

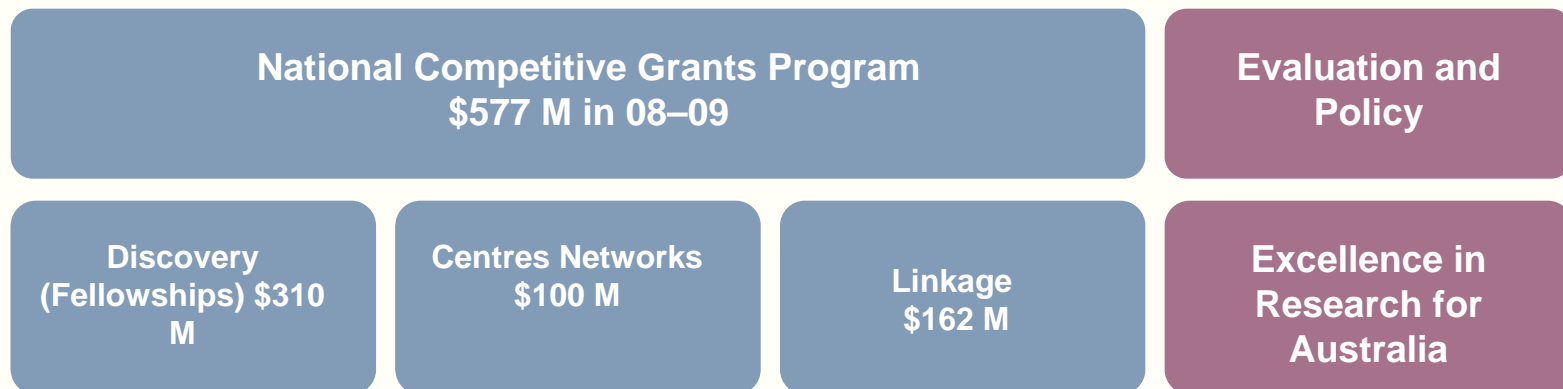


Professor Margaret Sheil
Chief Executive Officer
Australian Research Council





The ARC

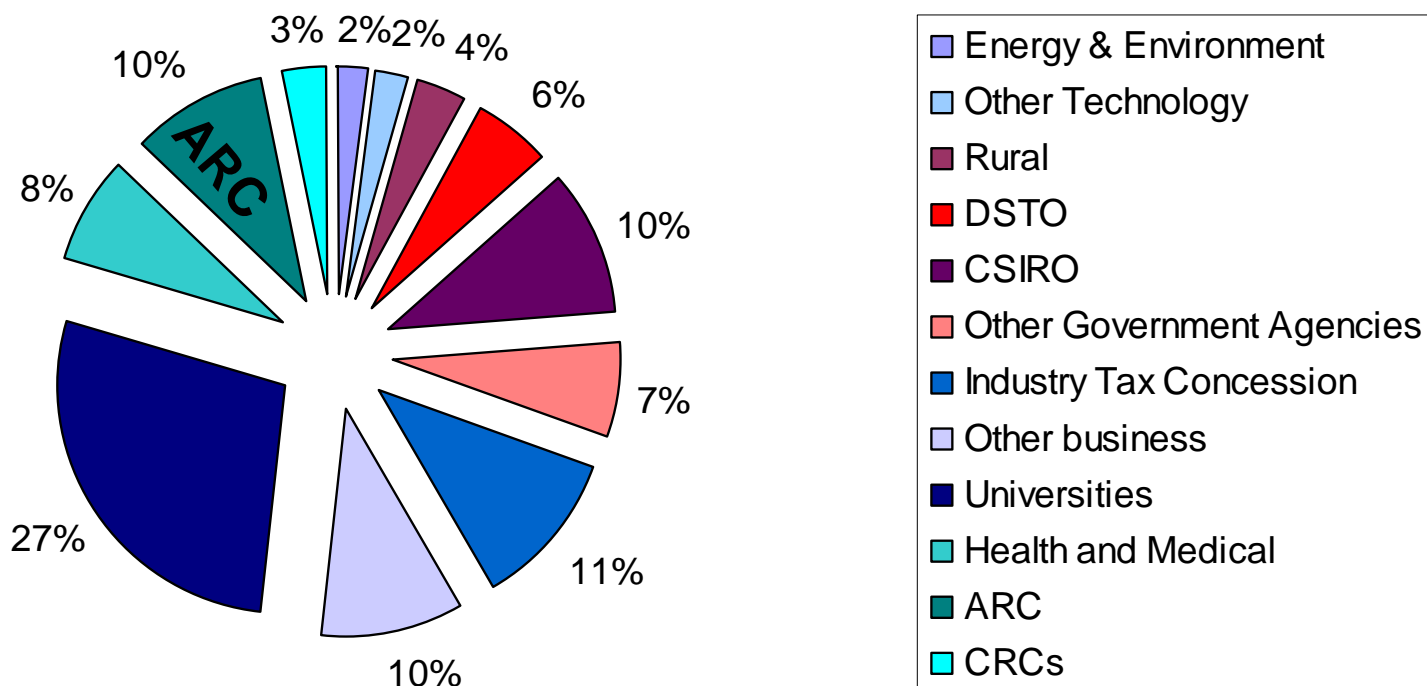


- Statutory Agency established 2001
- Fund direct costs to Universities and partners
- Projects, Fellows and infrastructure ($\$ < 5$ M)
- All disciplines except clinical medicine & dentistry





Government investment in R&D



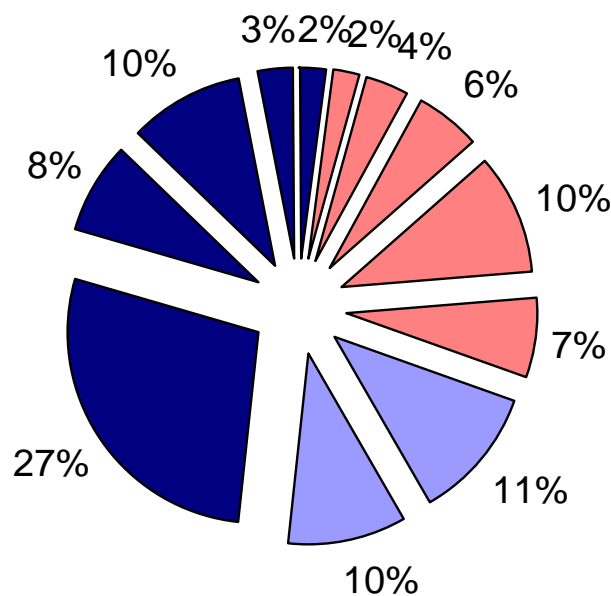
FY 06-07 \$5,973.9 M





Sector investment in R&D

Universities
~50%



Government
~29%

Business
~21%





ARC focus on internationalisation in 2009

- Removing any impediments to internationalisation in all ARC schemes
- All fellowships will be open to international applicants to work in Australia
- Provisions for international collaboration within all our programs





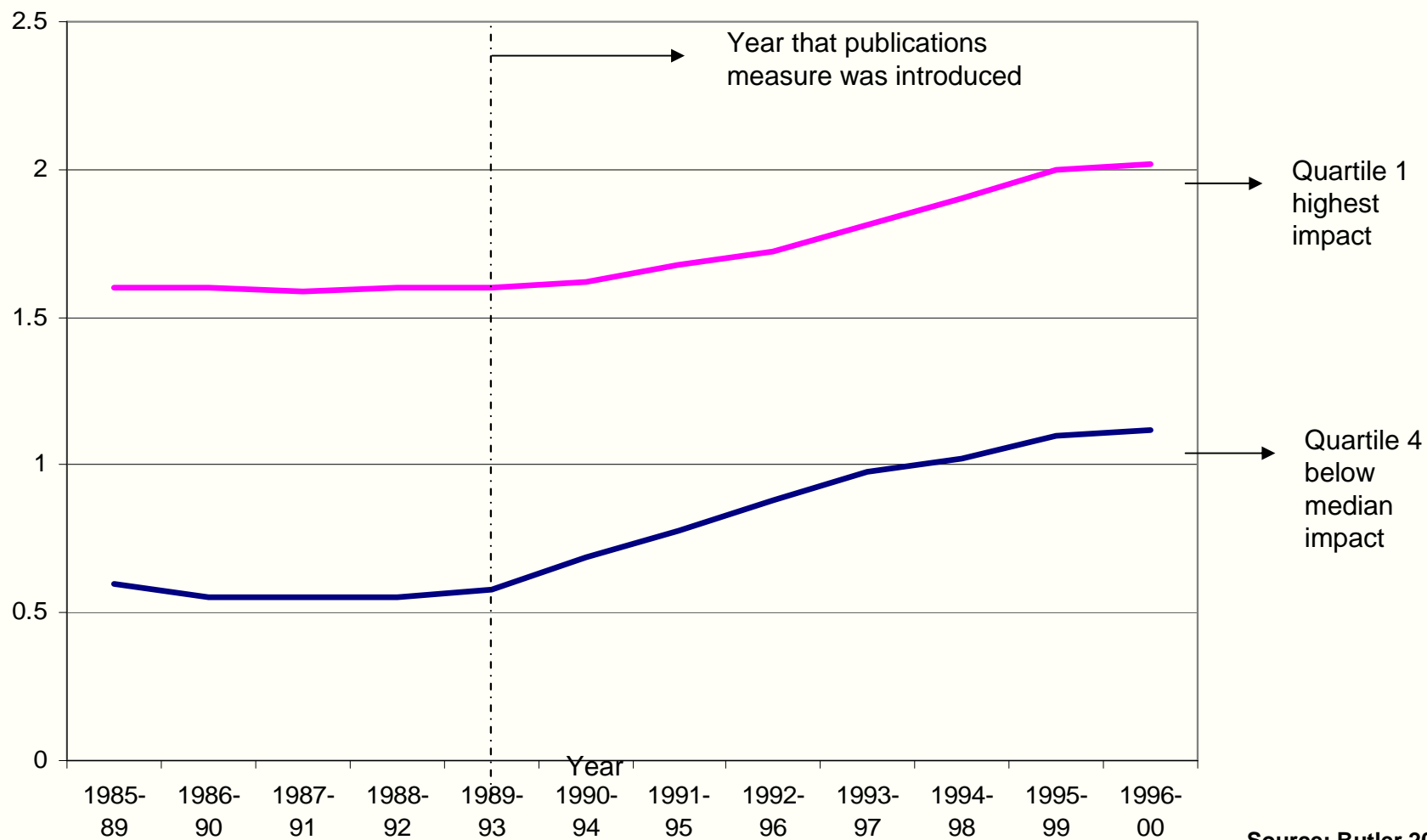
Why is assess the quality of research?

- Focuses research activity
- Highlights areas of research strength and gaps
- Increases outcomes and benefits
- Helps argue the case for research investment





Australian academic publishing practices

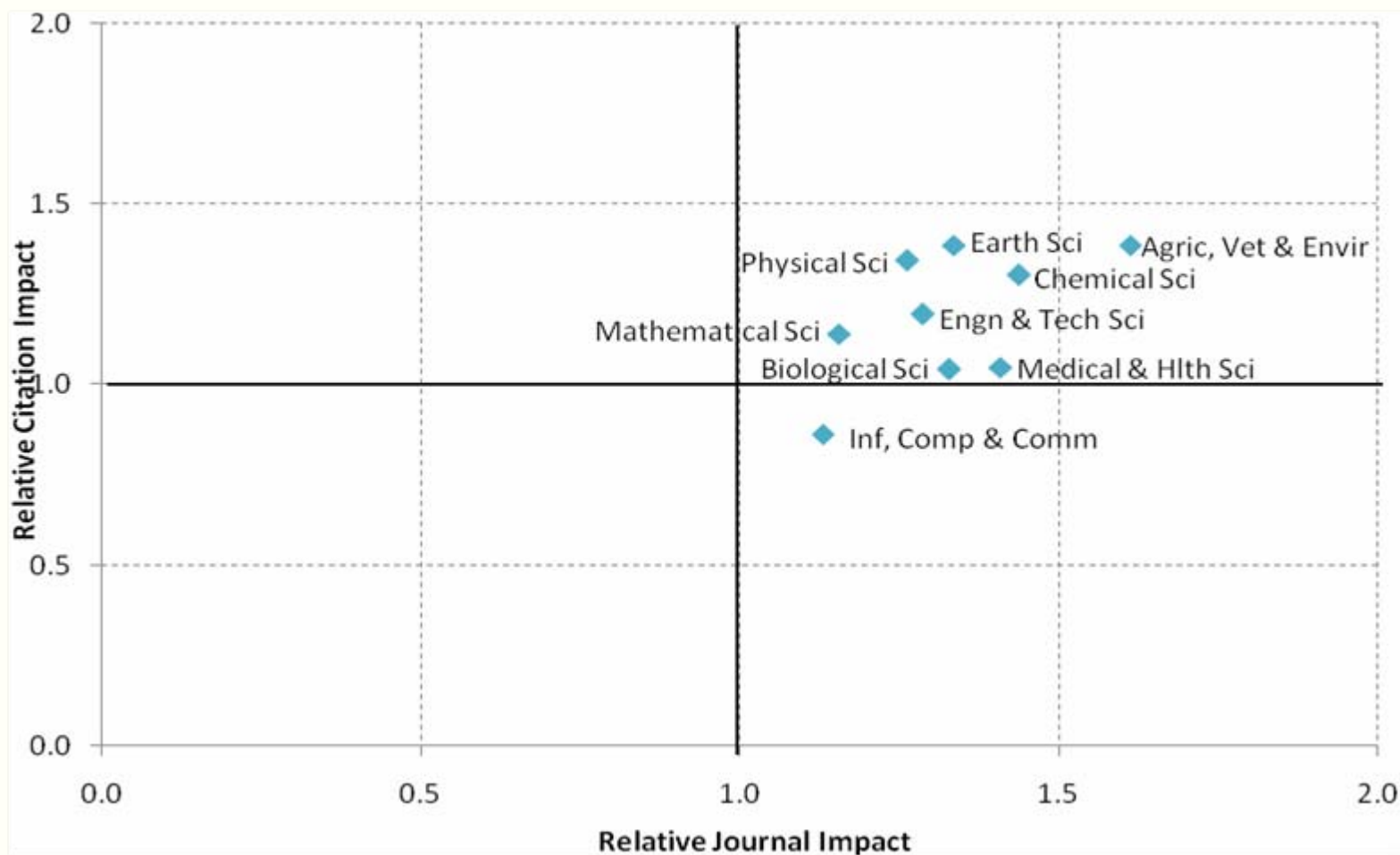


Source: Butler 2002



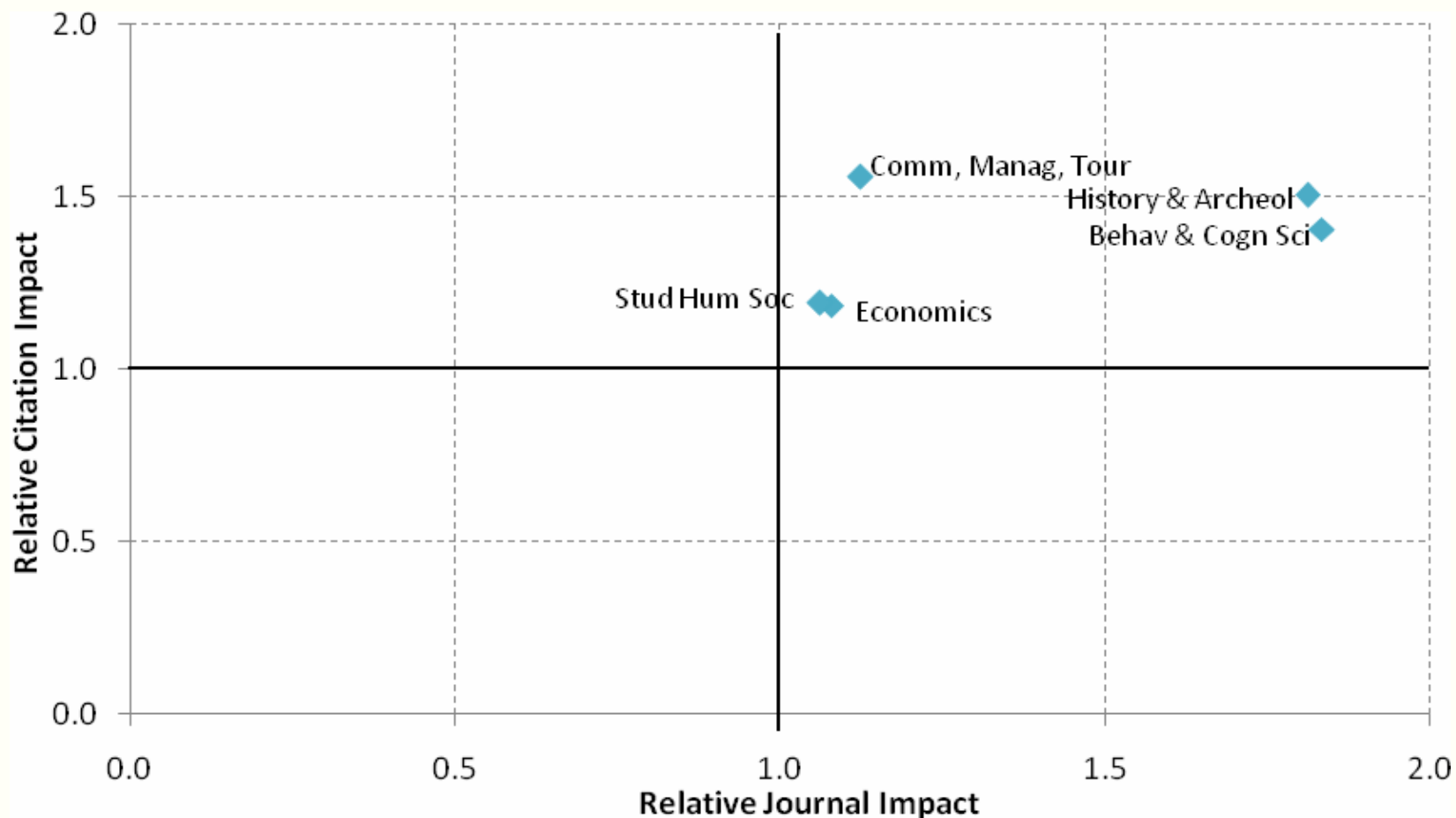


Impact of ARC-funded research sciences





Impact of ARC-funded research social sciences and humanities





Impact of ARC-funded research

Preliminary study findings: 2001–05 ARC-funded research publications

Relative to world benchmarks, ARC-funded publications appear in high-impact journals and are highly cited:

- In the sciences, the impact of ARC-funded publications was above the world average in all fields except information, computing and communication sciences.
- In the social sciences and humanities, the impact of ARC-funded publications was well above world averages in all disciplines that had sufficient numbers for analysis.
- In all fields except the mathematical sciences, the proportion of ARC-funded publications appearing among the most highly cited for their discipline is higher than the norm of one per cent.





ARC and comparator Australian sectors

Number of publications and relative impact — all publications, 2001-2005

Scheme/Sector	Number of Publications	Citations	Relative Citation Impact
ARC - Australian Postdoctoral Fellowships	1621	7001	1.36
ARC - Australian Professorial Fellowships	2178	11085	1.31
ARC - Australian Research Fellowships	1028	5599	1.27
ARC - Centres Excellence	574	878	1.35
ARC - Discovery Projects	10528	57064	1.17
ARC - Federation Fellowships	977	2694	1.59
ARC - Key Centres	402	2284	1.13
ARC - Linkage Projects	1604	5761	0.92
ARC - QEII Fellowships	1159	5473	1.12
ARC - Special research Centres	1863	12902	1.53
ARC Total	17246	88912	1.19
Cooperative Research Centres	3245	15728	0.99
Other Government	8247	31813	0.81
Other Hospital	11967	74046	1.30
Other University	58874	253521	0.91
Research Institutes	14199	116314	1.73
Australia	104319	541243	1.11
World	3782695	17649566	1.00





Who else is using quality assessments to drive performance improvements in their research?

1986—The United Kingdom

1993—Hong Kong

1997—Germany

1998—Ireland

2002—The Netherlands

2003—New Zealand

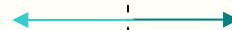
2005—France



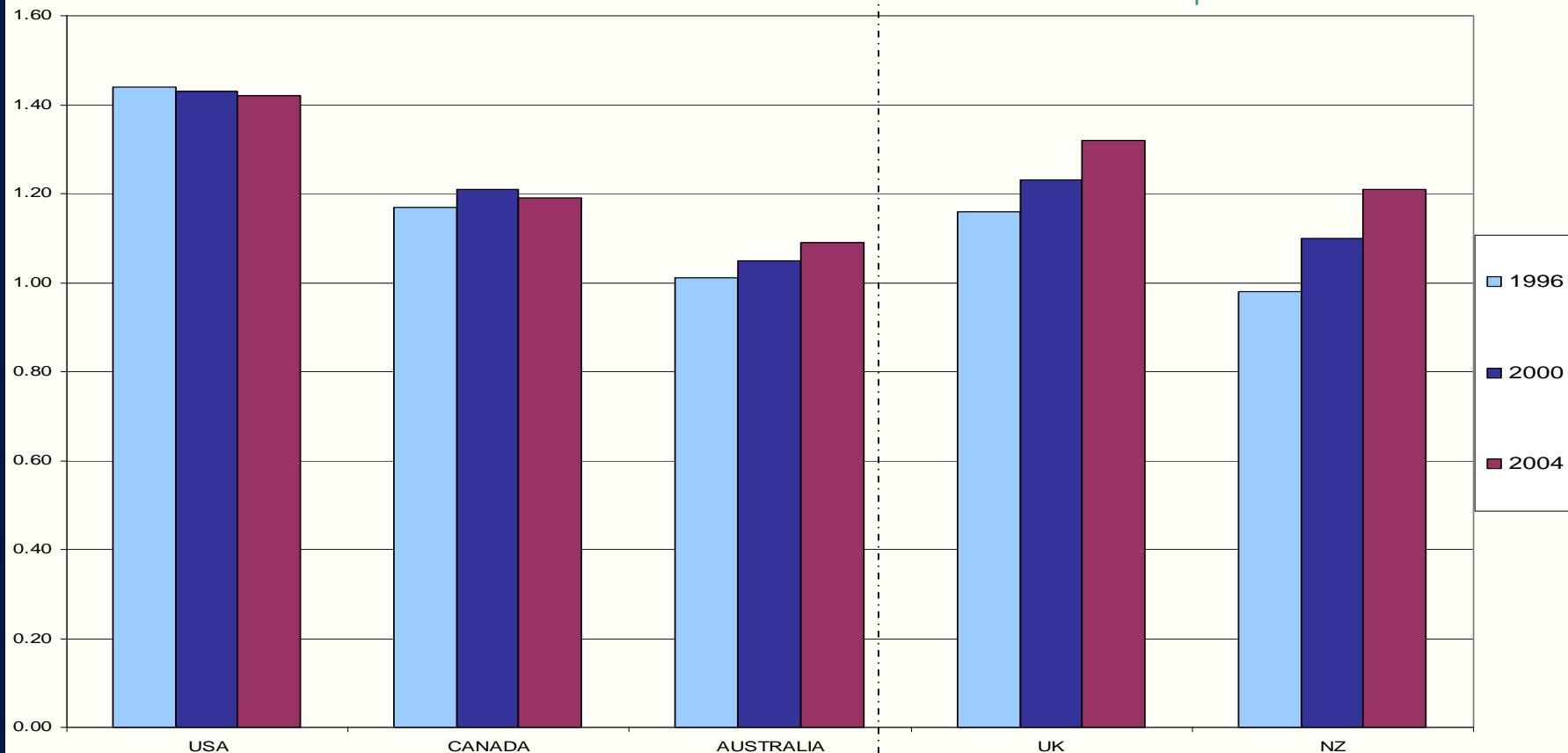


Research assessment improves research quality

Countries without quality
research assessment in place



Countries with quality research
assessment in place

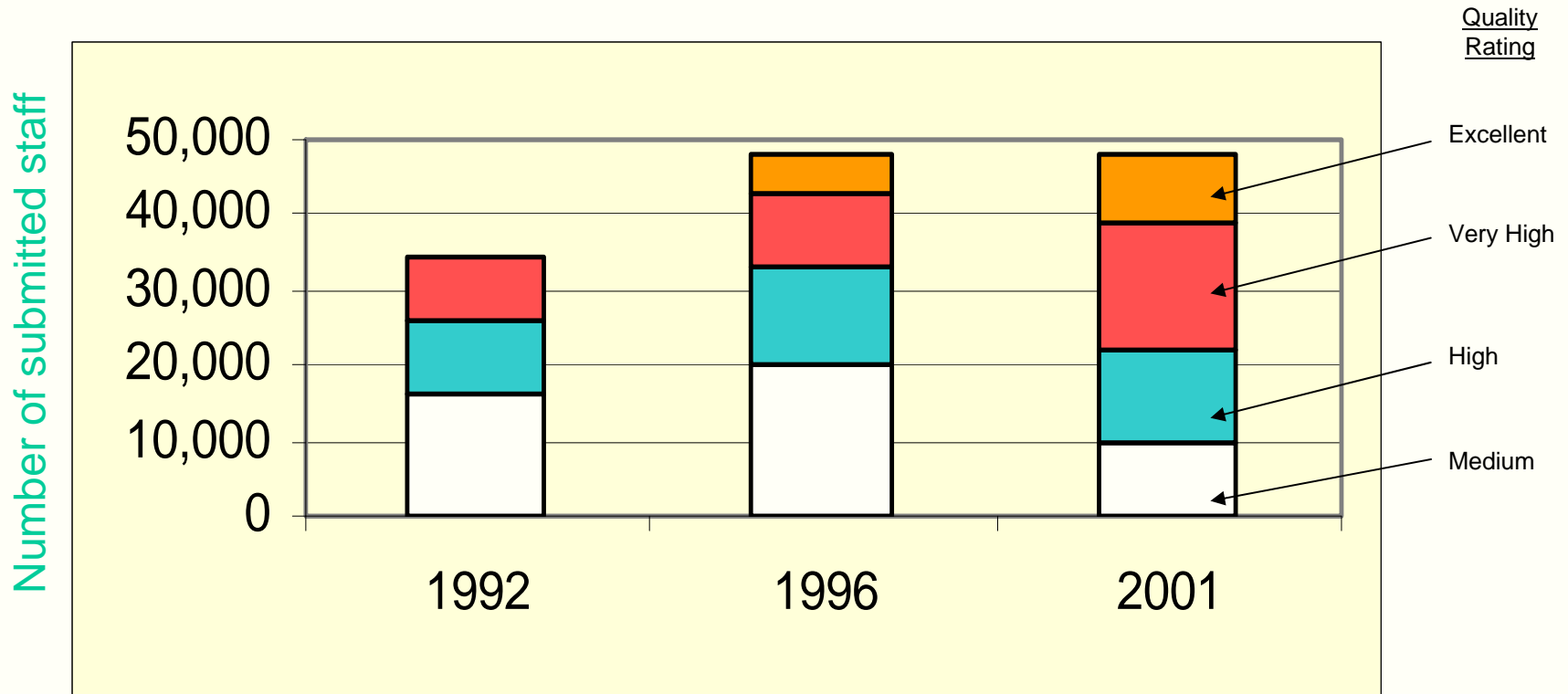


Source: Thomson ISI National Science Indicators





UK RAE exercises



Source: *Research Funding and Assessment: Beyond 2008*, Professor David Eastwood Vice Chancellor University of East Anglia.





What has the RAE achieved?

- Improved international recognition of the strength of UK research.
- Provided an evidence base for Government and increased research funding.
- Provided a single assessment system which operated across all disciplines.
- Provided feedback to university leaders.
- Driven a sustained improvement in research activities in terms of both quality and quantity of output.
- Boost to quality through improved ratings and improved performance of the UK research base.
- Extra funding attracted from Treasury.





Issues

- Mobility
- Specialisation
- Workload
- Interval





Research Excellence Framework (REF)

- will replace the RAE
- system based on metrics
- a consultation process was held early-2008
- a single unified framework for the funding and assessment of research across all subjects
- greater use of quantitative indicators, while taking account of key differences between the different discipline
- combine quantitative indicators - including bibliometric indicators wherever these are appropriate - and light-touch expert review





New Zealand PBRF 2007

- PBRF has just completed its second round of Quality Evaluation.
- Signs of having a positive impact on tertiary education-based research:
 - 41% increase in the number of researchers whose Evidence Portfolios were assigned a Quality score of 'A'.
 - 24% increase in the number of researchers whose Evidence Portfolios were assigned Quality scores of 'A' or 'B'.
- Since the introduction of the NZ PBRF, research resources have been directed more selectively to institutions judged by the PBRF process to have delivered better research.





New Zealand PBRF 2007 (cont.)

- Research has had a higher profile and focus than pre-PBRF.
- The PBRF has provided better information about relative research quality at institutional and subject level. It has sharpened consciousness of the place of 'excellence' across academic activity.
- The PBRF has contributed to significant changes in the management of research in research culture and awareness and in the priority given to research activity.





Challenges of comparison

Mapping across different discipline structures.

The granularity of ERA, using the ANZSRC, will allow for a high degree of flexibility in mapping and comparisons.

At the highest level of aggregation, ERA will use 22 two-digit FoR codes.

Strengths within the subordinate four-digit codes will be identified.





Australian Government
Australian Research Council

Excellence in Research for Australia (ERA) initiative



Defining our strengths,

identifying opportunities...





Excellence in Research for Australia (ERA) initiative

- replacement of previous Research Quality Framework (modeled on RAE but including impact)
- focus on bibliometric and other indicators rather than peer review (international expert development group)
- indicators will be assessed by expert reviewers who may seek review of a selection of outputs
- journal ranking exercise involving all disciplines (not just impact factors)
- assessment by discipline in 8 broad clusters
- challenges include: interdisciplinary research, developing predictive indicators and capturing excellence in applied research





Consultation Sector-wide

Consultation Paper

- released 4 June 2008, closed 30 July 2008
- 103 submissions received

Journal rankings

- released 12 June, closed 14 August 2008
- 114 submissions received

ERA Submission Guidelines Clusters 1 and 2

- released 21 January 2009, closed 6 Feb 2009





Disciplines Consultation

In 2008

- Indicators Development Group
- Humanities and Creative Arts Sub Groups
- PCE Working Group

In 2009

- Expert review of journal rankings
- Discipline working groups continuing....





ERA timeframe

Announced by Minister on 23 February 2009

- Trials in 2009 for 2 Clusters only
 - PCE submissions open June 2009
 - HCA submissions open August 2009
 - Esteem not included in Trials
 - Final documentation out early next week
- Full ERA process in 2010





ERA: Lessons learned



Detail from MAN ON WIRE. Directed by James Marsh. Photograph by James Ricketson





ERA: Lessons learned

- Time needed to adjust thinking to the new approach.
- All spent a long time preparing for the RQF.
- From the RQF:
 - the discipline not research group is a better unit of assessment
 - use comprehensive data rather than selective, and
 - use limited qualitative information.
- Senior administrators and research offices understand the new approach, researchers are taking some time to get up to speed.
- Workshops held with researchers have shown that once they understand, there is strong level of support for the approach.





ERA: Lessons learned (cont.)

- Competing agendas between researchers, research disciplines and university administrators
 - Retrospective data collection challenging
 - Overemphasis on some indicators (e.g. journal rankings)
- Esteem indicators are a good example of the tensions the ARC has to deal with but...
 - Researchers tend to favour their inclusion
 - Universities see them as adding unnecessary complexity to the submission process
 - Problems of robustness and making sure they fit the indicator principles
 - Will they add anything to the evaluation process?

