

# ***Evaluating HEIF: Assessing Cultural, Economic and Social Impacts***

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PACEC

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- Overall aims of the project and HEIF funding
- Stylised route to impacts
- Framework for evaluating impacts
- Overcoming difficulties in assessing impacts
- Key results
  - Knowledge exchange offices
  - Culture change
  - Impact on knowledge exchange income
  - Non-quantifiable benefits
- Further work



# *The Evaluation of HEFCE Third Stream Funding*

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- HEFCE funding project
  - Directed by Barry Moore (PACEC), Alan Hughes (CBR)
  - First major review of third stream funding in English HE sector
- Aims and objectives:
  - *To evaluate the impact of 3rd stream funding (mainly HEIF) on attitudes, culture and capacity in HEIs*
  - *To assess the benefits secured for the economy and society via the impact of 3<sup>rd</sup> stream funding on external private and public sector organisations and the community*



# HEFCE Third Stream Funding

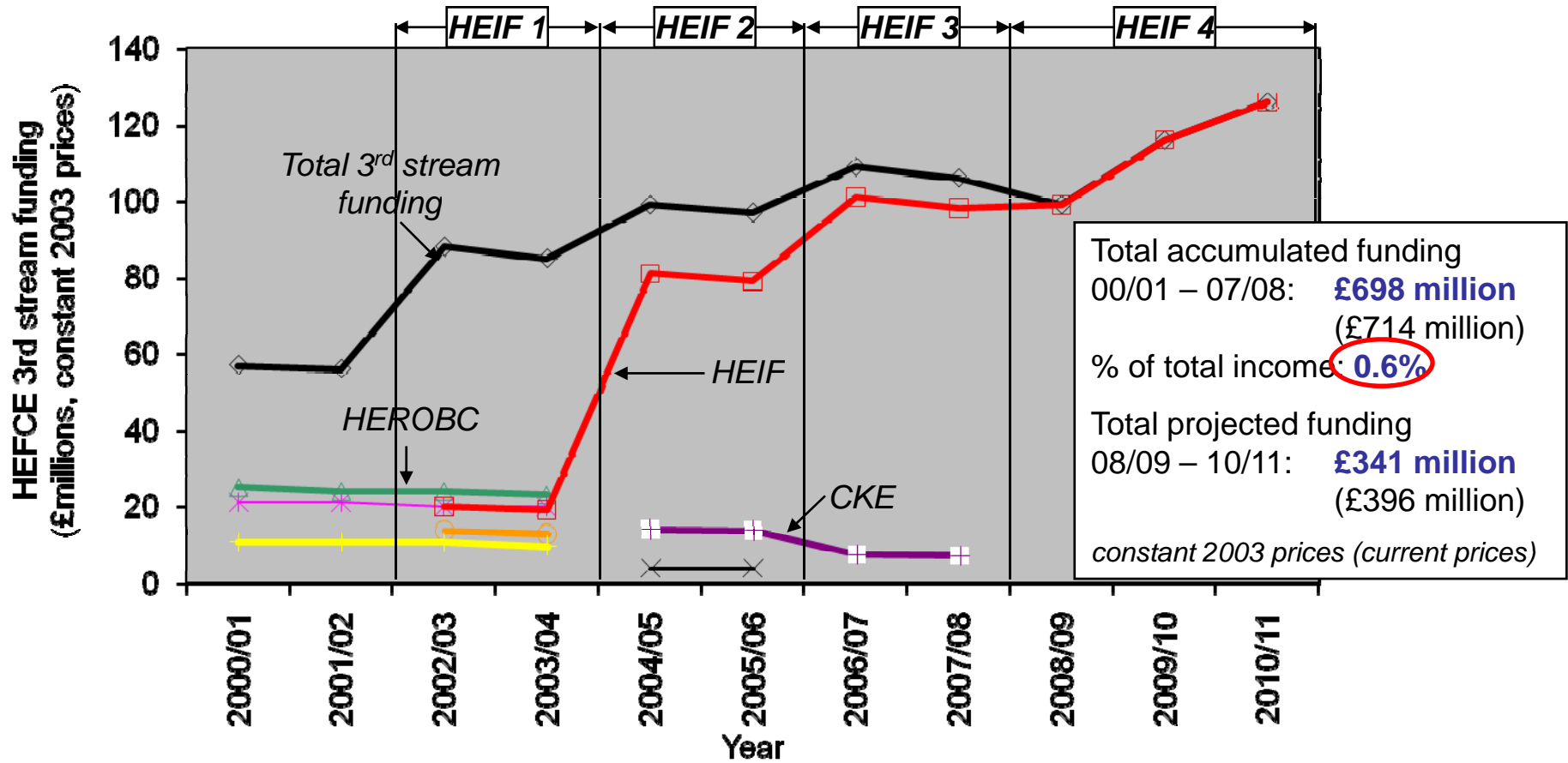
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- HEFCE third stream funding introduced in 1999 to **enhance the economic and social benefits of universities** by supporting and encouraging knowledge exchange between the HE sector, businesses, public sector bodies and third sector organisations
- Initially focused on building up capability within universities to engage (HEROBC)
- Objectives of latest round of HEIF are:
  - Build on past third stream achievements
  - Further develop and release HE knowledge for the economic and social benefit of the UK
  - Support universities to build and extend their capabilities to engage in third stream activities



# Evolution of Third Stream Funding in the HE Sector

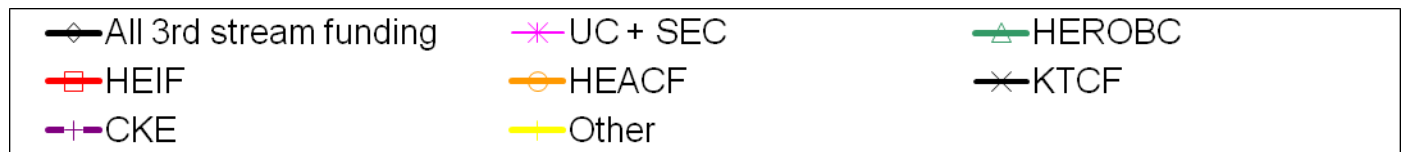
Approx. £700 million has been provided to HEIs over 00/01-07/08 for the third stream mission, although this remains a very small proportion of total income



Total accumulated funding  
00/01 – 07/08: **£698 million**  
(£714 million)  
% of total income: **0.6%**

Total projected funding  
08/09 – 10/11: **£341 million**  
(£396 million)  
constant 2003 prices (current prices)

Sources: HEFCE, PACEC/CBR analysis

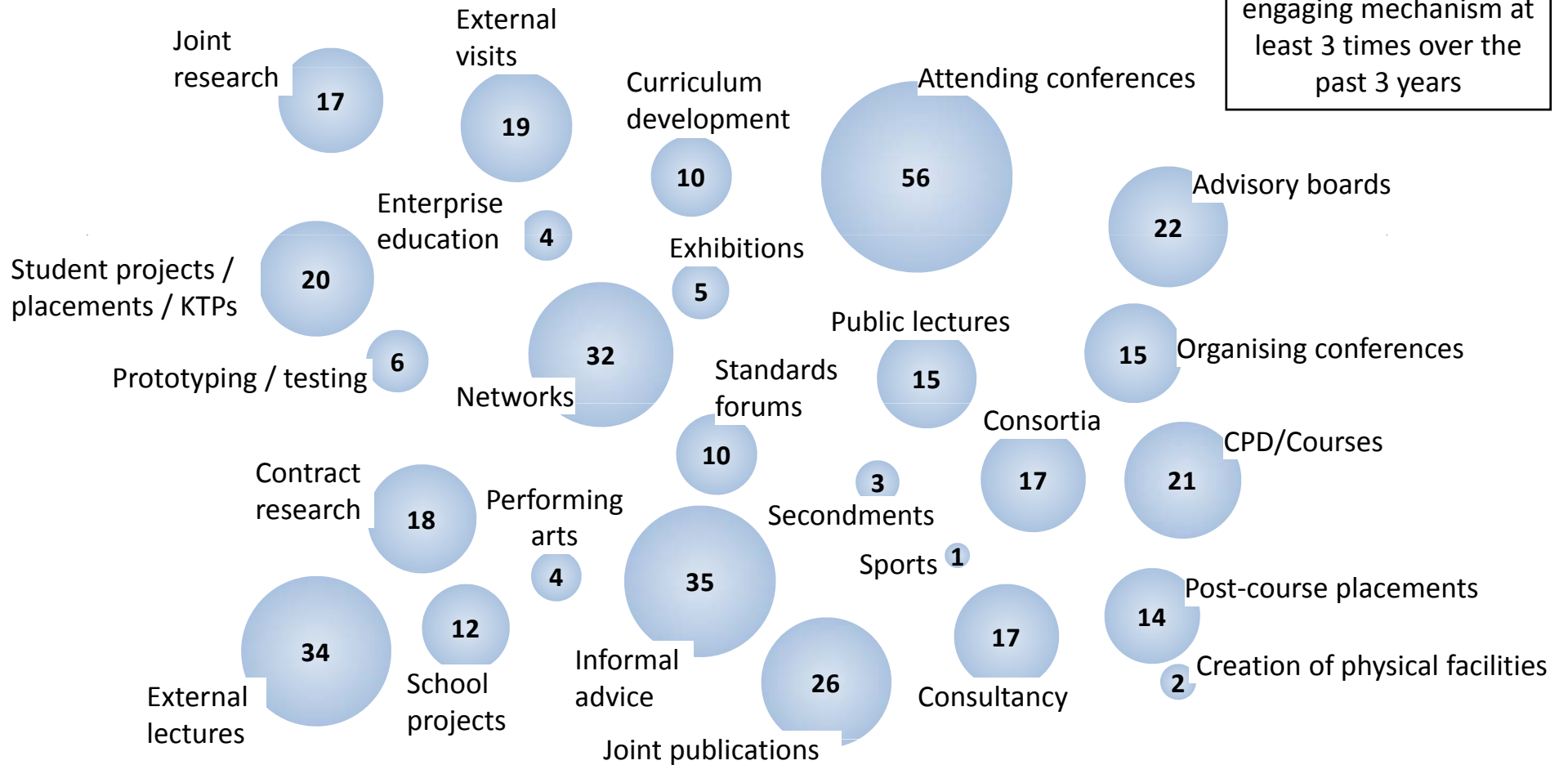




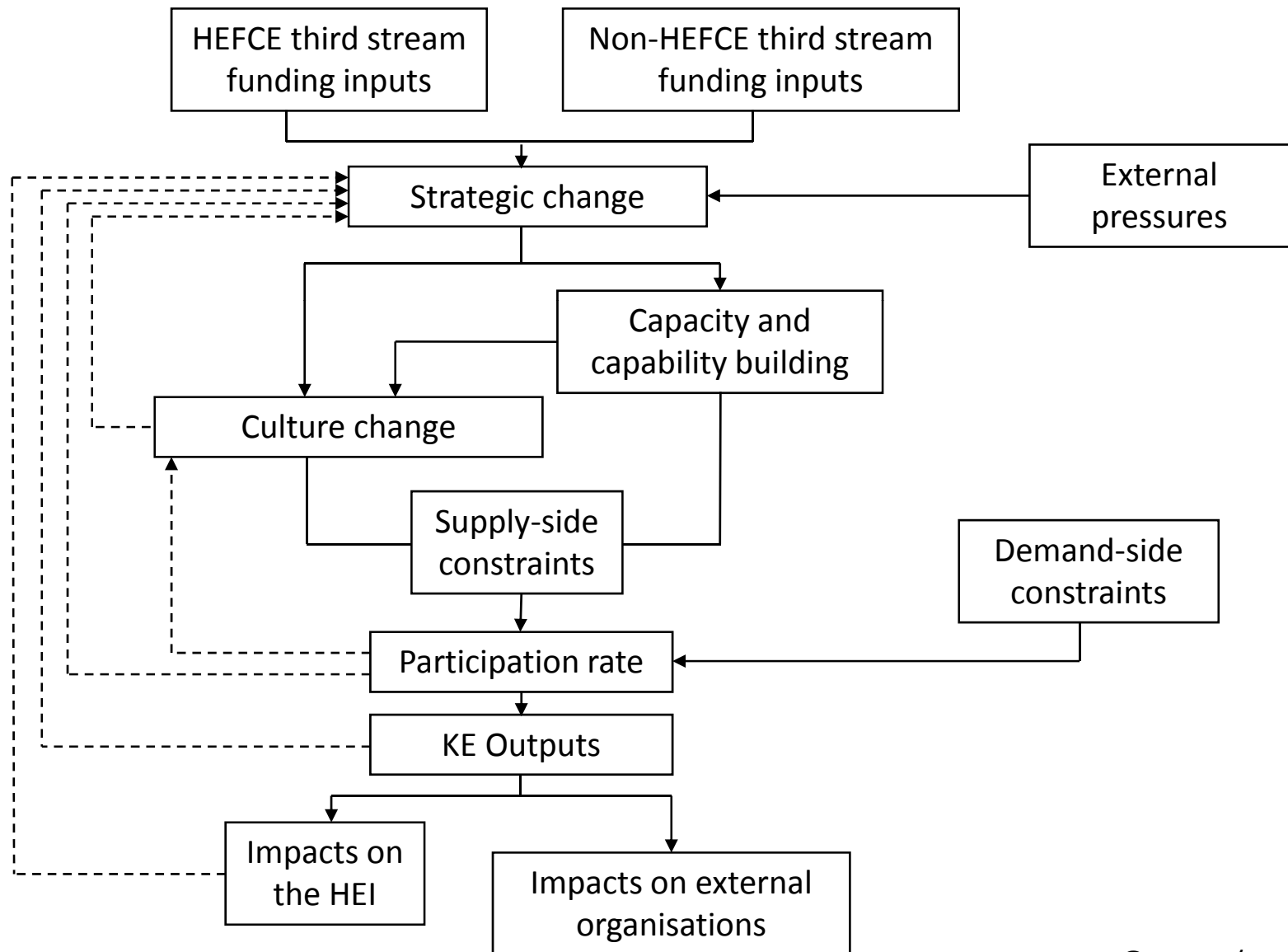
# Diversity of engagement mechanisms

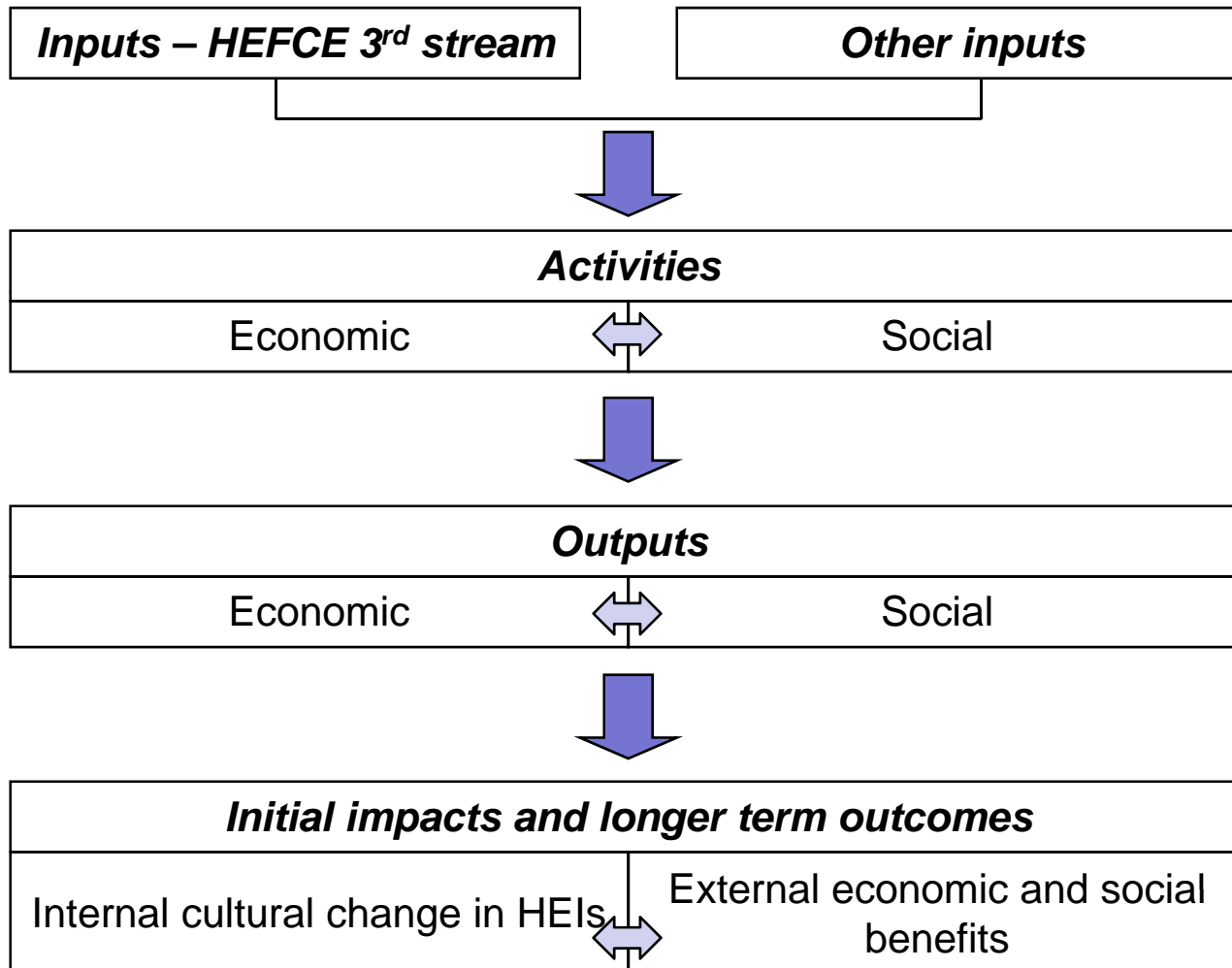
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Numbers in bubbles is the % of academics engaging mechanism at least 3 times over the past 3 years



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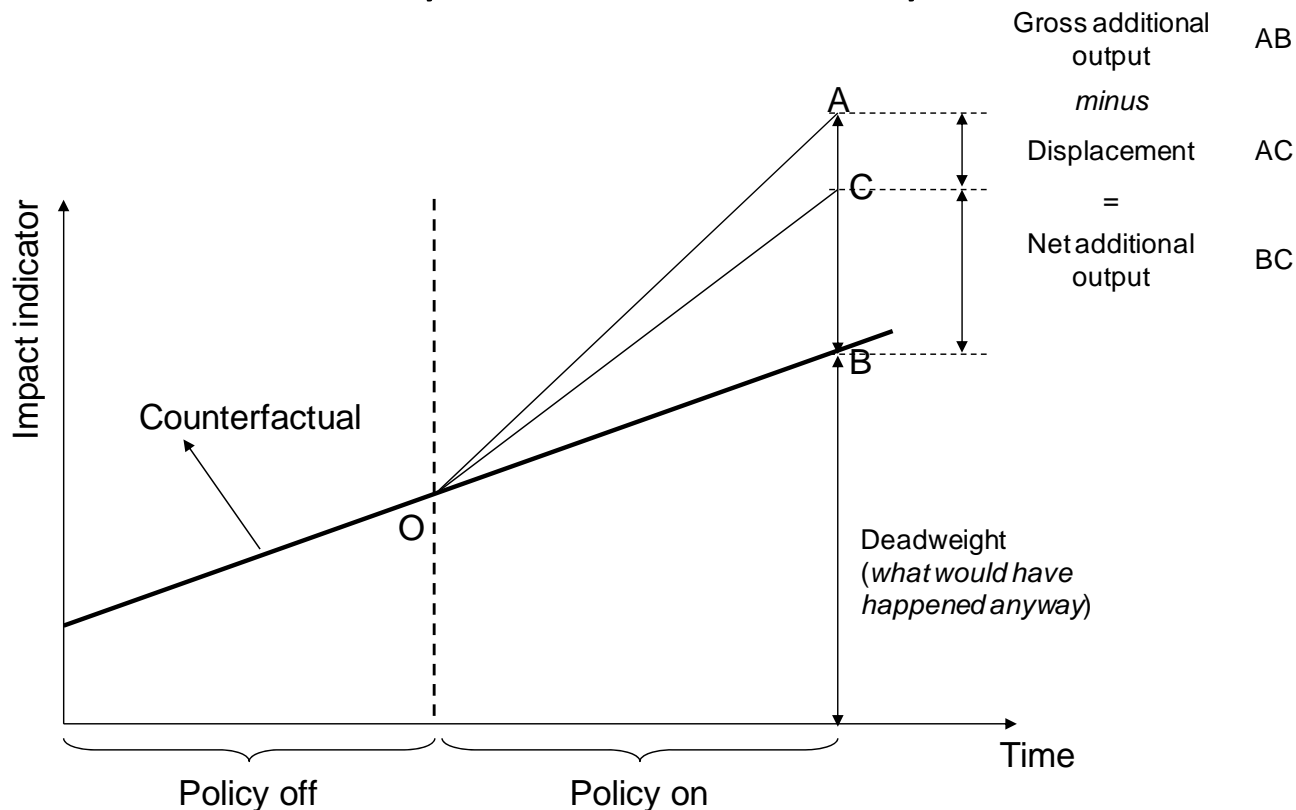






# Assessing the Impacts of HEIF Funding

- Crucial question: What would have happened in the absence of HEIF funding?
  - i.e. What outcomes are additional as a result of the policy?
    - Gross additionality vs. net additionality





# *Overcoming Data Problems to Assess Impact*

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- Data precludes traditional control group analysis. Therefore:
  - Compare ‘weak’ and ‘strong’ policy periods;
  - Compare those who initially received funding with those who did not;
  - Compare those who received large amounts of funding with those who received little funding;
  - Estimation of the average impact of HEIF using subjective-based estimates of gross additionality;
  - Estimation of the marginal impact of HEIF on knowledge exchange outputs using a multivariate econometric estimation technique.
- Our evidence base included:
  - Case studies (30 HEIs, approx. 130 interviews)
  - Surveys of academics (1,169) and external organisations (373)
  - Survey of 76 HEIs on additionality (Quotec, 2007)
  - Secondary databases (HEBCI, HESA etc.)
  - 1995 survey of culture in the HE sector

- Lots of experimentation with KE infrastructure over the period of HEFCE third stream funding
- Approx. 50% of HEIF 4 expenditures on dedicated KE staff in **range** of KE infrastructure
- Provide broad range of functions including:
  - Business support functions e.g. business plans, funding applications, manage business negotiations for large scale, complex multi-partner programmes, project management functions
  - Coordination functions
  - Central ‘gateway’ for firms (particularly SMEs) into the HEI
  - Organising awareness raising, staff development etc.
- Role of KEOs for the KE process: **initiator vs facilitator**
  - Only 13% of academics claimed that their interactions were initiated by KEO
  - Case study evidence suggests that they do play an important role in facilitating engagement



- Case study evidence suggests professionalisation of the functions of KEOs over past 8 years
- Of the external organisations that engage with the KEO, 43% rate them good and 30% rate them very good
- But still have barriers... 39% of academics view bureaucracy and inflexibility of administrators as a barrier
- Case study evidence highlighted a number of key constraints:
  - Establishing credibility with both academia and industry
  - Ability to attract staff with suitable skills and capability (inadequate salaries/incentive schemes/contract terms etc.)
  - Insufficient finance and resources
  - Lack of economies of scale
  - Negative attitude of academics / lack of awareness of KEOs and support structures



# ***Culture Change in the HE Sector:***

## ***Key results***

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- Evidence of substantial culture change at the top levels of Universities (Vice-Chancellor / Pro-VC)
- Modest culture change at the academic level compared with 1995
  - However, a significant majority of academics viewed knowledge exchange positively prior to HEIF
- Strong view that any culture change cannot come at the expense of academic freedom / quality, particularly for higher research intensive HEIs
- Some resistance lingers – e.g. increasing numbers of academics believe that taking non-academic sabbaticals will damage their careers



# *Factors influencing culture change*

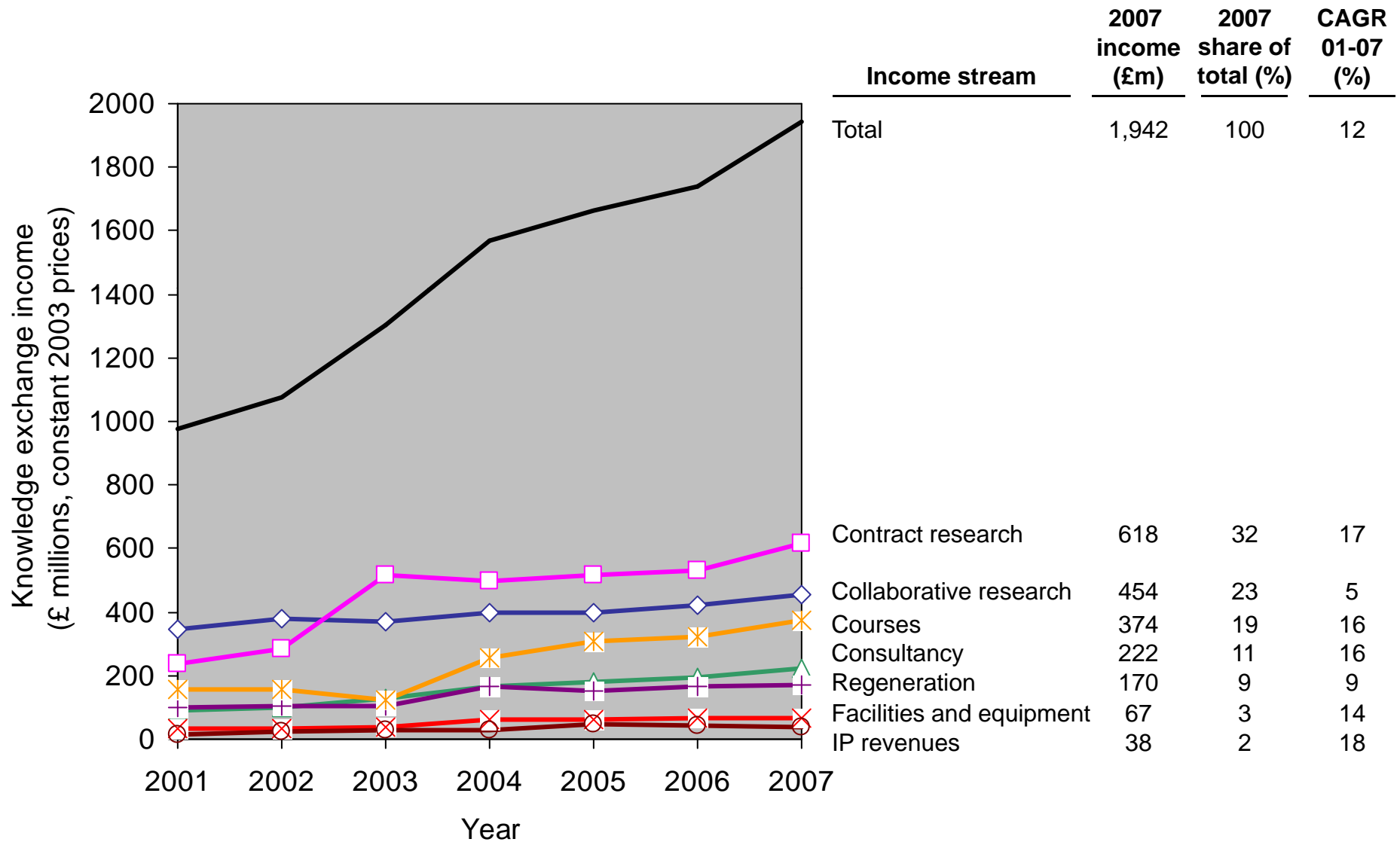
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- Embracing third stream by the **leadership** of Universities
- **Promotions and assessment** criteria increasingly incorporate third stream
- **Incentives** for engaging in third stream have increased (IP, buying-out of academic time, celebration of successes)
- Increased **awareness** of the value of third stream
- Increased **confidence**
- **Decreasing opportunity cost** of third stream engagement (better infrastructure, support staff etc.)
- HEIF funding has directly or indirectly influenced all of the above mechanisms



# Evolution of Third Stream Income 2001-2007

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**Weak vs. strong policy period**

	Change in income per HEI (£k)		
	Total period 2001-2007	Weak period 2001-2003	Strong period 2003-2007
All HEIs	4,512	365	4,147

**Initial receipt of funding**

	Growth 2001-2007 (%)
Received HEFCE third stream funding initially	108
Did not receive HEFCE third stream funding initially	82
All HEIs	99

**Amount of funding**

Level of cumulative HEFCE 3rd stream funding 2001-2007	Change in income (£k) 2002-2007
Lowest 30	1,188
Top 30	15,364

		All HEIs
Cumulative KE income 2001-07 (£m)		10,300
Cumulative HEFCE third stream funding 2001-07 (£m)		592
Additionality (%)	Upper estimate	41
	Lower estimate	28
Additional cumulative KE income 2001-07 (£m)	Upper estimate	4,200
	Lower estimate	2,900
Average gross additionality factor: ratio of additional KE income to third stream funding	Upper estimate	7.1
	Lower estimate	4.9

***BUT, all of above based on income from KE... how much of the impact/benefits are we missing?***



# ***Subjective Assessments of Gross Additionality***

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## ***Views of senior academics on gross additionality***

- Many KE activities would not have taken place and many collaborative networks would not have developed
- Would have focused more on short term income generation
- Scale of KE activities would have been reduced
- Speeded up the introduction and / or expansion of KE infrastructure / activities
- Crucial for developing KE infrastructure without which it would have been hard to engage
- Allowed HEIs to leverage other sources of funding
- Achieved greater integration of KE services

Examples include:

- Non-monetary value of activities (e.g. social benefits of research into CO2 emissions reduction for vehicles, long term health improvements through drug discovery etc.)
- Value of spin-off companies (lack of useful, accurate data)
- Indirect effects on users such as:
  - Supply chain effects and multipliers
  - Effects on user reputation, formation of informal / formal networks as a result of the interaction, other non-market effects
- Monetary and non-monetary value (educational value, social value etc.) of events (e.g. public lectures, concerts etc.)
- Other non-quantifiable social impacts such as social enterprise, improved community networks, improved community cohesion, raising educational aspirations etc.



# Towards Assessing Displacement

*Potential displacement of private sector activities by policy is linked to the degree of substitutability of the activity*

Activity	Share of total KE income (%)	Degree of substitutability
Contract research – original research	32	Low
Collaborative research – original research	23	Low
Courses – original research	} 19	Low
Courses – training / other		High
Consultancy (no original research)	11	High
Regeneration / development	9	High
Facilities and equipment services	3	Mid
IP / Licensing / Patents	2	High
Spin-outs – non-codifiable knowledge	n/a	Low
Spin-outs – codifiable knowledge	n/a	High
Events	n/a	High



- Areas for further work include:
  - Understanding the full range of KE infrastructure and how it facilitates or hinders the engagement process
  - Better understanding the different synergies between research, teaching and knowledge exchange
  - Understanding the scale of the indirect effects, social and non-monetary benefits
- Multivariate regressions
  - Results suggest an impact of HEIF on KE income
  - But, sensitive to the specification
  - Don't agree well with the other assessments
  - Further work required



***Thank You!***

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