



**CAUDIT**

**Council of Australian University Directors of Information Technology**

# Benchmarking

**Paul Sherlock**

**Chair, CAUDIT Standing Committee on Benchmarking**

**Briefing for the CAUL Meeting**

**26 March 2010**

## Profile Data

Member supplied information that provides some context to the benchmarking data

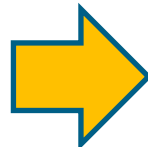
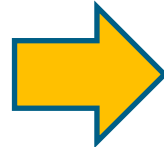
### Inputs

#### Benchmarking Data

Total & Central IT Spend  
Total & Central IT FTE  
Total & Central IT Staff Cost  
# of staff workstations  
# of student workstations  
# and size of locations

#### Published Data

Total Revenue  
Research Revenue  
Staff FTE  
Student EFTSL and SCH



### Calculated Data

#### Comparators

IT Spend as % of Total Revenue  
IT Spend per student (EFTSL)  
IT Spend per staff (FTE)  
Students per workstation  
Staff per workstation  
Degree of centralisation (by staff)  
Degree of centralisation (by spend)  
Average IT staff cost



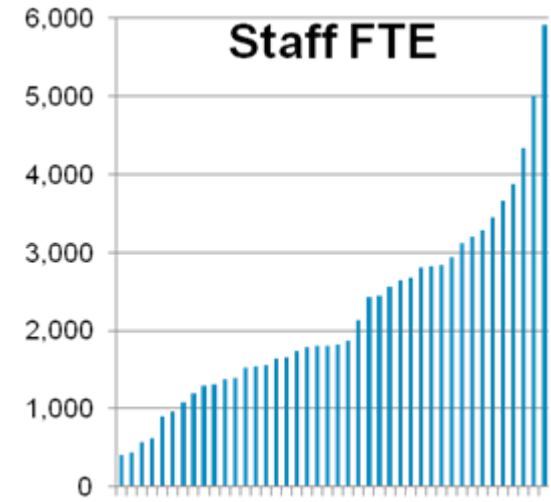
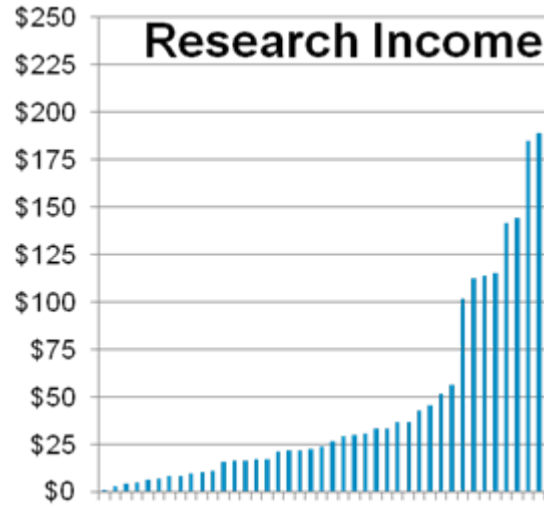
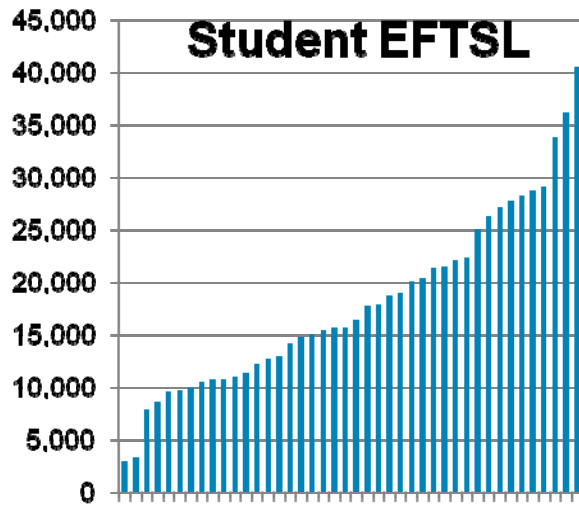
#### Complexity Index

# Complexity Index

Allows meaningful comparisons to be made between Universities of different sizes and shapes.

The complexity index is based on

1. Number of students (EFTSL)
2. Number of staff (FTE)
3. Research income (\$)
4. Number and size of different “sites”



**35%**

**+**

**25%**

**+**

**35%**

**+ 5%** (based on an algorithm which incorporates the number and size of sites)

**= complexity index**

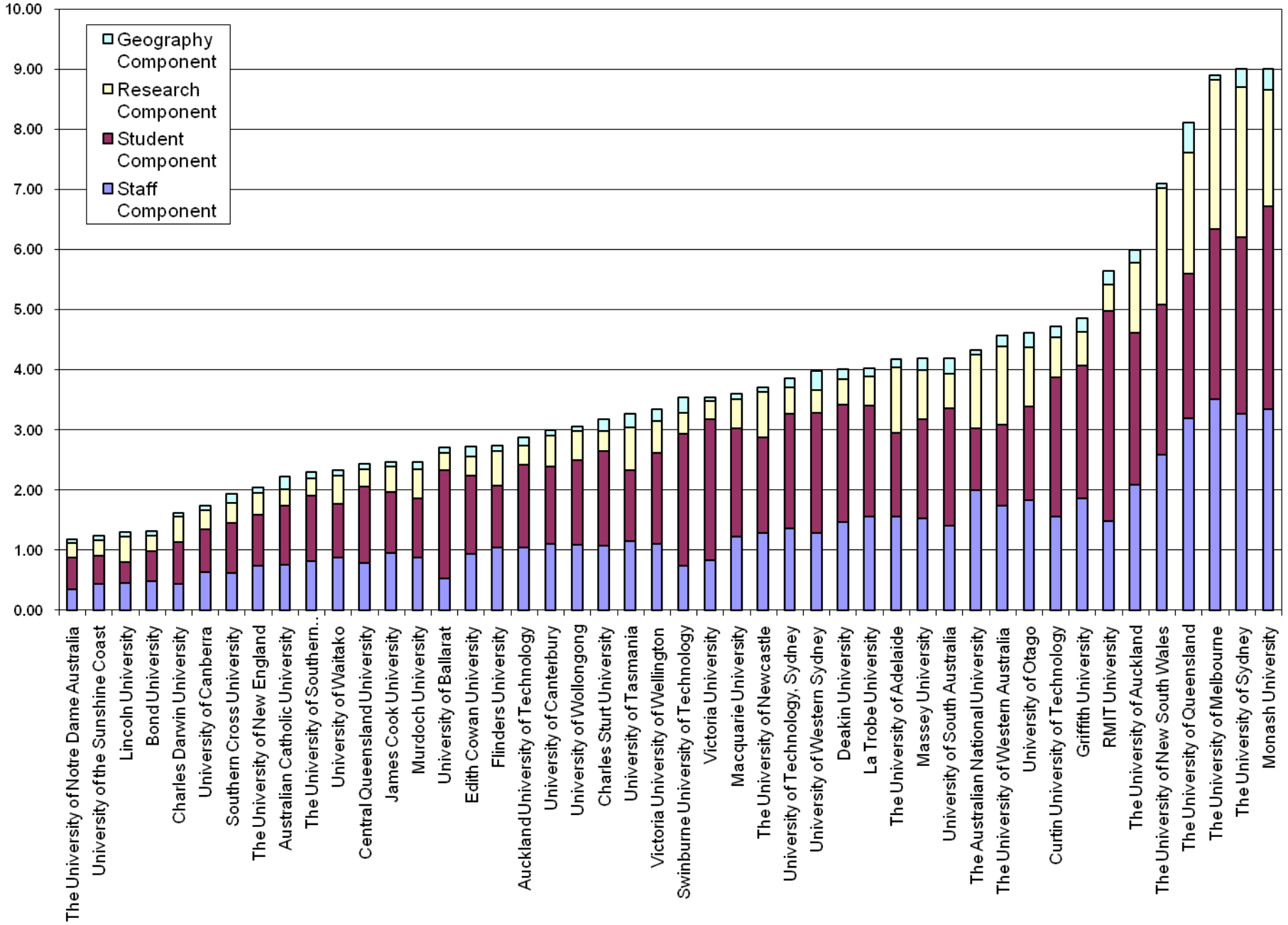
# Calculation

1. Obtain the raw measurement (eg. student EFTSL)
2. Scale the raw measurement using a linear algorithm between 1 and 10 based on the max and min values for student EFTSL across the sector
3. Applying a weighting to the scaled measurement based on the relative importance of underlying measure (eg. 35% for students)
4. Repeat the calculation process for staff, research and sites.
5. Add up the 4 weighted measurements to get the final index.

## An Example (UniSA)

1. Student EFT=23,301
2. Using max = 43,351 (RMIT) and min = 2,615 (Lincoln)  
UniSA's scaled student measurement is 4.03. RMIT = 10  
and Lincoln = 1.
3. Weighted student measurement is 35% of 5.61 = 1.51.
4. Adding this to the weighted measurements for research  
(0.58), staff (1.95) and sites (0.25) gives a total of 4.19

# Complexity Index



# Changes in the Complexity Index

2005 – Initial calculation

2006 – Added in TAFE students for dual sector institutions

2007 – Updated geography calculation

Possible future modifications

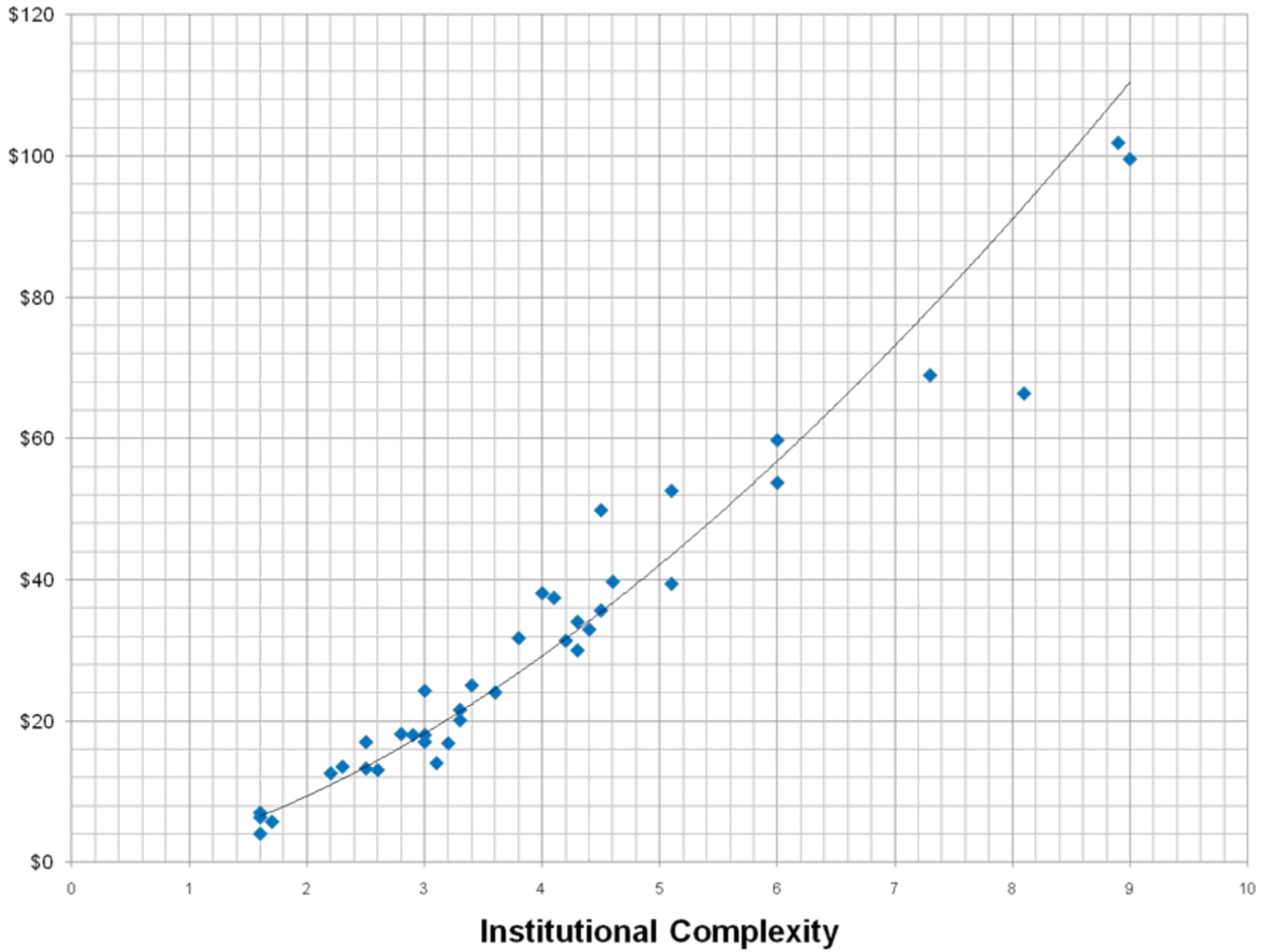
Include location (eg. regional, international) as part of the geography algorithm.

Consider discipline mix.

Consider cohort mix (domestic v international v HDR).

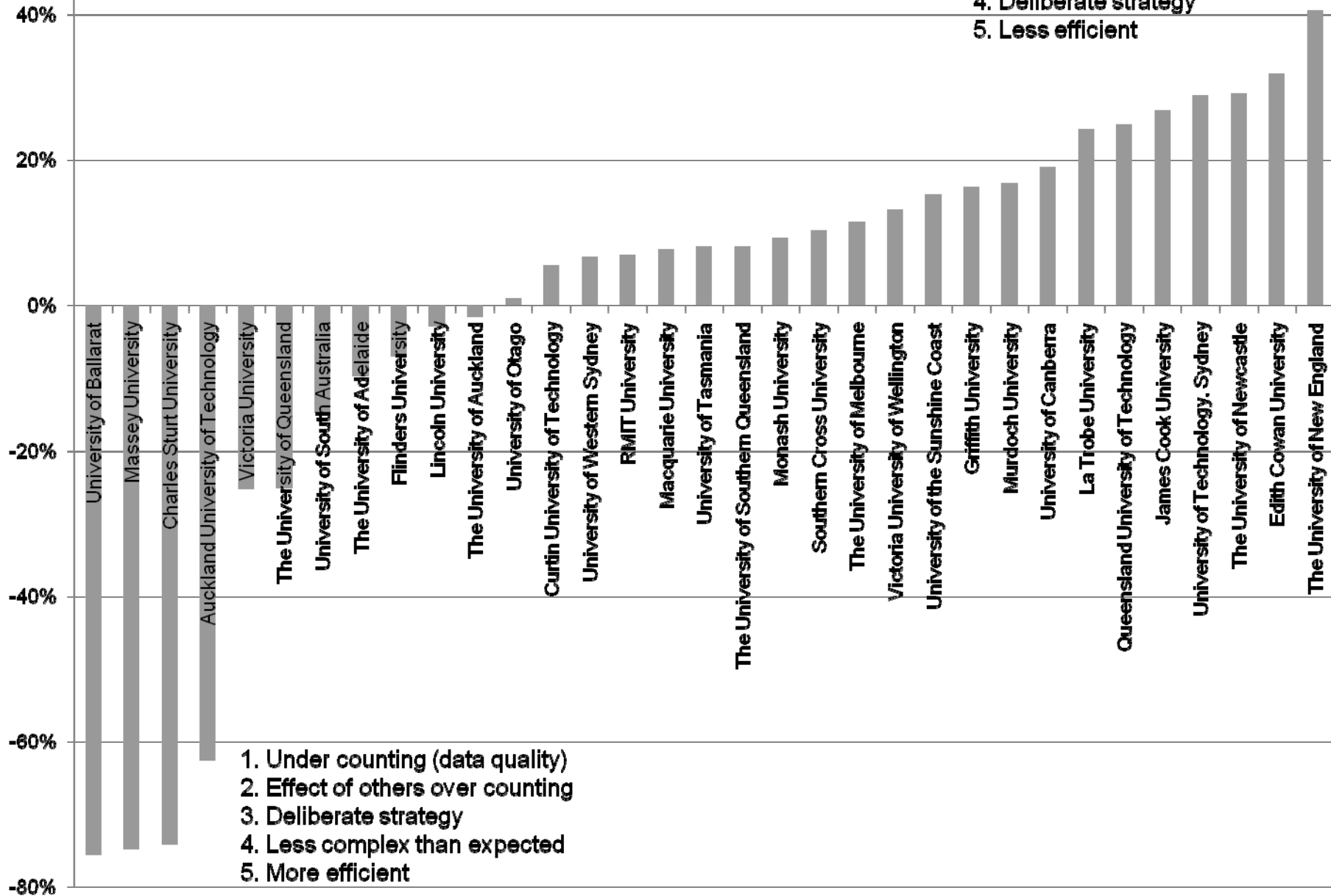
# Total University ICT Expenditure (2008)

Millions



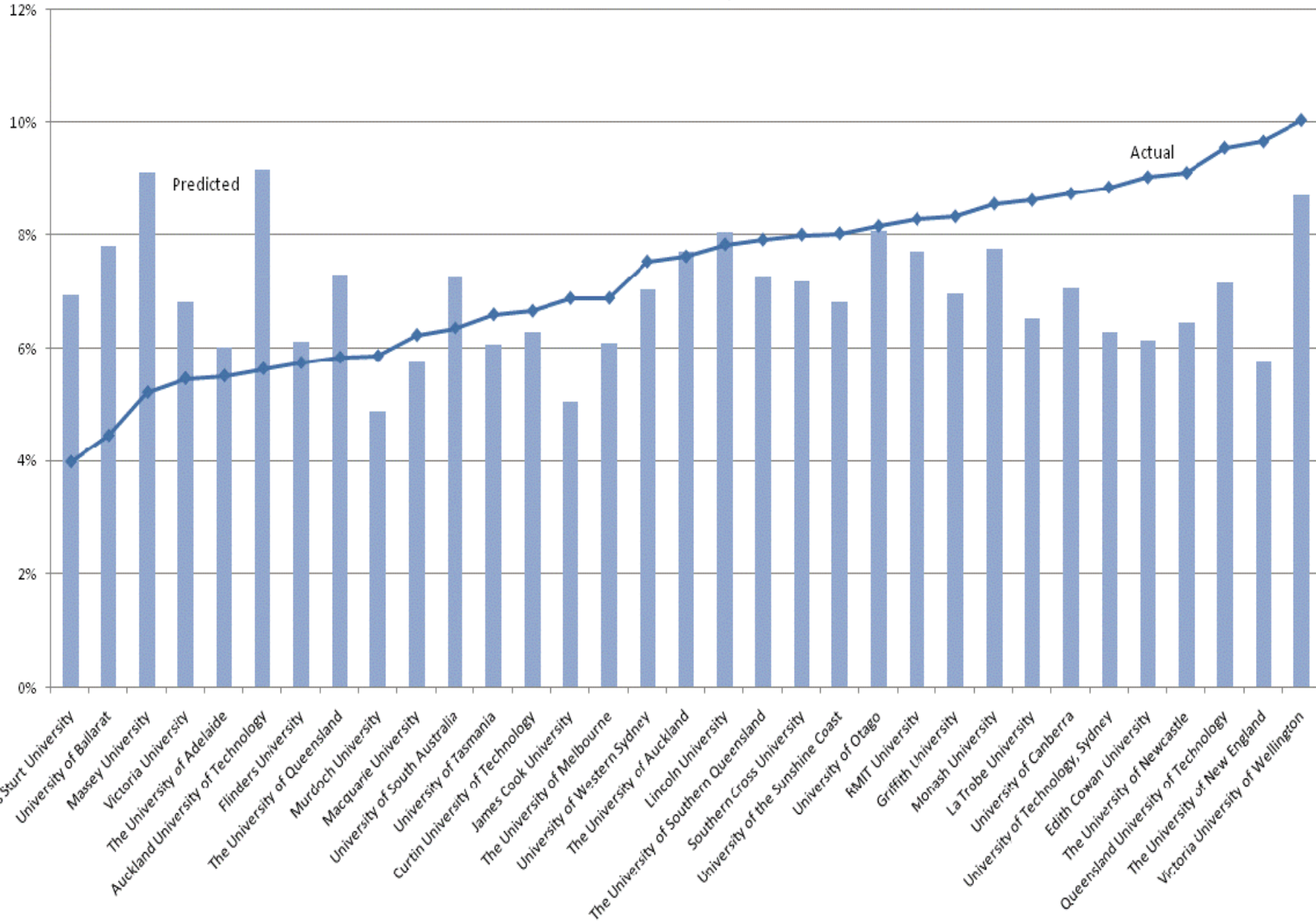
# % Difference between Actual and Predicted IT Expenditure

1. Over counting (data quality)
2. More complex than expected
3. Effect of others undercounting
4. Deliberate strategy
5. Less efficient

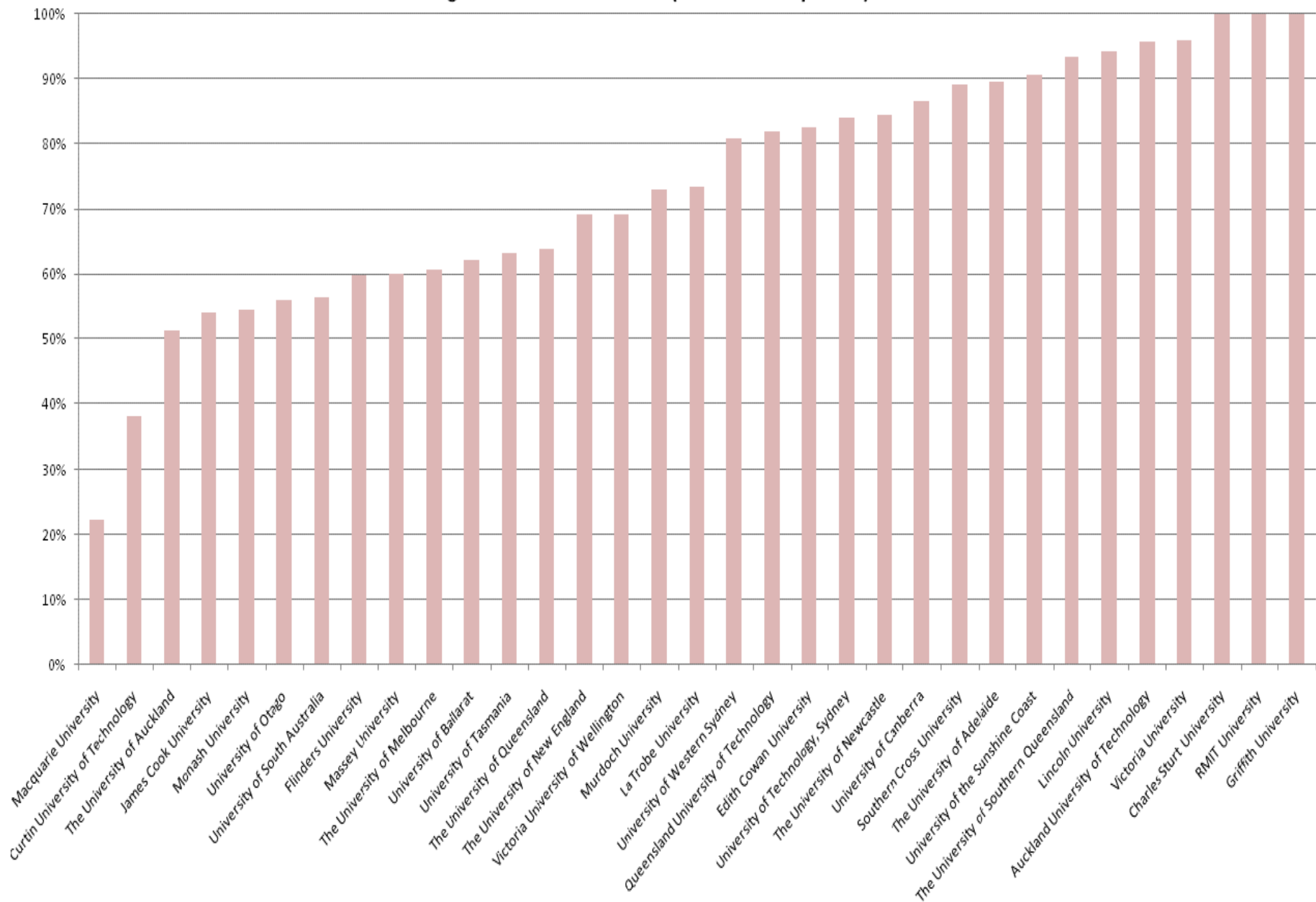


1. Under counting (data quality)
2. Effect of others over counting
3. Deliberate strategy
4. Less complex than expected
5. More efficient

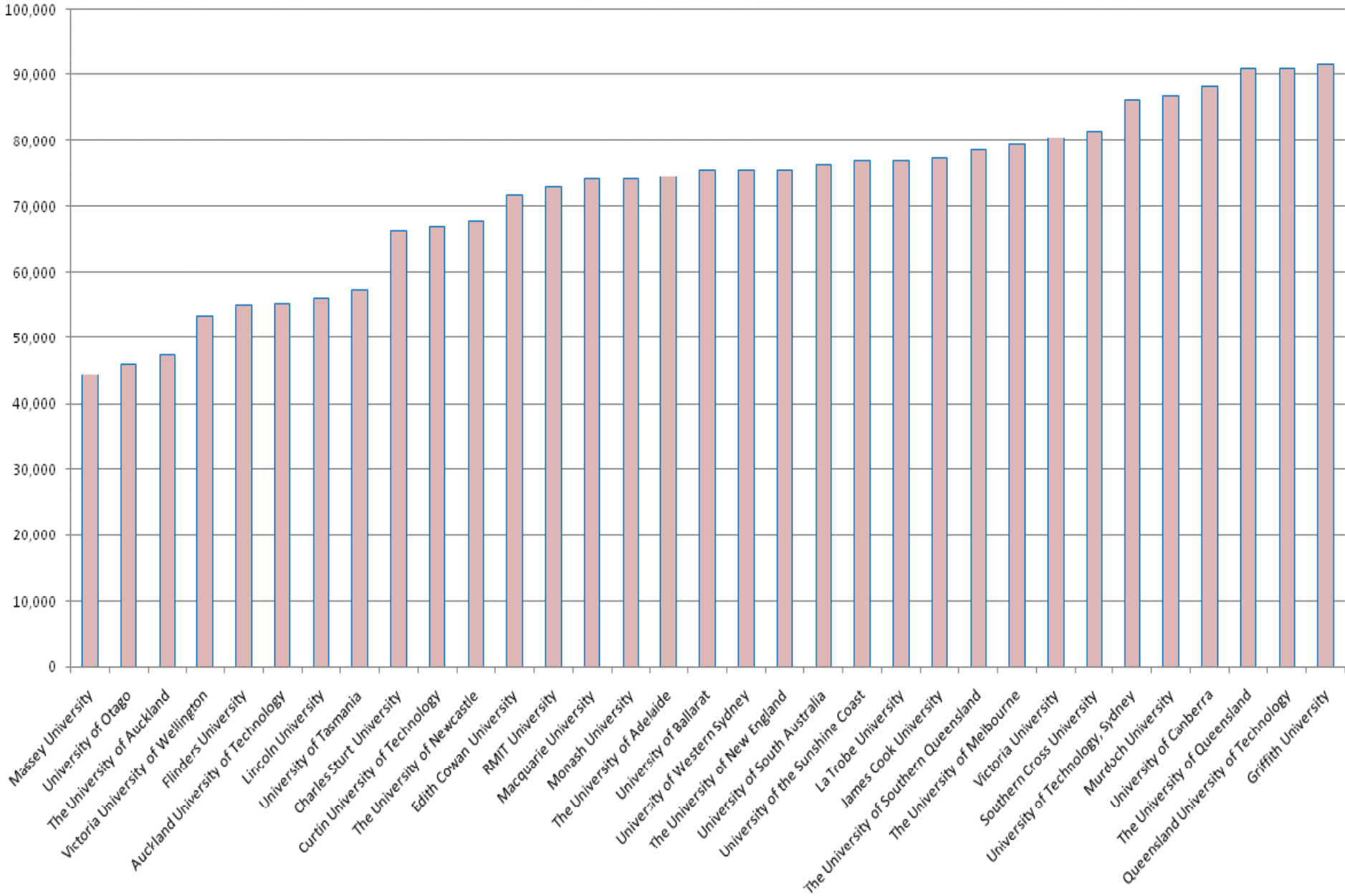
# Actual and Predicted IT Spend as a % of Total Revenue



## Degree of Centralisation (measured by staff)



Average IT Staff Cost (2007)



# Summary of University ICT

Measure	
Total Expenditure (actual and predicted)	\$1.3bn
% of Revenue (actual)	4.0 - 10.0%
% of Revenue (predicted)	5.0 - 9.2%
Average cost of an IT FTE	\$71,000
Degree of centralisation (staff)	22-100%

# Demonstration

When was the last time you were **first**?

