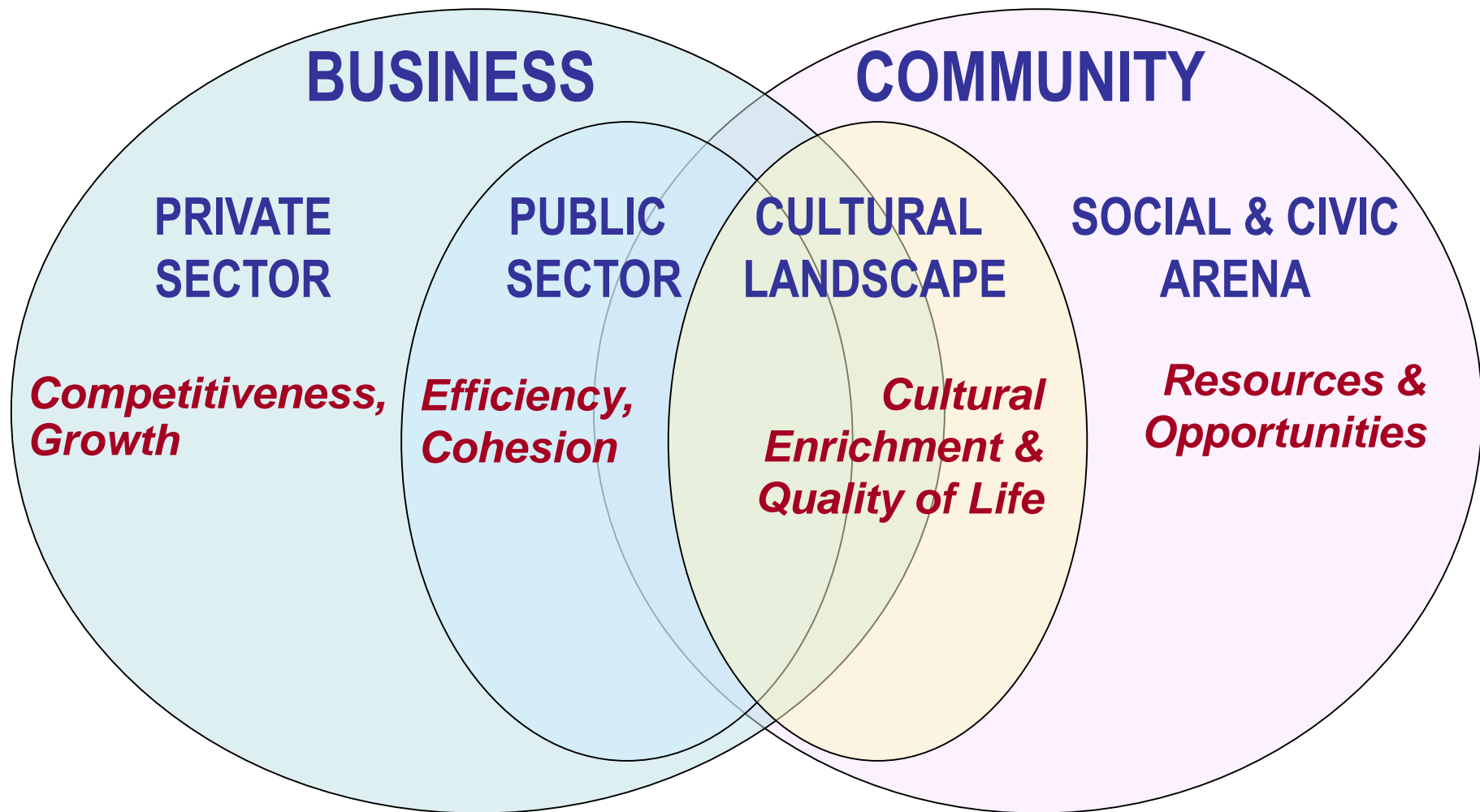
Nature and scale of knowledge exchange mechanisms between academics and external organisations



Number in bubbles is the % of academics engaging at least three times over the past three years in that mechanism, or at least once in the past three years for commercialisation activities.

Third stream – a definition

- *‘trend among many universities toward a third function, which has been described using a range of terms such as knowledge transfer, community service, community engagement and the third stream.’*
 - *‘Third Stream is about the interactions between universities and the rest of society.’* (SPRU, 2002)



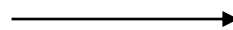
HEFCE: Transition from Technology Transfer to Knowledge Exchange

Where we have come from...

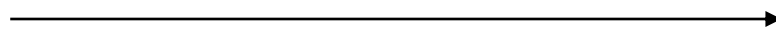
STEM focus



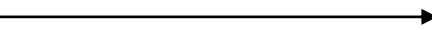
Simple 'transmission' model of knowledge



Wealth creation



Large, multi-national businesses



Where we have got to...

All disciplines

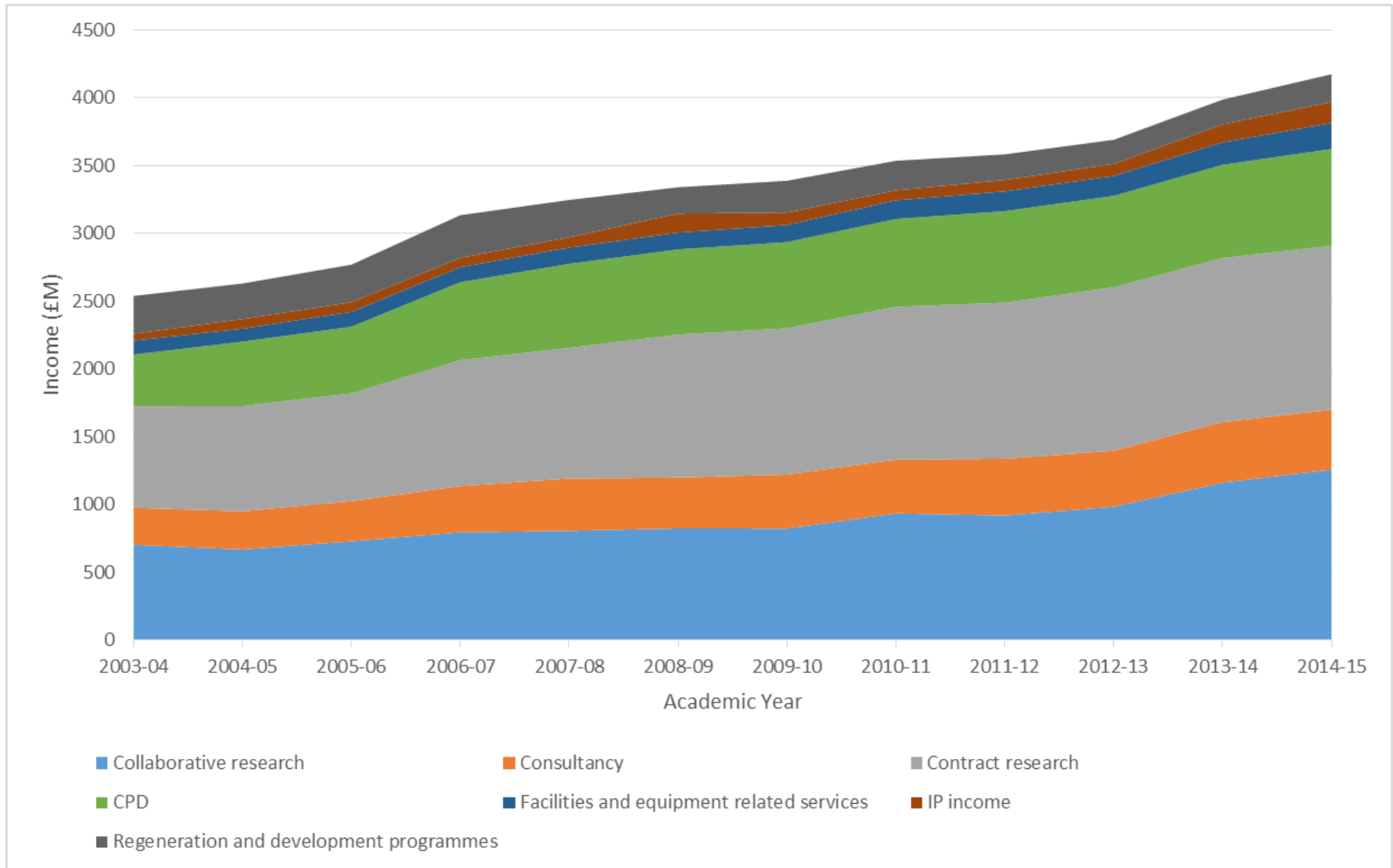
Dynamic exchange model
(engagement, not outreach)

Innovation, productivity, quality of
life, cultural enrichment, civic dev,
community regeneration etc.

Spectrum from global to local/
regional and all users

- How we allocate funding for knowledge exchange

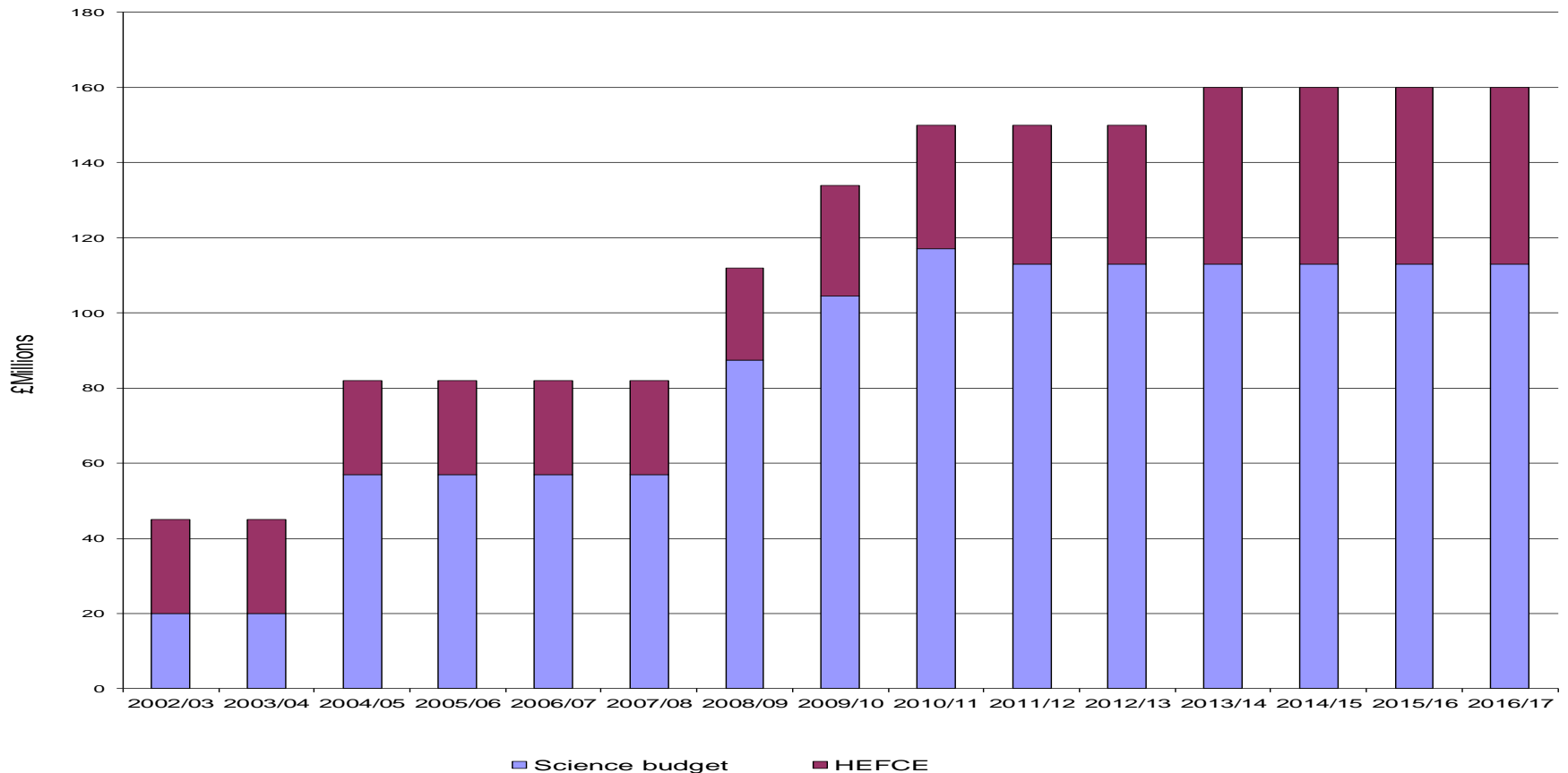
UK HE-BCI Income 2003-15 (£Ms Real Terms)



Overview of current HEIF model

- Determine total to allocate (research and teaching budgets)
- Total pot (£160M) allocated between HEIs on basis of income shares (as measured in HEBCI) - use income from users as proxy for impact
- Caps and modifiers to formula stop extreme skewing (different universities, disciplines, types of KE have very different earnings potential)
- Funds released against each university's strategy for KE (multiple sources) and use of HEIF – assessed, monitored

Knowledge Exchange Funding (HEIF)



Competitive process

Formula allocation

hefce

Leadership, Strategy and Institutional Structures

Leadership and governance

Organisational systems

Strategy

Institutional culture

Incentives and rewards

Building internal capability within the HEI

KE staff

Academics

Internal / external courses

Best practice networks

Recruitment

Internal courses

Workshops / seminars

Mentoring

Informal networks

Facilitating the research exploitation process

Access points for external orgs

Business development

Technology transfer

Consultancy support

Contracts / legal support

Patenting / IP advice

Corporate Relations

Press / communications

Investment funds

Marketing

External fundraising for research

Skills and human capital development

CPD / short courses

Lifelong learning

Careers services

Work placements / project experience

Joint curriculum development

Knowledge networks / diffusion

Provision of public space

Alumni networks

KE professional networks

Staff exchanges

Academic – external organisation networks

Exploiting the physical assets of the HEI

Science parks

Incubators

Facilities / equipment

Entrepreneurship and enterprise education

Social enterprise

Enterprise and entrepreneurship training

Supporting the community / public engagement

Outreach

Volunteering

Social cohesion / community regeneration

Widening participation

Awareness raising / knowledge diffusion

Involving public in research

Academic knowledge

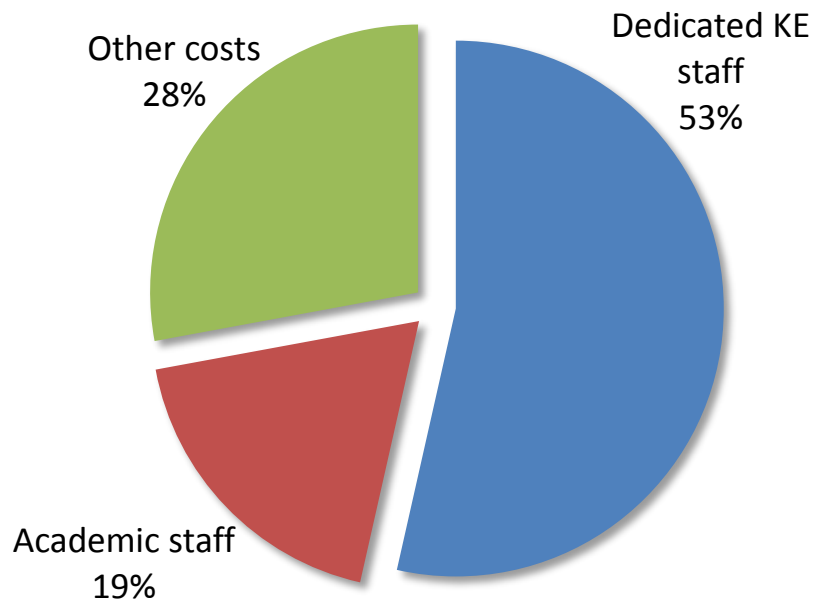
Academic

Economic and societal benefits

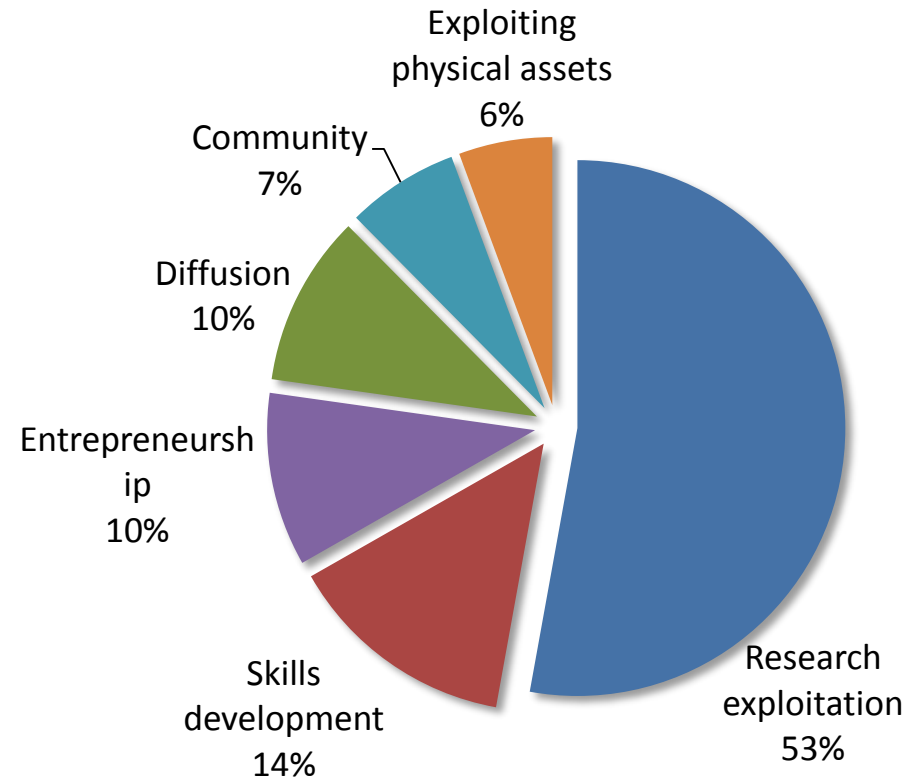
Knowledge Exchange Support Infrastructure: HEIF investments

- Total HEIF investment: £150 million per annum over 2010/11 – 14/15

**Share (%) of HEIF by expenditure
type**



**Share (%) of HEIF by infrastructure
category**



Other Sources of Funding Knowledge Exchange (% strategies)

Research exploitation

HEIF: £318 million

Other funds:

Reinvesting KE income	78%
RCUK	55%
TSB	50%
European funding	45%
RDA	40%

Skills development

HEIF: £84 million

Other funds:

Reinvesting KE income	44%
Core teaching	42%
Course fees	32%
RDA	28%
European funding	26%

Knowledge diffusion

HEIF: £62 million

Other funds:

Core research	33%
Core teaching	30%
Reinvesting KE income	25%
RDA	20%
RCUK	18%

Entrepreneurship and enterprise education

HEIF: £63 million

Other funds:

Core teaching	42%
European funding	30%
RDA	27%
Reinvesting KE income	24%
Donations / alumni	22%

Exploiting physical assets

HEIF: £34 million

Other funds:

Reinvesting KE income	52%
RDA	30%
European funding	25%
RCUK	21%
Internal resources	16%

Civic / community

HEIF: £41 million

Other funds:

Reinvesting KE income	36%
RDA	27%
HEFCE	26%
Donations / alumni	23%
Core teaching	19%

Issues and tensions – HEFCE recipes for success!

- Link policy with Government influence - and money!
- Influence university leadership/management, and then academics
- Be flexible – allow universities to own the agenda once earned trust
- Develop policy and practice with universities and Government – role of buffer body
- Changing academic/discipline practice is slower – international peers influence
- Tensions – more in universities than national?



Thank you for listening

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HEFCE weblinks

- KE policy: <http://www.hefce.ac.uk/econsoc/buscom/>
- HEIF: <http://www.hefce.ac.uk/econsoc/buscom/heif/>
- HE-BCI Survey:
<http://www.hefce.ac.uk/econsoc/buscom/hebci/>
- Evaluation: http://www.hefce.ac.uk/pubs/hefce/2009/09_15/
- Research working papers:
<http://www.hefce.ac.uk/econsoc/buscom/3stream/research.htm>