How Much Influence Do Economics Professors Have on Rankings? The Case of Australia and New Zealand

Sinha, Dipendra and Macri, Joseph

Ritsumeikan Asia Pacific University, Japan and Macquarie University, Australia

11 January 2007

HOW MUCH INFLUENCE DO ECONOMICS PROFESSORS HAVE ON RANKINGS? THE CASE OF AUSTRALIA AND NEW ZEALAND

Joseph Macri
Department of Economics,
Macquarie University
Australia
Phone: 61-2-9850-9469,
Fax: 61-2-9850-8586
Email: (jmacri@efs.mq.edu.au).

Dipendra Sinha
Ritsumeikan Asia Pacific University,
Japan
and
Macquarie University
Australia
Phone 81-977-78-1214
Fax 81-977-78-1123
Email: (dsinha@apu.ac.jp or dsinha@efs.mq.edu.au).

Abstract:

This study ranks Australian and New Zealand economics teaching departments on the basis of the research productivity of its economics professors in economics teaching departments using quality adjusted journal articles listed on the ECONLIT database for the periods 1988-2002 and for 1996-2002. The per capita research productivity of professors is highest for University of Melbourne, University of Western Australia and University of Canterbury. For a number of economics departments, the per capita research productivity is lower than the research productivity of all faculty members, using a number of criteria for 1988-2002 and 1996-2002. These universities are University of Auckland, Royal Melbourne Institute of Technology University, Griffith University and Macquarie University.

JEL Categories: A140, O110

I. Introduction

The voice of Tina Turner energetically singing, *"you're simply the best better than all the rest, better than any one any-one I've ever met",* in the chorus of the classic song 'Simply the Best', is likely to explain the jubilation universities feel when they are ranked highly in various league tables. The studies that rank universities, departments and individuals have long been a topic of immense interest and controversy, particularly if universities do not rate well. These studies are closely scrutinized by prospective students, existing and potential faculty members, governments, administrators and, are widely considered important for the scholarly success and prestige of universities. Moreover, governments of developed countries are increasingly tying funding of government universities to performance benchmarks. Invariably, and not surprisingly, the position of universities and departments in the various league tables usually relies upon the quality and performance of the senior faculty members, in particular, the professors. Very few would disagree that professors hold a unique and important place in universities, which encompasses, (i) undertaking world class research; (ii) fostering a research culture; (iii) improving the quality of undergraduate and graduate students; (iv) promoting free speech and academic freedom and, (v) defining and promoting professional values and standards in higher education in ensuring the advancement of knowledge.

The objective of this study, using journal articles included in the ECONLIT database (the database of the American Economic Association) and on the basis of two criteria – one based on citations and the other on perceptions of journal quality,

is to rank 28 Australian and New Zealand economics teaching departments on the basis of the research productivity of its professors. It is important to note that professors in both Australia and New Zealand, unlike the United States, are not usually appointed by an internal promotion mechanism. Established professorial positions are usually advertised externally and are called 'Chairs'. However, a number of universities have created positions of 'Personal Chairs', which are usually awarded through an internal process, and 'Professorial Fellows', which are awarded on the basis of accomplishments of the academic staff. Professors, personal chairs and professorial fellows represent approximately 13 percent of total faculty members (lecturers and above) in Australian and New Zealand economics departments (Macri and Sinha, 2006). In contrast, professors in the United States represent approximately 35 percent of total faculty members (American Association of University Professors, 2001). Professors in Australia and New Zealand, just like in the UK, are expected to be leading research in the departments. This leadership role is much more pronounced in these countries than in the United States. In fact, professors in these countries often have a lower teaching load than other faculty members so that they can concentrate more on research. In the United States, the situation is often the opposite. Newly appointed assistant professors are given a lower teaching load so that they can allocate more time on research. Do the professors in the economics departments in Australia and New Zealand fulfill their roles as leaders of research?

This study has important and distinguishing features. First, this is the only international study that ranks economics teaching departments on the basis of the

academic rank of professors. Second, it is the only international study that ranks economics teaching departments, using citation and perceptions journal quality weights, on the basis of professors. Third, as far as we are aware, the period under study represents the longest period ever undertaken in ranking economics teaching departments on the basis of the research output of professors. Fourth, in order to account for differences in journal formats, we standardize all of the ECONLIT journals in which Australian and New Zealand professors have published, to an American Economic Review (AER) page equivalent. Fifth, this paper's methodology enables international comparisons to be made on the basis of quality adjusted journal weights.

The paper is organized as follows. In section II, we provide a brief review of the literature. In Section III, we detail the data and methodology employed in ranking Australian and New Zealand economics teaching departments on the basis of the quality adjusted research output published by their professors. In Section IV, we provide and discuss the results. In Section V, we provide some concluding comments.

II. Literature Review

It is somewhat surprising that very little research has been undertaken in the ranking of economics teaching departments on the basis of the research productivity of its professors. Generally, most rankings studies have focused on ranking institutions and departments on the basis of all faculty members and employed criteria ranging from the origins of papers presented at American Economic Association (AEA)

meetings, surveys, and more 'objective' measures of research output, which include, but are not limited to, the number of journal publications in the ECONLIT database, publications in top-tiered journals, citations and the publications of books (see, for example, Coupe, 2003; Davis and Papanek, 1984; Fusfeld, 1956, Garcia-Castrillo *et al*, 2002; Gibson, 2000; Graves *et al*, 1982; Harris, 1990; Kalaitzidakis *et al*, 2003; King, 2001; Laband and Piette, 1994; Liebowitz and Palmer, 1984; Macri and Sinha, 2002, 2006; Mason *et al*, 1997; Sinha and Macri, 2002, 2004; Thursby, 2000; Towe and Wright, 1995). Brooks (2005) constructs rankings of countries and universities on the basis of download of journal articles from the ECONBASE database of Elsevier Science Limited. The results are generally consistent with those obtained by Garcia-Castrillo *et al.* In the context of this present study, as far as we are aware, there are only two studies that have examined the research productivity of economics professors in relation to the rankings of economics teaching departments. In an interesting and controversial study, Anderson and Blandy (1992) identified and surveyed 81 Australian teaching professors of economics, econometrics and economic history and asked them to rank Australian economics departments on a range of criteria. More recently, Macri and Sinha (2002) examined the research productivity of Australian economics professors in teaching departments by employing citations and perceptions based criteria. Macri and Sinha found that, on a per capita basis, economics professors were generally more productive than economics faculty members as a whole (lecturers and above).

III. Data and Methodology

By using journal articles collected from the ECONLIT database and on the basis of two criteria – one based on citations and the other on perceptions of journal quality, we rank 28 Australian and New Zealand teaching economics departments on the basis of the quality adjusted output produced by economics teaching professors for the periods 1988-2002 and 1996-2002.

The following university economics teaching departments (with abbreviations used in parentheses in relevant cases) are ranked: Adelaide, Australian National University (ANU, Department of Economics, Faculties only), Auckland, Canberra, Canterbury, Curtin University of Technology (Curtin), Flinders, Griffith, La Trobe, Lincoln, Macquarie, Massey, Melbourne, Monash (all campuses), Newcastle, Otago, Queensland, Queensland University of Technology (QUT), Royal Melbourne Institute of Technology University (RMIT), Sydney, Tasmania, New England (UNE), New South Wales (UNSW), University of Technology, Sydney (UTS), Western Australia (UWA), Western Sydney (all campuses) (UWS), , Victoria University of Wellington (VUW) and Wollongong. Deakin (all campuses), Murdoch, Victoria and Waikato economics teaching departments are excluded from this study as they did not have any professors listed on their faculty lists as of August, 2003. The faculty lists were collected from the websites of the departments in August, 2003. We exclude adjunct professors, part-time professorial staff and any professors that do not have any teaching obligations and are not being funded by their respective universities.

We use the ECONLIT database as of August 2003 to collect the journal publications data. The arguments for focusing solely on journal publications are twofold. First, most academics would agree journal articles are the only publications that undergo the widely accepted rigorous peer- review process in order to account for quality. Second, the heterogeneous nature of books and publishers make it an extremely difficult task to derive an 'objective' measure of quality. We exclude book reviews. We adopt the 'stock' approach, which involves collecting and assigning articles to a professor's present affiliation. This seems a logical approach given that when academics move from one institution to another they transport their human capital with them (see, for example, Conroy and Dusansky, 1995; Gibson, 2000; Scott and Mitias, 1996; Towe and Wright, 1995).

As noted earlier, we standardized all the ECONLIT journal articles Australian and New Zealand economics professors published to an American Economic Review (*AER*) standardized equivalent. For example, based on our calculations, *AER* is, on average, approximately 760 words per page. Therefore, a journal with an average number of words per page of 380 is given a weight of 0.5. We calculated the *AER* standardized equivalent for all the professorial published journals back to 1988. This was an extremely time-consuming task and required meticulous attention, given that some authors would use initials, middles names and first names throughout this period. Generally, if there were any doubts, we would contact the author(s) for clarification. The reason for selecting 1988 as our initial period was because it was the first year in which ECONLIT database recorded the author(s) affiliation.

The methodology used to compute the rankings for this paper is the same as that which was adopted in Macri and Sinha (2006). These quality journal weights are taken from Kalaitzidakis *et al*. (2003) (KMS hereinafter), and Laband and Piette (1994) (LP hereinafter). The quality weights used for the perception-based journal rankings are from Mason *et al*. (1997) (MSF hereinafter). The following formula is used to calculate the rankings:

$$(P)\left(\frac{1}{n}\right)(CF)(Q) \qquad (1)$$

where P is the number of pages, n is the number of authors, CF is the conversion factor as previously mentioned in terms of the AER standardized page equivalent and Q is the index of quality, based on KMS, LP, and MSF quality weights. The journal quality weights are all standardized to 1 in all cases. For all those journals that are not ranked in KMS, LP and MSF, we use the weight of the lowest ranked journal in which professors has published. We followed the convention in terms of co-authorship by dividing the pages evenly amongst authors ($1/n$). Furthermore, KMS ranked only those journals which were classified as 'economics' journals in the Social Science Citation Index (SSCI). As a result, there were several notable omissions that were considered important economics journals. In order to account for these notable exclusions, we used the LP weights for the following journals: *Industrial and Labor Relations Review, Journal of the American Statistical Association and Journal of Money, Credit and Banking.* It is also important to note that we have applied different weights to *AER* and *AER Papers and Proceedings*. We argue that they do not undergo the same refereeing process. Therefore, we apply

the LP weights to *AER Papers and Proceedings*, which does distinguish between *AER and AER Papers and Proceedings.* We now discuss the results.

IV. Results

We have considered 79 professors in 28 economics departments. While a number of universities have only one professor, Melbourne has 9 professors which is the highest number among these universities. Table 1 show the per capita productivity of the professors for 1988-2002 by the number of journal articles, which is denoted by NOPCPROF. It also shows the per capita productivity of all faculty members. This is denoted by NOPC. For the professors, La Trobe tops the list followed by Adelaide, Canterbury, Melbourne and UWA in that order. For Griffith and Wollongong, the per capita productivity of professors is lower than the per capita productivity of all faculty members.

Table 2 shows the per capita productivity of professors for 1988-2002 when KMS weights are used. It is denoted by KMSPCPROF. UWA has the highest rank followed by UNSW, Sydney, Melbourne and Griffith in that order. The productivity of all faculty members is denoted by KMSPC. For Auckland, RMIT and Wollongong, the per capita research productivity of professors is lower than that of all faculty members.

Table 3 shows the per capita productivity of professors for 1988-2002 when LP weights are used. It is denoted by LPPCPROF. UNSW tops the list followed by Griffith, Monash, UWA and Melbourne in that order. The per capita research productivity of all faculty members is denoted by LPPC. For Auckland, Canterbury,

Newcastle, RMIT and Wollongong, the per capita research productivity is lower for professors than for all faculty members.

Table 4 shows the per capita research productivity of professors for 1988-2002 when MSF weights are used. It is denoted by MSFPCPROF. La Trobe is at the number one position followed by UWA, Melbourne, Adelaide and Canterbury in that order. The per capita research productivity of all faculty members is denoted by MSFPC.

Table 5 shows the mean rankings of per capita research productivity of professors for 1988-2002. This is denoted by RMEAN. The rankings based on the number of journal articles, MSF weights, LP weights and KMS weights are denoted by RNOPC, RMSFPCP, RLPPCP and RKMSPCP respectively. For mean rankings, UWA occupies the number one position followed by Melbourne, Monash, Adelaide and Canterbury in that order.

Table 6 shows the per capita research productivity of professors for 1996-2002 using the number of journal articles. This is denoted by NOPCPROF. La Trobe is at the number one position followed by Canterbury, Adelaide, UWA and Melbourne in that order. The per capita number of journal articles for all faculty members is denoted by NOPC. For Auckland, Griffith, Macquarie, Otago, RMIT and UNSW, NOPC is higher than NOPCPROF.

Table 7 shows the per capita research productivity of professors for 1996-2002 when KMS weights are used. It is denoted by KMSPCPROF. Melbourne occupies the first position followed by UWA, Sydney, UNSW and Canterbury in that order. The per capita research productivity of all faculty members is denoted by

KMSPC. For ANU, Auckland, Griffith, Macquarie, and RMIT, KMSPCPROF is lower than KMSPC. Auckland has the fifth position by KMSPC but 24th position by KMSPCPROF.

Table 8 shows the per capita research productivity of professors for 1996-2002 when LP weights are used. It is denoted by LPPCPROF. The first ranked Melbourne is followed by UNSW, Sydney, UWA and Canterbury in that order. The per capita research productivity of all faculty members is denoted by LPPC. For ANU, Auckland, Griffith, Macquarie, Newcastle, Otago and RMIT, LLPC is higher than LPPCPROF. Again, for Auckland, per capita research productivity for all faculty members is much higher than that of professors.

Table 9 shows the per capita research of professors for 1996-2002 when MSF weights are used. It is denoted by MSFPCPROF. La Trobe occupies the first position followed by Canterbury, Melbourne, UWA and Tasmania in that order. The per capita research productivity for all faculty members is denoted by MSFPC. For Auckland, Griffith, Macquarie and RMIT, MSFPCPROF is lower than MSFPC.

Table 10 shows the mean rankings of per capita research productivity of professors for 1996-2002. This is denoted by RMEAN. The rankings based on the number of journal articles, MSF weights, LP weights and KMS weights are denoted by RNOPC, RMSFPCP, RLPPCP and RKMSPCP respectively. For mean rankings, Melbourne occupies the number one position followed by Canterbury and UWA (both occupy the second position), La Trobe and Adelaide in that order.

V. Conclusions

We compare the per capita research productivity of professors of teaching economics departments using a variety of criteria. We also compare the per capita research productivity of the professors with the productivity of all faculty members. The two departments in terms of per capita research productivity of professors are Melbourne and UWA. These two departments are ranked in the top 5 in all the tables. Canterbury appears in 8 tables. For Auckland and RMIT, the per capita research productivity of professors is lower than the research productivity of all faculty members in as many as 6 tables. For Griffith and Macquarie, per capita research productivity of professors is lower than the research productivity of all faculty members in 5 and 4 tables, respectively.

References

Anderson, M and Blandy, R. (1992) What Australian economics professors think, *Australian Economic Review,* 100, 17-40.

American Association of University Professors, 2001, http://www.aaup.org/Wbellas.htm

Brooks, R. (2005) Ranking economics research output by Econbase downloads: a comparison to publication based measures, *Applied Financial Economics Letters*, 1, 75-78.

Conroy, M.E. and Dusansky, R. (1995) The productivity of economics departments in the U.S.: Publications in the core journals, *Journal of Economic Literature*, 33, 1966-71.

Coupe, T. (2003) Revealed performances: Worldwide rankings of economists and economics departments 1969-2000, *Journal of the European Economic Association*, 1, 1309-45.

Davis, P. and Papanek, G.F. (1984) Faculty ratings of major economics departments by citations, *American Economic Review*, 74, 225-30.

Fusfeld, D.R. (1956) The program of the American Economic Association, *American Economic Review,* 46, 642-644.

Garcia-Castrillo, P., Montanes, A. and Sanz-Gracia, F. (2002) A worldwide assessment of scientific production in economics (1992-1997), *Applied Economics*, 34, 1453-75.

Gibson, J. (2000) Research productivity in New Zealand university economics departments: Comment and update, *New Zealand Economic Papers*, 34, 73-88.

Graves, P.E., Marchand, J.R. and Thompson, R. (1982) Economics department rankings: Research incentives, constraints, and efficiency *American Economic Review*, 72, 1131-41.

Harris, G.T. (1990b) Research performance indicators in Australian university economics departments 1986-87, *Economic Analysis and Policy*, 20, 73-82.

Kalaitzidakis, P., Mamuneas, T.P. and Stengos, T. (2003) Rankings of academic journals and institutions in economics, *Journal of the European Economic Association*, 1, 1346-66.

King, I. (2001) Quality versus quantity: Ranking research records of economics departments in New Zealand, *New Zealand Economic Papers*, 35, 97-112.

Laband, D. and Piette, M.J. (1994) The relative impacts of economics journals: 1970-90, *Journal of Economic Literature*, 32, 640-66.

Liebowitz, S.J. and Palmer, J.P. (1984) Assessing the relative impacts of economics journals, *Journal of Economic Literature*, 22, 77-88

Macri, J and Sinha, D. (2002) Research productivity of Australian economics professors, 1988-2000, *Journal of Economic and Social Policy*, 7, 99-115.

Macri, J. and Sinha, D. (2006) Rankings methodology for international comparisons of institutions and individuals: An application to economics in Australia and New Zealand, *Journal of Economic Surveys*, 20, 111-46.

Mason, P.M, Steagall, J.W. and Fabritius, M.M. (1997) Economics journal rankings by types of school: Perceptions versus citations, *Quarterly Journal of Business and Economics*, 36, 69-79.

Scott, L.C. and Mitias, P.M. (1996) Trends in rankings of economics departments in the U.S.: An update. *Economic Inquiry*, 34, 378–400.

Sinha, D. and Macri, J. (2002) Rankings of Australian economics departments, 1988-2000, *Economic Record*, 78, 1-19.

Sinha, D. and Macri, J. (2004) Ranking of economists in teaching economics departments in Australia, 1988-2000, *Economics Bulletin* 1, 1-19.

Thursby, J.G. (2000) What do we say about ourselves and what does it mean? Yet another look at economics department research, *Journal of Economic Literature*, 38, 383-404.

Towe, J.B. and Wright, D.J. (1995) Research published by Australian economics and econometrics departments: 1988-1993, *Economic Record,* 71, 8-17.

Table 1. Per Capita Research Productivity of Professors and All Faculty Members by the Number of Journal Articles, 1988-2002

	NOPCPROF	RANK	NOPC	RANK
Adelaide	28.71	2	6.74	5
ANU	15.33	8	5.41	9
Auckland	4.67	24	3.61	19
Canberra	14.74	10	2.55	23
Canterbury	26.82	3	4.18	13
Curtin	10.91	13	3.93	17
Flinders	5.5	20	2.06	26
Griffith	1.67	27	2.33	24
La Trobe	42.58	1	9.47	2
Lincoln	11.5	11	3.44	20
Macquarie	5.47	21	4.01	16
Massey	3.22	26	3.83	18
Melbourne	24.8	4	10.4	1
Monash	20.55	6	4.66	12
Newcastle	8.25	15	4.69	11
Otago	7.5	17	5.61	7
Queensland	15.23	9	7.57	4
QUT	11.5	11	2.24	25
RMIT	1	28	1.01	28
Sydney	7.17	19	4.09	15
Tasmania	16.83	7	5.56	8
UNE	8.5	14	6.18	6
UNSW	7.94	16	4.71	10
UTS	5.29	22	1.37	27
UWA	23.72	5	8.64	3
UWS	7.41	18	2.78	21
VUW	5.08	23	2.71	22
Wollongong	3.5	25	4.11	14

Note: NOPCPROF and NOPC stand for the per capita research productivity on the basis of the number of journal articles of professors and the per capita research productivity of all faculty members on the basis of the number of journal articles, respectively.

Table 2. Per Capita Research Productivity of Professors and Per Capita Research Productivity of All Faculty Members with KMS weights, 1988-2002

	KMSPCPROF	RANK	KMSPC	RANK
Adelaide	4.04	11	1.3	12
ANU	7.15	7	6.16	1
Auckland	0.36	27	2.98	5
Canberra	1.3	20	0.17	25
Canterbury	4.23	10	2.51	6
Curtin	1.18	21	0.31	24
Flinders	1.42	18	0.35	21
Griffith	10.5	5	1.65	8
La Trobe	2.82	16	1.31	11
Lincoln	0.4	26	0.17	25
Macquarie	1.97	17	0.57	18
Massey	0.75	22	0.57	18
Melbourne	11.18	4	5.32	3
Monash	9.48	6	1.6	9
Newcastle	0.5	24	0.15	27
Otago	6.44	8	0.95	15
Queensland	3.07	15	1.53	10
QUT	3.13	14	0.33	23
RMIT	0.002	28	0.02	28
Sydney	13.85	3	2.45	7
Tasmania	3.2	13	0.91	16
UNE	0.5	24	0.5	20
UNSW	14.86	2	4.17	4
UTS	3.79	12	0.71	17
UWA	15.99	1	5.35	2
UWS	1.41	19	0.35	21
VUW	6.1	9	1.18	13
Wollongong	0.55	23	1.04	14

Note: KMSPCPROF and KMSPC stand for the per capita research productivity on the basis of KMS weights of professors and the per capita research productivity of all faculty members, respectively.

Table 3. Per Capita Research Productivity of Professors and Per Capita Research Productivity of All Faculty Members with LP Weights, 1988-2002

	LPPCPROF	RANK	LPPC	RANK
Adelaide	2.2	10	0.53	13
ANU	2.74	9	3.03	2
Auckland	0.06	27	2.21	5
Canberra	0.51	20	0.06	28
Canterbury	1.87	11	1.96	6
Curtin	0.51	20	0.28	18
Flinders	1.2	13	0.27	19
Griffith	10.51	2	1.35	8
La Trobe	1.17	14	0.52	14
Lincoln	0.13	26	0.09	27
Macquarie	1.13	17	0.35	16
Massey	0.4	22	0.26	21
Melbourne	7.17	5	3.13	1
Monash	8.45	3	1.28	9
Newcastle	0.17	25	0.18	24
Otago	5.46	7	0.73	12
Queensland	1.17	14	0.76	11
QUT	1.16	16	0.14	25
RMIT	0.02	28	0.12	26
Sydney	7.09	6	1.47	7
Tasmania	0.75	18	0.35	16
UNE	0.22	23	0.22	22
UNSW	12.53	1	2.69	4
UTS	1.3	12	0.27	19
UWA	8.23	4	2.71	3
UWS	0.68	19	0.19	23
VUW	3.67	8	0.78	10
Wollongong	0.18	24	0.43	15

Note: LPPCPROF and LPPC stand for the per capita research productivity on the basis of the LP weights of professors and the per capita research productivity of all faculty members, respectively.

Table 4. Per Capita Research Productivity of Professors and Per Capita Research Productivity of All Faculty Members with MSF Weights, 1988-2002

	MSFPCPROF	RANK	MSFPC	RANK
Adelaide	135.87	4	32.37	6
ANU	99.9	6	36.93	4
Auckland	21.3	25	20.27	16
Canberra	59.17	10	10.42	25
Canterbury	113.09	5	22.08	14
Curtin	53.75	11	19.26	18
Flinders	27.77	22	10.66	24
Griffith	15.54	27	14.8	20
La Trobe	162.32	1	41.51	3
Lincoln	49.31	14	13.96	21
Macquarie	34.79	18	19.94	17
Massey	16.87	26	16.82	19
Melbourne	139.96	3	59.21	1
Monash	93.01	8	24.28	10
Newcastle	40.6	17	22.67	12
Otago	42.94	16	24.07	11
Queensland	73.11	9	35.18	5
QUT	51.98	12	9.99	26
RMIT	7.94	28	4.37	28
Sydney	48.21	15	22.49	13
Tasmania	93.66	7	25.54	9
UNE	33.25	19	26.08	8
UNSW	49.99	13	26.82	7
UTS	27.17	23	7.28	27
UWA	146.2	2	47.32	2
UWS	33.11	20	12.27	23
VUW	30.59	21	12.98	22
Wollongong	22.21	24	21.05	15

Note: MSFPCPROF and MSFPC stand for the per capita research productivity on the basis of the MSF weights of professors and the per capita research productivity of all faculty members, respectively.

Table 5. Mean Rankings of Professors on the Basis of Number of Journal Articles, KMS weights, LP Weights and MSF Weights for 1988-2002

	RNOPCP	RMSFPCP	RLPPCP	RKMSPCP	RMEAN
Adelaide	2	4	10	11	4
ANU	8	6	9	7	6
Auckland	24	25	27	27	27
Canberra	10	10	20	20	14
Canterbury	3	5	11	10	5
Curtin	13	11	20	21	17
Flinders	20	22	13	18	19
Griffith	27	27	2	5	15
La Trobe	1	1	14	16	7
Lincoln	11	14	26	26	22
Macquarie	21	18	17	17	19
Massey	26	26	22	22	25
Melbourne	4	3	5	4	2
Monash	6	8	3	6	3
Newcastle	15	17	25	24	24
Otago	17	16	7	8	12
Queensland	9	9	14	15	11
QUT	11	12	16	14	13
RMIT	28	28	28	28	28
Sydney	19	15	6	3	9
Tasmania	7	7	18	13	10
UNE	14	19	23	24	23
UNSW	16	13	1	2	7
UTS	22	23	12	12	18
UWA	5	2	4	1	1
UWS	18	20	19	19	21
VUW	23	21	8	9	15
Wollongong	25	24	24	23	25

Note: RNOPCP, RMSFPCP, RLPPCP, RKMSPCP and RMEAN stand for rankings based on the per capita research productivity of professors based on the number of journal articles, MSF weights, LP weights, KMS weights and mean rank, respectively.

Table 6. Per Capita Research Productivity of Professors and All Faculty Members by the Number of Journal Articles, 1996-2002

	NOPCPROF	RANK	NOPC	RANK
Adelaide	15.21	3	4.4	5
ANU	4.58	15	2.86	10
Auckland	1.67	25	1.95	20
Canberra	10.33	7	1.61	23
Canterbury	20.32	2	3.15	9
Curtin	7.93	10	2.73	14
Flinders	2.42	22	0.88	27
Griffith	0.66	27	1.19	25
La Trobe	33.17	1	6.43	1
Lincoln	6.5	11	2.17	16
Macquarie	1.9	24	2.69	15
Massey	2.94	20	2.78	12
Melbourne	13.78	5	6.42	2
Monash	10.33	7	2.77	13
Newcastle	4.25	16	2.14	17
Otago	3	18	3.39	8
Queensland	9.87	9	4.72	4
QUT	4.67	13	1.59	24
RMIT	0	28	0.88	27
Sydney	3	18	2.14	17
Tasmania	12.67	6	3.74	6
UNE	4.6	14	3.43	7
UNSW	2.75	21	2.86	10
UTS	3.99	17	1.07	26
UWA	14	4	5.56	3
UWS	5.12	12	2.06	19
VUW	1.67	25	1.65	21
Wollongong	2.17	23	1.62	22

Note: NOPCPROF and NOPC stand for the per capita research productivity on the basis of number of journal articles of professors and the per capita research productivity of all faculty members on the basis of the number of journal articles, respectively.

Table 7. Per Capita Research Productivity of Professors and Per Capita Research Productivity of All Faculty Members with KMS weights, 1996-2002

	KMSPCPROF	RANK	KMSPC	RANK
Adelaide	1.49	12	0.84	6
ANU	1.72	10	2.72	3
Auckland	0.05	24	0.87	5
Canberra	0.27	22	0.06	26
Canterbury	2.75	5	0.75	8
Curtin	1	14	0.18	17
Flinders	0.26	23	0.09	24
Griffith	0.0008	27	0.07	25
La Trobe	2.5	6	0.65	9
Lincoln	0.28	21	0.13	22
Macquarie	0.006	26	0.12	23
Massey	0.7	18	0.37	14
Melbourne	5.91	1	3.07	1
Monash	2.11	8	0.59	10
Newcastle	0.03	25	0.005	28
Otago	0.84	15	0.37	14
Queensland	0.72	17	0.59	10
QUT	1.93	9	0.14	20
RMIT	0	28	0.02	27
Sydney	4.41	3	0.82	7
Tasmania	2.24	7	0.44	13
UNE	0.4	19	0.15	19
UNSW	3.48	4	2.28	4
UTS	1.1	13	0.3	16
UWA	5.52	2	2.88	2
UWS	0.75	16	0.18	17
VUW	1.53	11	0.58	12
Wollongong	0.38	20	0.14	20

Note: KMSPCPROF and KMSPC stand for the per capita research productivity on the basis of the KMS weights of professors and the per capita research productivity of all faculty members, respectively.

Table 8. Per Capita Research Productivity of Professors and Per Capita Research Productivity of All Faculty Members with LP Weights, 1996-2002

	LPPCPROF	RANK	LPPC	RANK
Adelaide	1.08	7	0.33	10
ANU	0.65	10	1.39	2
Auckland	0.02	25	0.48	6
Canberra	0.1	22	0.02	27
Canterbury	1.26	5	0.35	8
Curtin	0.47	12	0.22	13
Flinders	0.12	21	0.04	26
Griffith	0.008	27	0.02	27
La Trobe	1.03	8	0.21	14
Lincoln	0.07	23	0.08	22
Macquarie	0.02	25	0.1	20
Massey	0.39	15	0.16	17
Melbourne	4.41	1	2.05	1
Monash	1.14	6	0.35	8
Newcastle	0.05	24	0.13	18
Otago	0.19	17	0.23	12
Queensland	0.16	18	0.29	11
QUT	0.36	16	0.07	23
RMIT	0	28	0.11	19
Sydney	2.5	3	0.58	5
Tasmania	0.45	13	0.18	15
UNE	0.16	18	0.07	23
UNSW	4.17	2	1.36	3
UTS	0.69	9	0.17	16
UWA	1.96	4	1.27	4
UWS	0.4	14	0.1	20
VUW	0.52	11	0.36	7
Wollongong	0.15	20	0.07	23

Note: LPPCPROF and LPPC stand for the per capita research productivity on the basis of the LP weights of professors and the per capita research productivity of all faculty members, respectively.

Table 9. Per Capita Research Productivity of Professors and Per Capita Research Productivity of All Faculty Members with MSF Weights, 1996-2002

	MSFPCPROF	RANK	MSFPC	RANK
Adelaide	75.9	6	21.26	5
ANU	31.57	11	19.51	6
Auckland	9.44	25	9.48	17
Canberra	33.38	10	5.77	25
Canterbury	87.88	2	16.18	8
Curtin	38.85	9	12.68	13
Flinders	10.79	23	4.3	27
Griffith	2.86	27	5.28	26
La Trobe	114.33	1	26.68	3
Lincoln	28.09	12	8.8	20
Macquarie	6.43	26	10.6	15
Massey	15.43	21	12.13	14
Melbourne	79.45	3	37.02	1
Monash	44.94	8	13.89	12
Newcastle	19.09	18	9.19	18
Otago	21.41	16	15.72	10
Queensland	47.44	7	22.12	4
QUT	23.76	13	7.3	23
RMIT	0	28	3.88	28
Sydney	16.91	19	10.34	16
Tasmania	75.94	5	17.83	7
UNE	21.68	15	15.65	11
UNSW	15.92	20	15.81	9
UTS	21.38	17	5.86	24
UWA	76.42	4	27.67	2
UWS	21.98	14	8.97	19
VUW	10.7	24	7.52	22
Wollongong	12.88	22	8.46	21

Note: MSFPCPROF and MSFPC stand for the per capita research productivity on the basis of the MSF weights of professors and the per capita research productivity of all faculty members, respectively.

Table 10. Mean Rankings of Professors on the Basis of Number of Journal Articles, KMS Weights, LP Weights and MSF Weights for 1996-2002

	RNOPCP	RMSFPCP	RLPPCP	RKMSPCP	RMEAN
Adelaide	3	6	7	12	5
ANU	15	11	10	10	10
Auckland	25	25	25	24	25
Canberra	7	10	22	22	16
Canterbury	2	2	5	5	2
Curtin	10	9	12	14	9
Flinders	22	23	21	23	24
Griffith	27	27	27	27	27
La Trobe	1	1	8	6	4
Lincoln	11	12	23	21	19
Macquarie	24	26	25	26	26
Massey	20	21	15	18	21
Melbourne	5	3	1	1	1
Monash	7	8	6	8	6
Newcastle	16	18	24	25	22
Otago	18	16	17	15	17
Queensland	9	7	18	17	12
QUT	13	13	16	9	12
RMIT	28	28	28	28	28
Sydney	18	19	3	3	8
Tasmania	6	5	13	7	7
UNE	14	15	18	19	17
UNSW	21	20	2	4	11
UTS	17	17	9	13	14
UWA	4	4	4	2	2
UWS	12	14	14	16	14
VUW	25	24	11	11	20
Wollongong	23	22	20	20	23

Note: RNOPCP, RMSFPCP, RLPPCP, RKMSPCP and RMEAN stand for rankings based on the per capita research productivity of professors based on the number of journal articles, MSF weights, LP weights, KMS weights and mean rank, respectively.