



**Research
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*Facilitating
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Full Economic Costing of Research The UK Experience Workshop 1

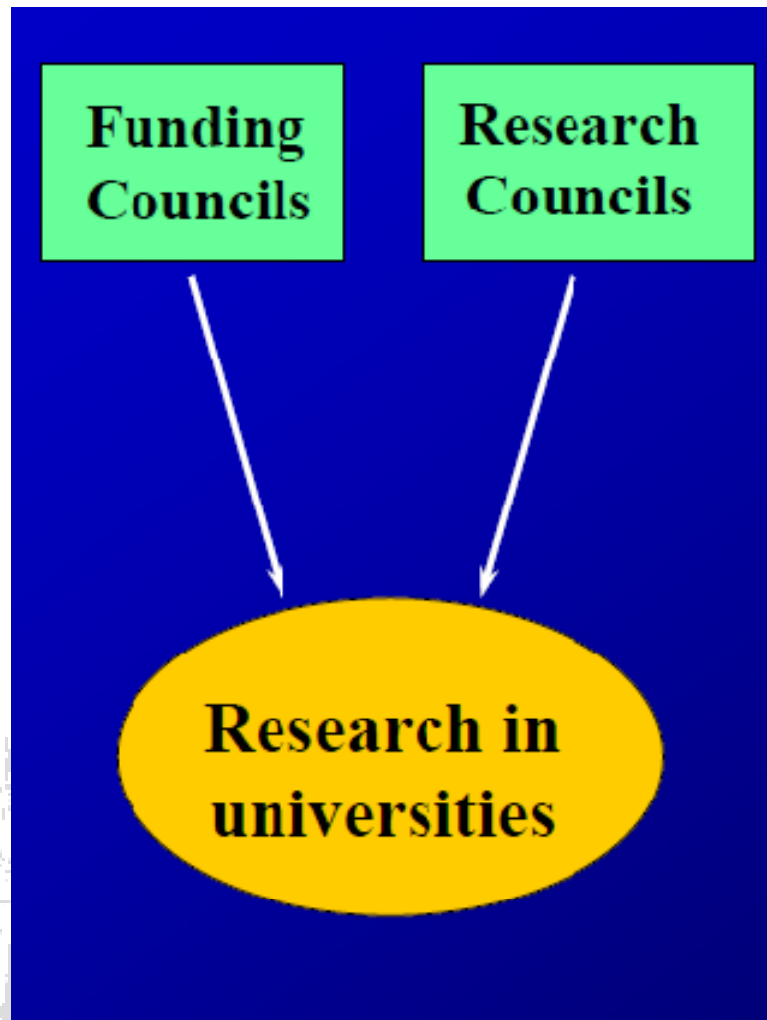
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University of Oxford



1. Introduction
2. The UK context & background
3. The two stages to the development of full economic costing
4. Implementation challenges & Issues
5. Issues for discussion



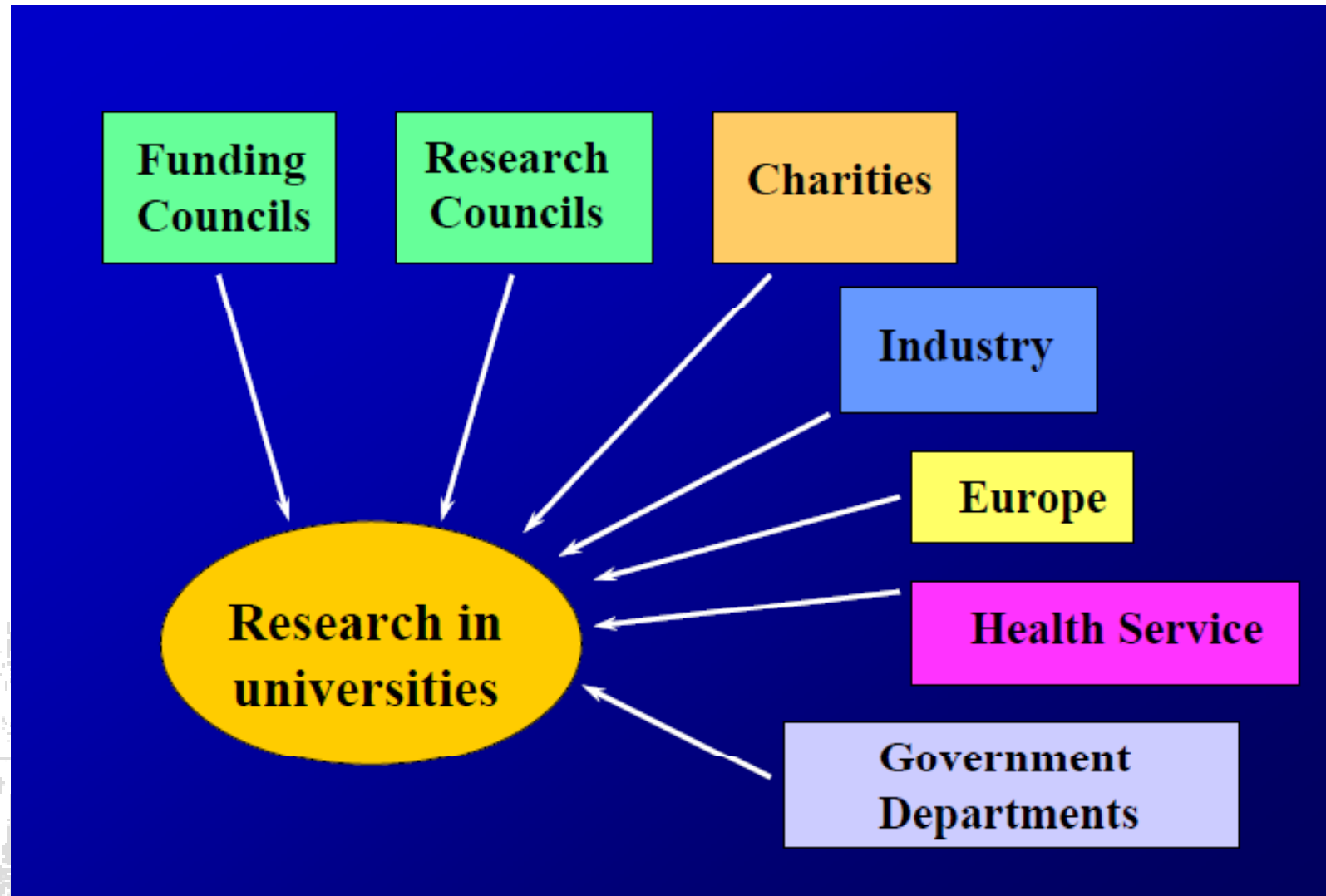
Funding of Research in UK – The Dual Support System



**Funding Council QR
provides capability and
capacity in universities**

**Research Councils
support specific “peer
reviewed” projects**

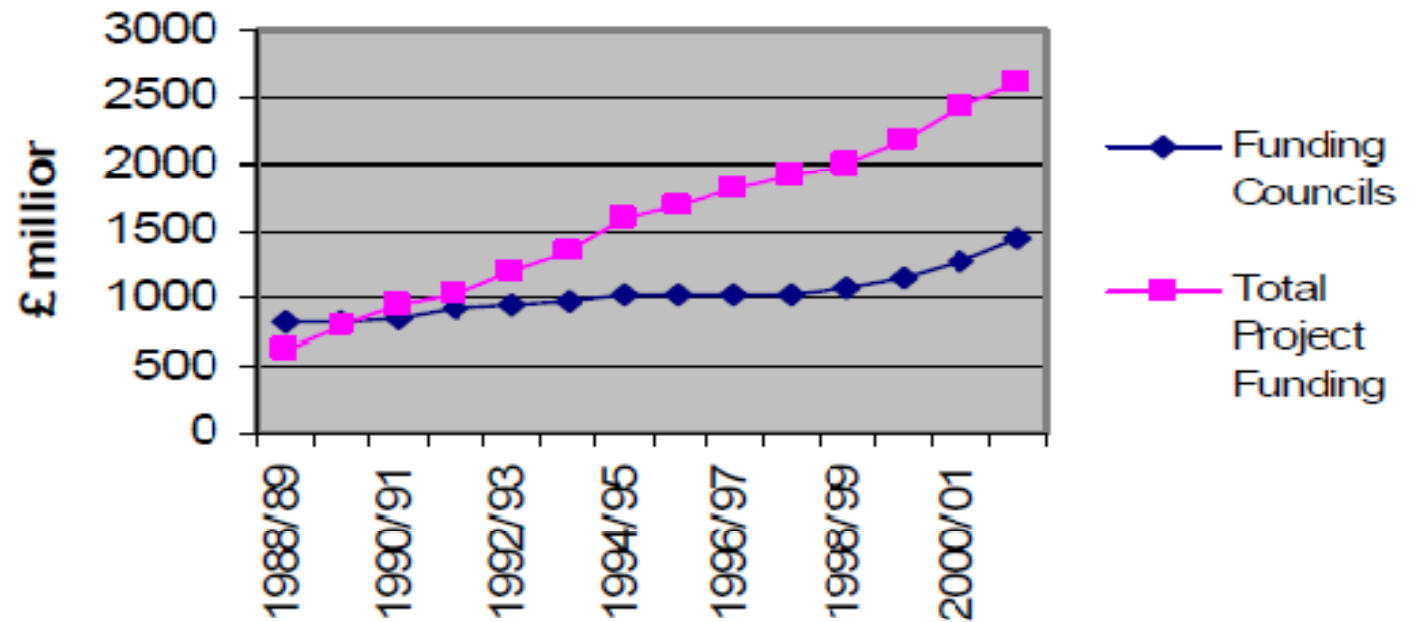
But life is more complicated – funding comes from many sources



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Funding of University Research 1988-2002



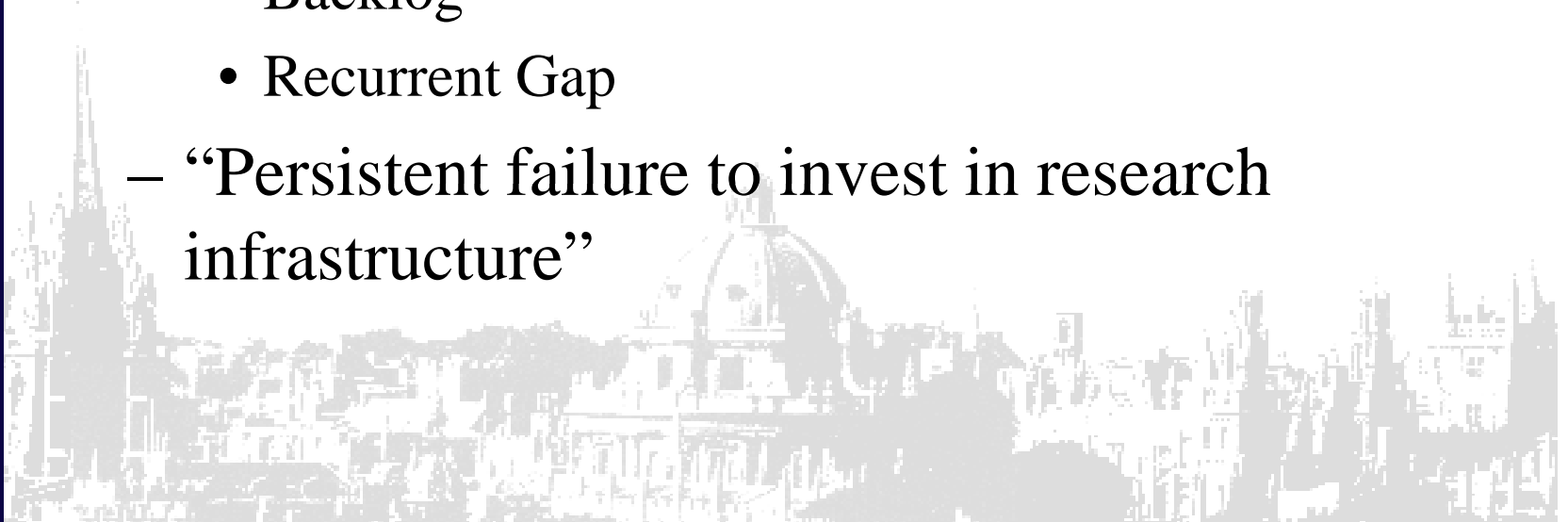
Where did Universities get their funds?

- | | |
|-------------------------------|--|
| ▪ Government | Underfunded |
| ▪ Tuition fees | Underfunded (but overseas students pay full cost) |
| ▪ Industry | Underfunded |
| ▪ Charities | Underfunded |
| ▪ Philanthropy/
endowments | No UK tradition; thus low level only (often only direct costs) |
| ▪ Technology transfer | Some successes but insufficient on its own |
| ▪ Consulting | Rewards primarily for individuals |

➤ Universities need to become self-funding in sustainable ways

The Result

- Under-Investment in university infrastructure highlighted in the Dearing Report in 1997
- Transparency Review detailed
 - Backlog
 - Recurrent Gap
- “Persistent failure to invest in research infrastructure”



Transparent Approach to Costing TRAC – Stage 1

- TRAC costing methodology developed and implemented 2000-01 to calculate Full Economic Cost of university activities
- Allowed costs to be compared with income



TRAC methodology

- Activity-based costing
- Annual retrospective allocation of costs from audited financial statements to activities at institutional level
- As many costs as possible identified as direct
- All other costs allocated on a robust basis using consistent cost drivers
- Accounting for use of academic staff time
- Two cost adjustments
 - Infrastructure cost adjustment
 - Return for financing and investment

TRAC Methodology

Costs allocated to

- Teaching
 - Publicly funded
 - Non-Publicly funded
- Research
 - Publicly funded
 - Non-Publicly funded
- Other



What this showed

Transparency Review Outcomes

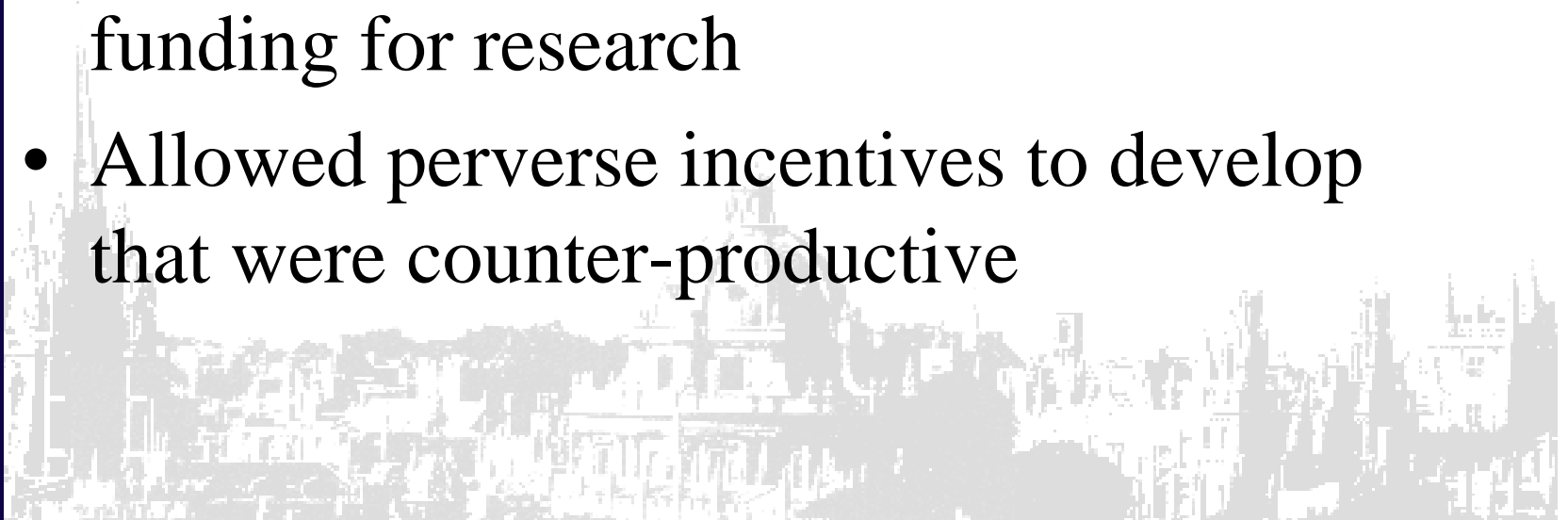
	Research	Teaching
	Intensive	Intensive
Publicly funded T	-4%	-2%
Non publicly funded T	+35%	+30%
Publicly funded R	-35%	-90%
Non publicly funded R	-30%	-80%
Other activities	+25%	+10%

Informal data, 1999-2000

The Problem (1)

At Government level:

- No clear cost framework for the sector to support growth in activity
- No clear definition of Dual Support funding for research
- Allowed perverse incentives to develop that were counter-productive



The Problem (2)

- Universities did not know their full costs at activity level
- Had no robust administrative processes to cope with cost pressures
- Didn't price research properly for commercial activity



The move to Full Economic Cost (FEC)

“In return for greater support for research, **universities have a responsibility to manage their research effectively and sustainably.** This will mean continued development of their costing and financial management systems to enable them better to **understand the contribution of individual research projects to the actual costs,** direct and indirect, **of the research.** The Government will expect universities to manage their budgets in a way which allows them to invest properly in infrastructure renewal and ensures that **research is put on a sustainable footing.**”

(HM Treasury 2002)



A ‘Sustainable Footing’ means:

- costing and pricing an activity properly and ensuring that the funds are used for the intended purpose
- Identifying the flow of funds needed to meet the full economic cost of each activity



Principles

- Publicly funded research should be fully funded by the public purse
- Universities should know their own costs, price for sustainability and plan for reinvestment

Aims

- Healthy research base
- Increase in KT and innovation for public good / economic benefit
- Help prevent another massive short-fall occurring in research base.



What about universities?

Mission Statement (Extract)

The University of Oxford aims to achieve and sustain excellence in every area of its teaching and research, maintaining and developing its historical position as a world-class university...

In support of this aim, the University will:

- *provide the facilities and support for its staff to pursue innovative research, building upon Oxford's outstanding research record, by responding to developments in the intellectual environment and society at large, and by forging close links with the wider academic world, the professions, industry and commerce...*



From ‘vicious’ circle ...

How to achieve and maintain excellence:

- Raise profile/awareness
 - publications/citations
- Recruit & retain key academic staff
- Develop and maintain facilities & infrastructure

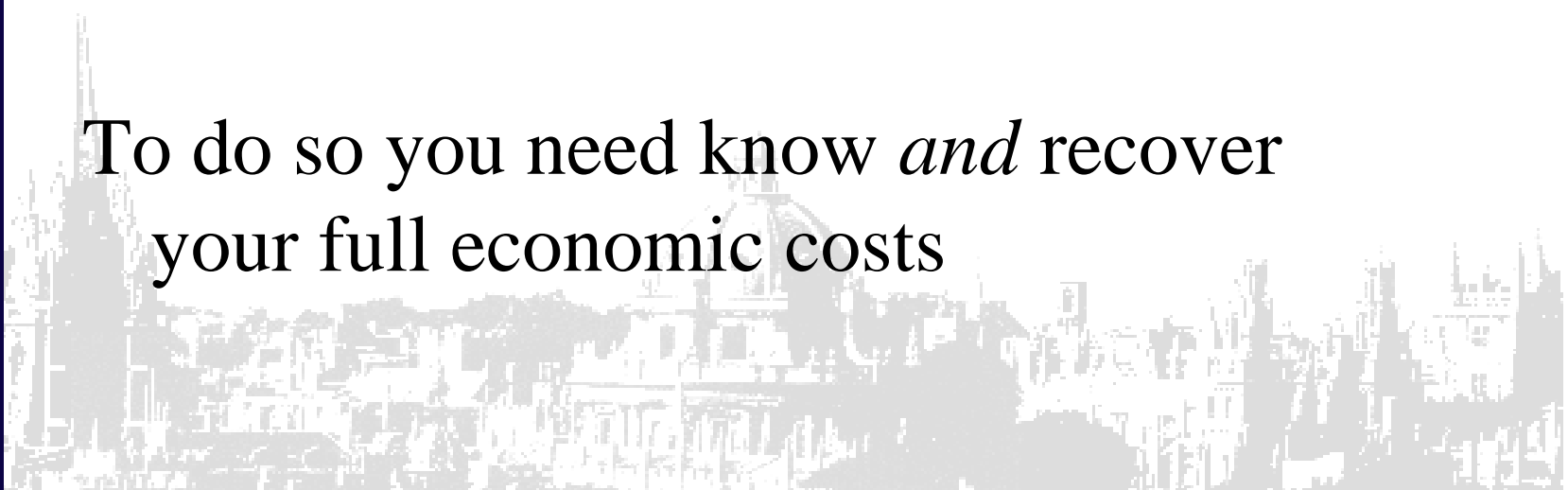


...to ‘virtuous’ circle

Through proper funding and investment
in physical and human infrastructure

But

To do so you need know *and* recover
your full economic costs



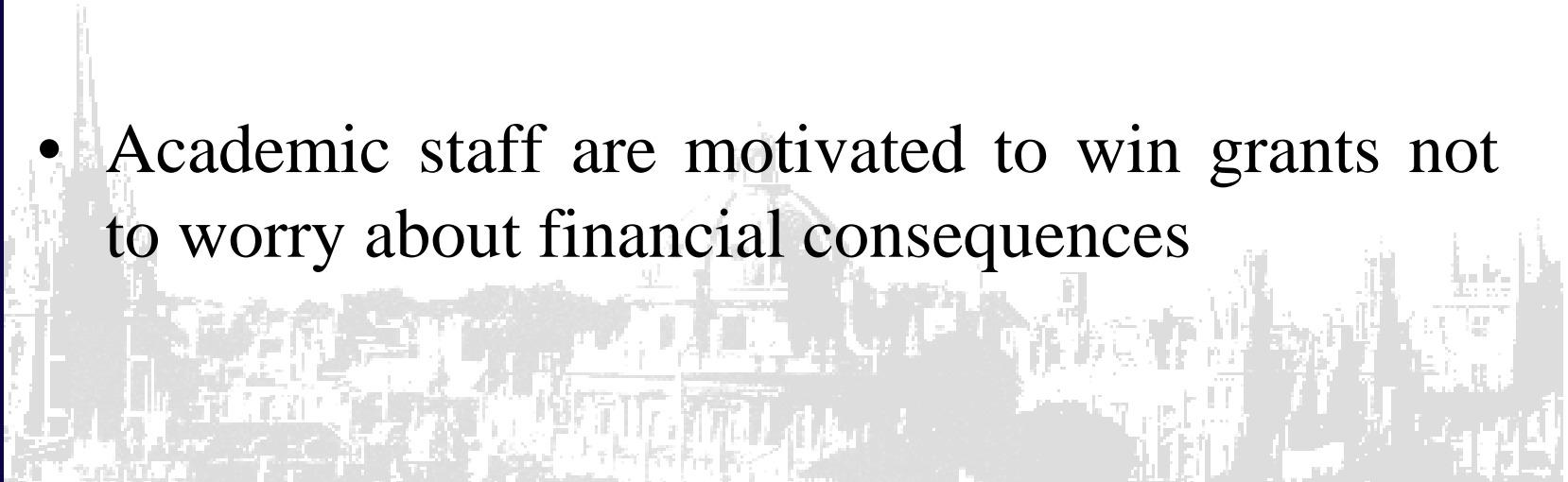
What is FEC? (1)

A price which, if recovered across an institution's full programme, would recover the total cost (direct and indirect) of the institution, *including an adequate recurring investment in the institution's infrastructure.*



However

- Historically UK universities have had little or no understanding :
 - of the cost of different activities,
 - of the difference between cost and price,
 - that on virtually every research grant awarded the institution would lose money
- Academic staff are motivated to win grants not to worry about financial consequences



and

- UK universities operate in an environment where long term strategic financial planning is challenged by short term ‘easy win’ objectives
- The diverse research funding base and sponsors’ aims are not easily compatible with long term financial planning



Motivation for change

For University

- Sustainability
- Recovery of full costs
- Transparency
- Strategic planning

For Researchers

- Unconvinced!
- More transparency
- Better funding
- Funding of academic time



What is FEC? (2)

At Research Project level:

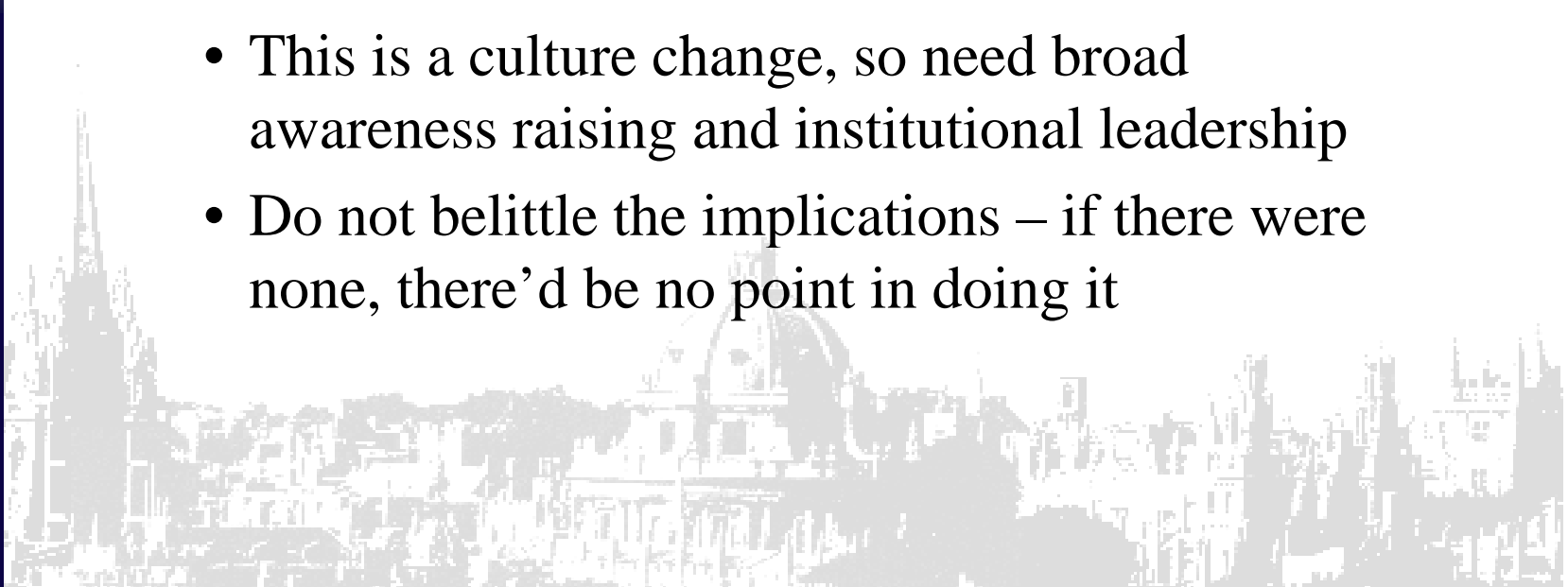
- **Directly Incurred Costs (DI)**
Additional costs incurred for running the project
 - Research assistance / technical support/consumables/etc
- **Directly Allocated Costs (DA)**
On-going infrastructure / support costs
 - Academic / research staff time
 - Estates charges (allocated per full-time researcher)
 - Depreciation
- **Indirect Costs**
 - General central/local support costs
 - Cost of Capital Employed

Implementation Challenges and Issues

First things first:

Moving to FEC is not just a Finance or
Research Office matter

- This is a culture change, so need broad awareness raising and institutional leadership
- Do not belittle the implications – if there were none, there'd be no point in doing it



Ownership (1)

- Development of TRAC/FEC was by the sector, for the sector
- Single methodology at national level
- Full collaboration/support from Government and Research Councils
- Additional funding provided
- Clear objectives at the time

Ownership (2)

- Original intention was to maintain a ‘light touch approach’
- Four years on, accountability and assurance requirements are increasing
- Who’s in the driving seat now?

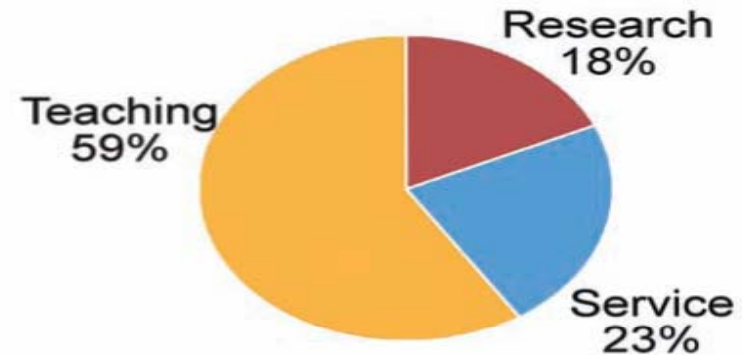


Culture

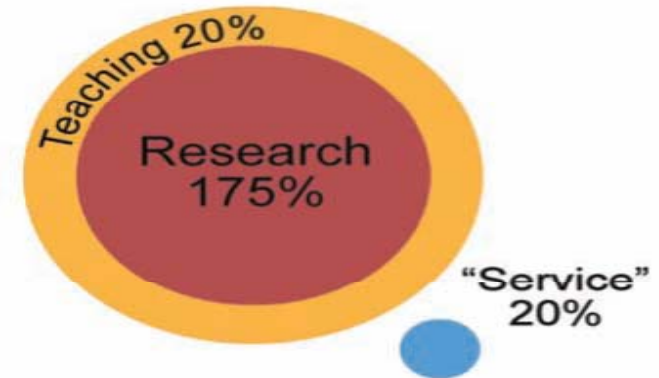
- Motivation for change – different drivers
- Incentives & rewards – flow of funds
- Provision of support and training
- Balance winning funds with covering costs
- If you charge more you need to deliver
- Accounting for time

HOW PROFESSORS SPEND THEIR TIME

How they actually
spend their time:



How departments
expect them to
spend their time:

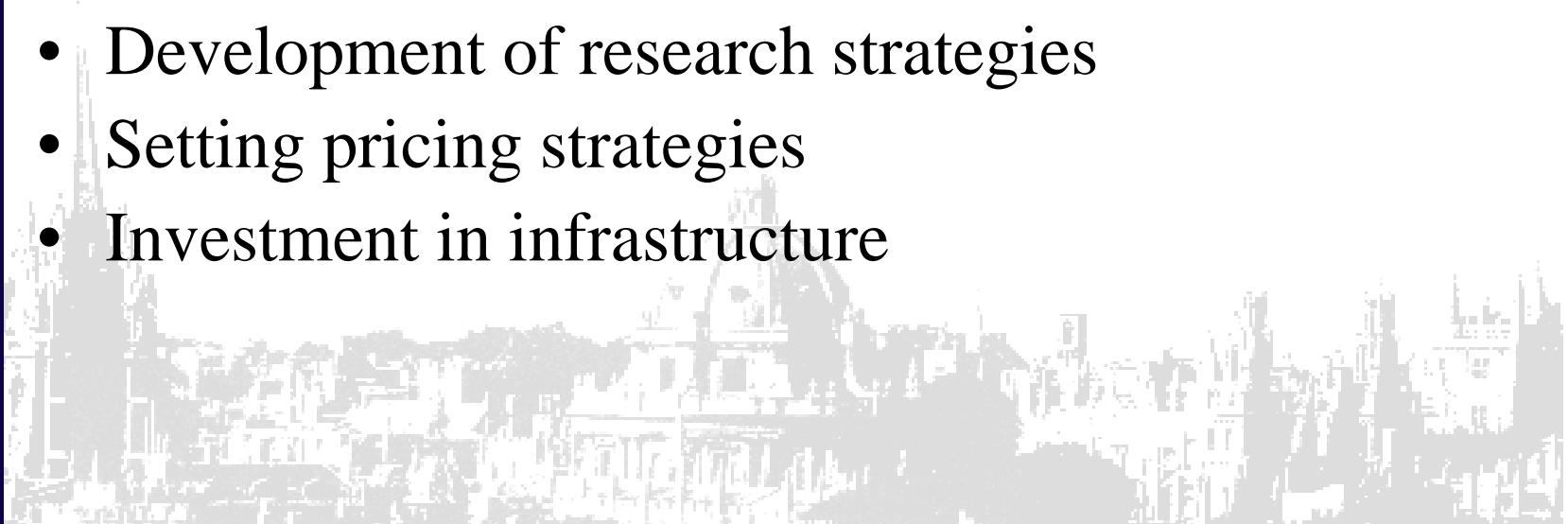


How Professors
would *like* to
spend their time:

Don't tell me
what to do

Sustainability (1)

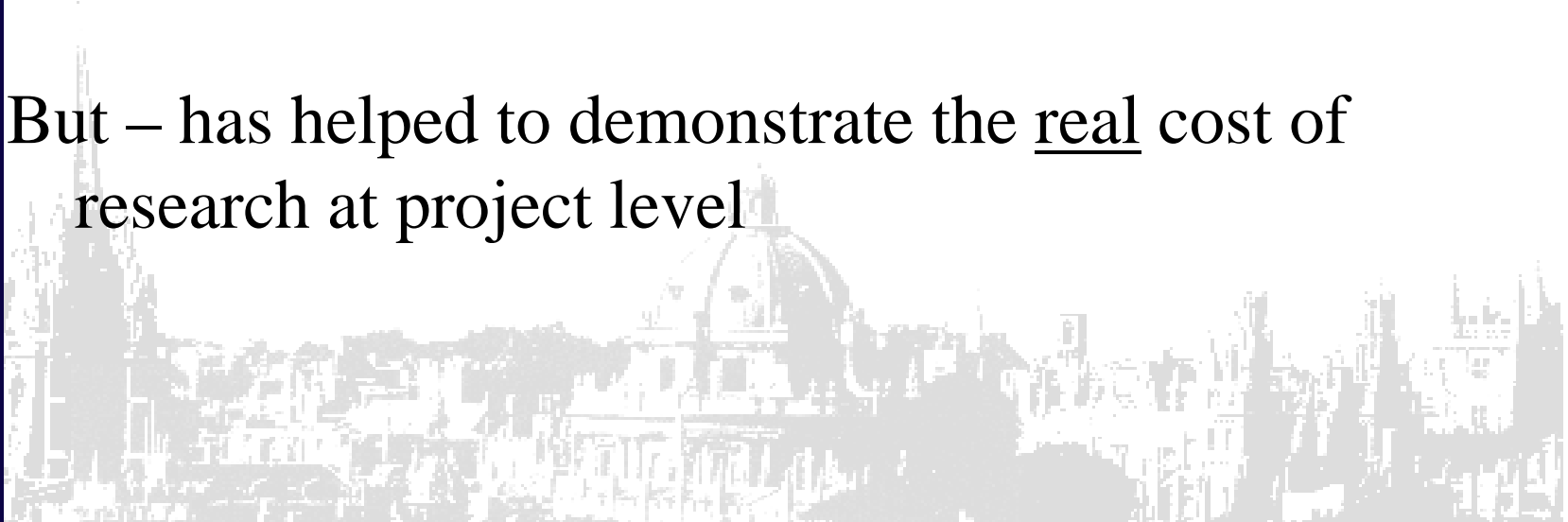
- How FEC inter-relates with internal resource allocation models
- Having to understand the difference between expenditure and real costs
- Balancing volume (RAE/REF) with sustainability
- Development of research strategies
- Setting pricing strategies
- Investment in infrastructure



Sustainability (2)

- Value for money
- Competitiveness
- Inefficiency = higher costs?
- Cost adjustments are important

But – has helped to demonstrate the real cost of research at project level



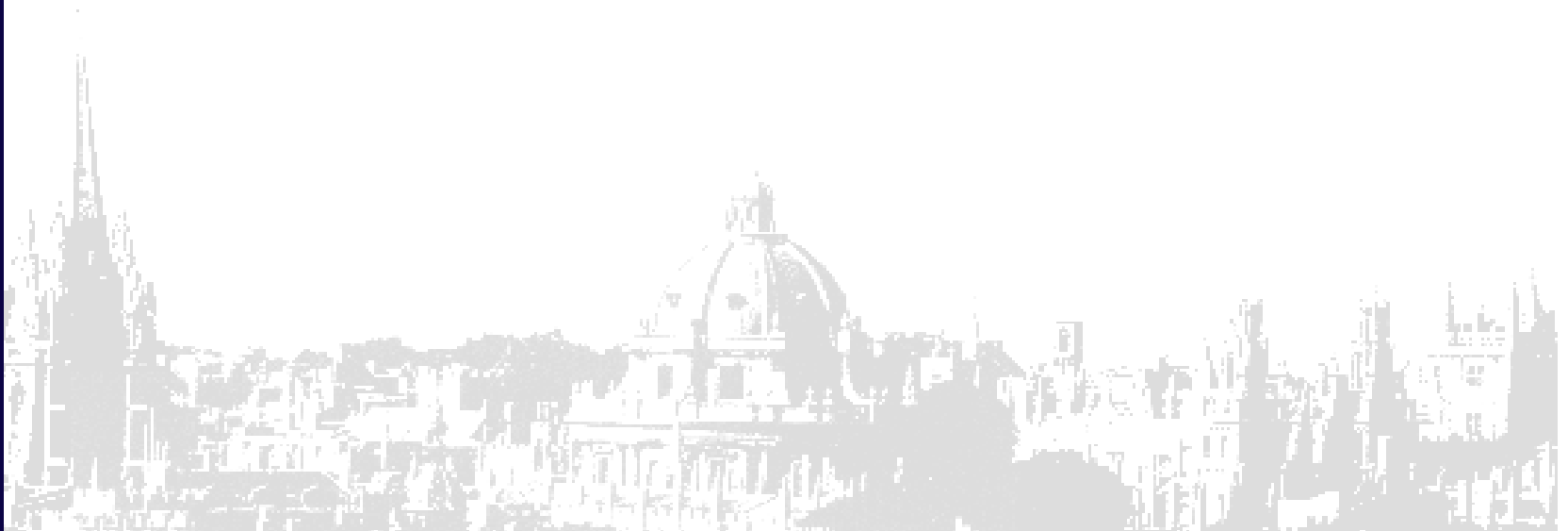
Relationship with Sponsors of Research (1)

- Research Councils
 - Clarity of purpose
 - Different concerns over behaviour
 - Value for money?
- Charities
 - Some initial suspicion
 - Better cost recovery
- Government Departments
 - No coordination
 - No additional funding

Relationship with Sponsors of Research (2)

- US Federal/Foundations
 - Better cost recovery
 - Beware NIH overheads
- Industry
 - High level of suspicion
 - Moving to pricing
 - Improved cost recovery?
 - More professional approach
 - Do we ‘sell’ IP?

Total Costing is a tool, not the solution





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Thank You

Acknowledgements: TRAC Development Group; Professor David Westbury; JM Consulting



Issues for Discussion

- **Ownership**
 - Who is driving Total Costing
 - Are the objectives clear
- **Culture**
 - What are the motivations for change
 - What behavioural impacts
 - Accounting for time
- **Sustainability**
 - Volume vs sustainability
 - How impact on resource allocations
 - Pricing strategies
 - Incentives/rewards
- **Consequences**
 - Competitiveness
 - Relationship with sponsors