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An Analysis of New Zealand Economists' Research Output 2000-2006

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Abstract

In this paper we examine, in some depth, the research practices of New Zealand's academic economists. To date, virtually all published work in this area has focussed on the overall productivity of the country's economics departments. However, such rankings give little information on the research performance of various sub-groups of economists. In order to address this situation, we utilize descriptive statistics to assess research output by academic rank, gender, educational attainment, and publication source. The paper concludes with a brief discussion of the performance of individual researchers.

Keywords

economics departments department rankings research output economics research

JEL Codes

A10, A14, C81, J24

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1. Introduction

The purpose of this paper is to examine, in some depth, the research practices of New Zealand's academic economists. To date, virtually all published work in this area has focussed on the overall productivity of New Zealand's economics departments. ¹ Understandably, the resulting rankings are of general interest to economists and university administrators, especially now that the New Zealand government has introduced a research output-related funding mechanism (the Performance Based Research Funding scheme, generally denoted as PBRF). ² However, such rankings give little information on the research performance of various sub-groups of economists. In order to address this situation, we utilize descriptive statistics to assess research output by academic rank, gender, educational attainment, and publication source. The paper concludes with a brief discussion of the performance of individual researchers.

2. Database Discussion

The database employed in this study was discussed in depth in an earlier paper by the authors (Anderson and Tressler, 2008). ³ The primary features of our database are as follows: a) relevant research is defined to be refereed papers published in journals included in the EconLit database as at 15 April 2007 (1217 journals); b) all countable publications, over the period 2000-2006, are assigned to each academic's home institution as at 15 April 2007 (a stock measure of output); and c) all academic staff holding the rank of Lecturer through Professor in a New Zealand university economics department, as at 15 April 2007, are included in the study. In summary, 106 out of a total of 139 academic staff members authored or co-authored at least one paper over the seven year period of study. In total, 612 refereed papers were produced (in whole or in part) over the relevant time period. ⁴

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¹ For example, see Bairam (1997); Gibson (2000); King (2001); Dalziel, Cullen and Saunders (2002); Macri and Sinha (2006); Sinha, Macri and McAleer (2008); and Anderson and Tressler (2008). An exception to this statement is the recent work of Gibson, Tressler and Anderson (2008) that explores changes in the publication practices of New Zealand-based economists over time.

For a brief discussion of the PBRF programme, and its applicability to the economics profession, see Gibson, Tressler and Anderson (2008).

The referenced database has been supplemented by data from John Gibson. More specifically, Gibson provided information on gender, years of experience, and name of PhD granting institution (if applicable) for all academic staff in our core database.

It should also be noted that Peter Phillips, an internationally renowned economist, is not included in the Auckland data. We have restricted our dataset to academics holding 'regular' appointments at

The second component of our database is the most contentious: the selection of a scalar measure of activity. It should initially be noted that our preferred unit of output is the size adjusted page, and our preferred output measure is the number of size adjusted pages per capita. In our study we have employed six different measures of output based on weighting schemes utilized in prior studies of research activity by economists.

The most simplistic scheme employed is denoted as **EQUAL**; it assumes that all publications are of equal value and, as such, is primarily a measure of quantity rather than quality. We also adopted a weighting scheme based on a reputational survey of economics journals; this scheme was developed by Mason, Steagall and Fabritius (1997) and, hence, is denoted as **MFS**. Citation counts underlie three of our schemes, although each of these schemes are based on different time periods, cover a different set of journals (some overlap, but not total), and make different adjustments to the underlying citation counts. These schemes are denoted as **KMS**, **COUPEIF** and **BAUWENS**, and are based on the work of Kalaitzidakis, Mamuneas and Stengos (2003), Coupe (2003), and Bauwens (1998), respectively. The sixth and last weighting system is a hybrid scheme based in part on citation counts, arbitrary assignment to groups, and, most importantly, an ordered-logit analysis of academic rank regressed on journal publications and other control variables. A major advantage of this scheme, denoted as **GIBSON**, is that the weights reflect the implicit values placed by New Zealand-based promotions and hiring committees on their academic staff's research portfolios (see Gibson, 2000).

3. Decomposition of the Departmental Rankings

With one exception, all published rankings of New Zealand economics departments have been based on the performance of the department as a whole.⁵ While this is quite legitimate, it fails to address two major issues: first, a department with a higher proportion of senior staff than another should be expected to perform better, based on the assumption that senior staff should be more productive than junior staff; and second, many junior staff members, on the roster as at 15 April 2007, are unlikely to have held research-related positions over the full time period of the study (on the other hand, one would expect virtually all Associate and Full Professors to have been employed in research-related positions throughout the 2000-2006 period).

New Zealand universities. By 'regular' we mean an appointment akin to what would be called in a North American setting, a tenure or tenure track position.

The exception is Sinha and Macri (2008). They analyzed the research productivity of (Full) Professors in Australia and New Zealand. It should be noted that, at the time of their study (2003), such appointments at New Zealand universities were few in number. In recent time a number of appointments have been made at this level. For instance, in 2003 Waikato had zero appointments at the Professorial level, but at our census date (April 2007) this department had five such appointments.

These qualifications are testable. We first address the following question: are Professors more productive than Associate Professors, and Associate Professors more productive than Senior Lecturers, and so on? From Table 1 it is quite clear that the answer in the New Zealand context, at least over the period 2000 to 2006, is an unambiguous yes. For all six output measures, mean output follows the expected pattern: the more senior the rank, the greater the number of published size adjusted pages per capita. Only under the KMS scheme is the output performance rather tightly compressed, save for the rank of Lecturer; in all other cases higher ranked researchers out-perform those one rank below by a substantial amount. At this point, it should be noted that virtually all Professors and Associate Professors were active researchers over the time period of this study, whereas only 72% of Senior Lecturers and less than half of Lecturers published, in whole or in part, at least one page of work in one of 1217 eligible journals.

Table 1. Weighted Pages Per Capita by Rank Various Weighting Schemes, 2000-2006

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	Number	%						_
	in Rank	Active	EQUAL	Gibson	KMS	MSF	CoupelF	Bauwens
Professor	27	96.3	75.2	14.2	179.4	78.2	29.4	145.1
Associate Professor	27	96.3	50.5	10.4	179.3	45.9	16.7	96.7
Senior Lecturer	58	72.4	22.1	3.9	117.5	19.3	6.9	41.0
Lecturer	27	44.4	5.6	1.5	22.4	9.2	5.1	14.1
Total/Average	139	76.8	35.2	6.8	123.8	34.7	12.9	67.7

Our database also allows us to explore the merits of the argument that a higher proportion of junior staff (lecturers and senior lecturers) than senior staff (associate professors and professors) held research-related appointments for only a portion of the time period covered by this study. Indeed, the data shows that 48% of the junior group (40 of 84) did not hold an academic appointment for the full seven years of this study; in fact, the average length of tenure for this group is only 3.4 years. The corresponding figure for the senior group is 0%; that is, all members of this group had held research-related appointments for seven or more years as at 31 December 2006. This information provides some rationale for the under-performance of 'junior' staff, but other factors such as aptitude, education, and teaching loads may enter into the analysis.

Let us now look at departmental rankings for each of these two groupings: senior and junior staff. The results of this exercise are presented in Tables 2 to 4. It should be noted that the Auckland University of Technology (AUT) has been excluded from this analysis due to the small size of its economics department; for example, the department has only one member in the senior category.

Table 2. Department Rankings, Professors and Associate Professors Weighted Pages per Capita, 2000-2006

Various Weighting Schemes												
	Total EQUAL Gibson KMS MSF CoupeIF Bauwens Points											
	EQUAL	Gibson	KIVIS	MSE	CoupeIF	Bauwens	Points	Rank				
Auckland	7	6	4	6	6	7	36	6				
Canterbury	2	2	2	2	2	2	12	1				
Lincoln	6	7	7	7	7	6	40	7				
Massey	5	5	6	5	5	5	31	5				
Otago	3	1	3	1	4	4	16	3				
Victoria	4	3	1	3	1	3	15	2				
Waikato	1	4	5	4	3	1	18	4				

Table 3. Departmental Ranking, Lecturers and Senior Lecturers Weighted Pages per Capita, 2000-2006

	Various Weighting Schemes													
	501141	0.11	14140		0 15	_	Total	Б.						
	EQUAL	Gibson	KMS	MSF	CoupelF	Bauwens	Points	Rank						
Auckland	2	1	1	1	1	2	8	1						
Canterbury	3	4	2	3	2	3	17	3						
Lincoln	4	6	4	6	5	4	29	5						
Massey	5	5	7	7	7	7	38	7						
Otago	1	2	3	2	3	1	12	2						
Victoria	7	3	5	4	4	5	28	4						
Waikato	6	5	6	5	6	6	34	6						

For Senior Staff, Canterbury heads the list closely followed by Victoria, Otago and Waikato. A second grouping, and much further back in total points, has Massey in the lead, followed by Auckland and Lincoln. The Junior Staff rankings are quite different. We now find Auckland occupying first place, well ahead of Otago and Canterbury (in second and third place, respectively). In a more distant grouping, we find Victoria, Lincoln, Waikato and Massey. In

order to compare results across the three data sets (All Staff,⁶ Senior Staff and Junior Staff), the reader is referred to Table 4. Note that Otago and Canterbury do relatively well across the board. On the other hand, Auckland and Waikato display great variability: the former is a top performer in the Junior Group and relatively weak in the Senior Group; and the reverse holds for Waikato. The remaining departments display less variability in their overall rankings.

Table 4. Overall Department Rankings, 2000-2006

(Weighted Pages Per Capita)									
	Sr. Lecturers	and Professors	All Ranks						
Auckland	1	6	4						
Canterbury	3	1	2						
Lincoln	5	7	6						
Massey	7	5	7						
Otago	2	3	1						
Victoria	4	2	5						
Waikato	6	4	3						

4. Research Output by Gender

Our database can also be utilized to shed some light on the important policy issue of gender balance within the professoriate. It must be stressed that what follows is not a policy-oriented discussion, but merely a presentation of the results of breaking our sample into two groups: Male and Female. From the data presented in Table 5, it is apparent that female academics constitute a small percentage of the total staff compliment in New Zealand economics departments-approximately 21.6% of the total (30 out of 139).⁷ It is also apparent that, as at 15 April 2007, almost all female academic economists held junior appointments (Lecturer and Senior Lecturer); more specifically, only two of 27 Professors and 3 of 27 Associate Professors are female, whereas 25 of 85 Lecturers and Senior Lecturers are female.

⁶ See Anderson and Tressler (2008) for details.

Although this is a troublesome statistics, it should be noted that slightly less than 14% of the more than 14,000 economists worldwide registered with RePEc author service are female (see Zimmermann, p.18). This figure can be interpreted as a rough estimate of the percentage of research-oriented economists who are female.

Table 5, Gender Distribution by Academic Rank, 15 April 2007

	Female	Male	Total
Professor	2	25	27
Associate Professor	3	24	27
Senior Lecturer	15	43	58
Lecturer	10	17	27
Total Number	30	109	139

Given our productivity focus, it is natural to investigate differences in publication rates between males and females across the various output measures employed in this study. As shown in Table 6, an assessment of the ratio of male to female output, across all ranks, reveals sharp differences: males, on average, produced between 2.2 and 3.9 times as much output (share and size adjusted pages per capita) as females over the period 2000- 2006. The validity of the above comparison can be readily challenged on two counts based on information previously presented in this paper: first, our data supported the contention that academic staff in senior positions (Associate Professor and Professor) produced substantially more output than those in junior positions (Lecturer and Senior Lecturer); and second, almost all of the females in employed in New Zealand economics departments as at 15 April 2007 held junior appointments. This suggests that a better comparison is to look at productivity differences solely between males and females at the junior level. We now find that the productivity gap is much smaller than that produced in an 'all ranks' assessment. Ignoring the KMS measure of output, the spread now ranges from 1.3/1.0 to 2.3/1.0. The KMS measure is an exception: it shows the male/female output ratio being higher for the junior ranks than for all-ranks: 4.7 and 3.9, respectively.

Table 6: Male/Female Per Capita Output Ratio, 2000-2006

	(Various Weighting Schemes)										
EQUAL Gibson KMS MSF CoupelF Ba											
All Ranks	2.2	3.7	3.9	3.3	2.8	2.4					
Lecturers and Senior Lecturers	1.5	2.3	4.7	1.9	1.3	1.4					

There are undoubtedly many reasons for the above noted productivity differences between genders. Our data suggests two possible causes: years of experience and type of graduate school attended. As shown in Table 7⁸, females have considerably fewer years of experience than males across all ranks: 9.9 years versus 15.2. The data also suggests that a lower proportion of females than males were in research-related positions for the full duration of this study (60% versus 74%).

It is also plausible to argue that the presence of a PhD and, equally important, the global rank of the institution granting the degree, play a role in explaining research output differences across academic staff. As shown in Table 8, the average level of research output for New Zealand academic economists differed greatly depending upon type and level of educational attainment. As a crude approximation, it can be said that graduates of a top-tier PhD programme produce twice the level of output compared to graduates of 'other' PhD programmes, and the latter, in turn, produced twice the level of research output of academic staff without PhDs. Given that only 13% (4 of 30) of females are graduates of 'top-tier' institutions as opposed to 35% (39 of 108) of males, it is reasonable to expect their overall output to be below the sample average. However, the data presented in Table 8 does indicate substantial 'within class' variation in favour of males. Due to small number property issues, the results for the 'No PhD' and 'PhD Top30 School' are somewhat problematic; however, the male/female output ratios, for the 59 males and 23 females holding 'Ordinary PhDs', range between 1.9 and 3.3.

⁸ It should be noted that the sample size for the discussion related to years of experience and educational background is 138, not 139 as applies throughout the prior analysis. We were unable to obtain this information for one male academic staff member.

As a proxy for a 'top rated' PhD programme, we have used the rankings devised by Bairam (1994). He ranked the top 30 economics departments based on their total page contribution to each of five leading journals over the 1985-1990 period. The journals are: the *American Economic Review*, *Economics*, the *Economic Journal*, the *Journal of Political Economy*, and the *Quarterly Journal of Economics*. For purposes of this paper, a PhD programme is deemed to be 'top-rated' if it appears in the top30 list of at least one of the five above noted journals.

Table 7. Per Capita Output, by Gender and Years of Experience, 2000-2006

	(Various Weighting Schemes)							
	Number	Average						
	in	Years				Output		
	Group	Experience	EQUAL	GIBSON	KMS	MFS	COUPEIF	BAUWENS
Females > 6 Yrs Exp.	18	14.4	23.8	2.8	41.7	16.7	5.4	38.9
Females <= 6 Yrs Exp.	12	3.2	9.5	1.3	32.7	6.3	5.4	21.9
Females: All	30	9.9	18.1	2.2	38.1	12.5	5.4	32.1
Males > 6 Yrs Exp.	80	19.4	48.0	9.3	131.2	47.7	17.7	91.9
Males <= 6 Yrs Exp.	28	3.4	18.5	4.8	199.1	21.5	7.7	39.0
Males: All	108	15.2	40.3	8.1	148.8	40.9	15.1	78.2
All Economists	138	14.1	35.48	6.83	124.71	34.70	13.00	68.17

Based on the above information, it may be tempting to say that males outperform females; however, it is not clear whether the differences are statistically significant. To ascertain this would require an econometric analysis that explicitly takes into account experience, educational attainment, rank and perhaps other independent variables such as teaching load and administrative duties. We leave this for others to explore.

Table 8. Per Capita Output, by Type of Degree and by Gender, 2000-2006

		Average				Per Capita		
	Number in	Years of				Output		
	Group	Experience	EQUAL	GIBSON	KMS	MFS	COUPEIF	BAUWENS
No PhD								
Female	3	11	7.0	0.3	0.0	0.0	0.0	7.0
Male	10	23.8	21.2	2.9	34.5	18.0	8.0	34.7
Total	13	20.8	17.9	2.3	26.6	13.8	6.2	28.3
Ordinary PhD								
Female	23	10.2	19.5	2.6	33.4	16.0	6.6	36.6
Male	59	14.3	39.7	7.1	110.6	35.7	13.6	70.6
Total	82	13.2	34.1	5.9	88.9	30.2	11.7	61.1
PhD: Top30 School								
Female	4	7.5	18.3	1.4	94.0	1.8	2.6	24.9
Male	39	14.4	46.1	10.9	235.8	54.5	19.2	100.9
Total	43	13.8	43.5	10.0	222.6	49.2	17.6	93.8
All Economists								
Female	30	9.9	18.1	2.2	38.1	12.5	5.4	32.1
Male	108	15.2	40.3	8.1	148.8	40.9	15.1	78.2
Total	138	14.1	35.5	6.8	124.7	34.7	13.0	68.2

5. Where do New Zealand economists publish?

Over the period of this study (2000- 2006), New Zealand's 139 academic economists published all or part of 612 articles in 238 different journals. ¹⁰ In Table 9 we present a list of the journals hosting five or more of the above noted papers- 33 in all. Note that the New Zealand Economic Papers (NZEP) is the single largest publisher of articles written in whole or part by New Zealand's academic economists; this is not surprising given the mandate of the journal, and the likelihood that many of the nation's economists will undertake, at some point in their career, research with a domestic policy focus. Furthermore, it should be noted that the NZEP is the Reading publication source for economists at four of nation's economics departments, second for one, and third at the remaining two departments. ¹¹

Table 9. New Zealand Economics Departments, Publications by Journal, 2000-2006

	(Five or More I	Publications)	
	Number of		Number
Journal Name	Articles	Journal Name	Articles
New Zealand EconomicPapers	43	Intn Rev of Applied Ec	6
Applied Economic Letters	16	Australian J of Regional Studies Rev of Ec Res on Copyright	6
J of Economic Surveys	14	Issues	6
Applied Economics	13	J of Interdisciplinary Ec	6
Economic Letters	11	Agenda, 2000	5
Australian Ec History Rev	10	Oxford Economic Papers	5
Australian Economic Papers	10	Information Ec and Politics	5
Pacific Economic Bulletin	10	International Trade J	5
Australian J of Agr and Res Ec	9	Ecological Economics	5
Economia Intern/Intern Ec	8	Open Economies Review	5
J of Development Economics	8	Economic Theory	5
J of Development Studies	7	J of African Economies	5
Scottish J of Political Economy	7	Rev of International Economics	5
Economic Record	6	Review of Applied Economics	5
Economica	6	History. of Economics Review	5
J of Environmental Ec and Mgmt	6	Manchester School	5
International J of Ind Org	6		

Recall that the census date for determining eligible staff was 15 April 2007.

The NZEP is the leading publication vehicle for economists at Auckland, Massey, Waikato and Lincoln (tied with one other journal). It is the second most utilized journal at Victoria, and third at Canterbury and Otago.

The 33 journals listed in Table 9 constitute 14% of all journals in our database, and contain 45% of all refereed papers published by New Zealand's academic economists between 2000 and 2006. Undoubtedly, many readers will make their own assessment of the quality of the journals listed. All that we intent to do is note that very few of the top weighted journals contained within our five selective weighting schemes are represented in the list of 33 contained in Table 5. For example, only three of these journals appear on the MSF weighting scheme's top forty list. The corresponding numbers for the KMS and GIBSON schemes are four (out of 40) and four (out of 35), respectively. Another way of looking at this matter is to determine the percentage of all publications (612 in total) that appear in journals on the KMS and MFS top40 list, and on Gibson's top35 list. The results are as follows: 13.4%, 12.8%, and 9.8%, respectively. In summary, it would appear that the journals most frequently utilized by New Zealand economists are, in general, not highly ranked by any of our relevant weighting schemes.

6. Individual Performance

Following recent practice, we will now present our Hall of Fame. In Table 10 we display the top twenty producers ¹² based on a simple aggregation of rank across all six weighting schemes (that is, we assume all schemes are of equal value). The results are of interest in at least three respects. First, three economists stand out as having research outputs substantially above all others; they are David Fielding, Graeme Guthrie and John Gibson. Indeed, in four of our six measures they occupy the top three positions, in another they hold three out of the top five positions, and only under the KMS scheme does their dominance diminish as they occupy positions ranging second to eleventh. Second, it should be noted that six of the nation's eight economics departments place staff members in the top twenty. Although Auckland has the most researchers on the list (6), Canterbury and Otago have a higher percentage of staff in the top twenty (25.0% and 23.5%, respectively, compared to 23.1% at Auckland). Waikato is a close fourth with 20.0 percent of its staff in the top twenty group, followed by Victoria at 9.1, and Massey at 4.2. Lincoln and AUT are not represented in the top twenty.

¹² In this paper, we exclude Peter Phillips from Auckland's compliment. We have done so on the basis that he is a part-time appointee and is a tenured faculty member at another institution. However, if he were to be deemed to be a member of Auckland's economics department, his performance would dominate that of all other New Zealand economists; in fact he would rank first on every measure presented in this paper. For details, see Anderson and Tressler (2008).

Table 10. Rankings of Individual Economists by Various Weighting Schemes, 2000-2006

									Total	Final
Name/Last	Name/First	Univ.	EQUAL	Gibson	KMS	MSF	CoupelF	Bauwens	Points	Rank
Fielding	David	0	2	1	8	1	2	1	15	1
Guthrie	Graeme	V	5	2	2	2	1	3	15	1
Gibson	John	W	3	3	11	3	3	2	25	3
Li	Xiaoming	M	4	4	21	18	10	6	63	4
Sul	Donggyu	Α	26	8	7	5	9	9	64	5
Guender	Alfred V.	С	10	5	13	11	18	10	67	6
Woodfield	Alan E.	С	14	13	22	10	4	14	77	7
Han	Chirok	Α	47	7	1	9	7	16	87	8
Haug	Alfred A.	0	17	14	4	16	23	15	89	9
McDermott	C. John	V	13	6	16	39	8	7	89	9
Oxley	Les	С	7	15	35	15	15	8	95	11
Knowles	Stephen	0	20	17	27	4	20	13	101	12
Holmes	Mark	W	1	9	39	28	21	4	102	13
McCann	Philip	W	6	25	49	20	5	5	110	14
Thorsnes	Paul	0	38	24	12	14	13	11	112	15
Reed	W. Robert	С	29	23	14	7	24	20	117	16
Ryan	Matthew	Α	21	22	5	29	28	18	123	17
Maloney	Tim	Α	22	10	33	8	35	23	131	18
Chaudhuri	Ananish	Α	32	18	10	22	26	29	137	19
Bandyopadhyay	Debasis	Α	18	12	36	12	45	24	147	20

Notes: A, Auckland; AUT, Auckland University of Techology; C, Canterbury; L, Lincoln; M, Massey; O, Otago; V, Victoria; W, Waikato.

7. Summary

In this paper we explored the publication habits of New Zealand's academic economists, on staff at each of nation's economics departments as at 15 April 2007, in some depth. Employing descriptive statistics only, we found that research output over the period 2000 to 2006 is associated with academic rank in the expected manner: the higher the rank, the higher the average output across all six of our output measures. In a related finding, we demonstrated that the departmental research rankings for junior staff (Lecturer and Senior Lecturer) were rather different from those generated by Senior Staff (Associate Professor and Professor); and these in turn differed from the rankings generated by 'All Staff'.

The most controversial part of our study relates to our analysis of average research output by gender. We found that, on average, males outperformed females at all ranks (Junior and Senior categories) for all six output measurement schemes. However, the data revealed that females on average possessed considerably fewer years of experience and were less likely to have graduated from a 'Top' PhD programme. In addition, we found that females constitute a small minority of total staff (21%), and are largely found in the lower ranks of the professoriate.

Although New Zealand's academic economists publish widely in international journals, we found that relatively few of these publications are in journals identified as top-tier by any of our quality-weighted output measurement schemes. Nevertheless, the nation has many active and high quality researchers. We have provided a listing of the top-twenty producers based on the strong assumption that all six of our output measurement systems are of equal value. It was found that three individuals dominate the rankings- the same three hold the top three positions in all but one of our five quality adjusted output schemes.

Before concluding we must stress that our definition of research output is highly restrictive. Following almost universal practice, we have restricted our analysis to refereed journal articles published in one or more of the 1217 journals listed in EconLit in April 2007. This means that those researchers who publish primarily in conference papers, chapters in books, research monographs or text books are penalized by us and virtually all others doing research in this area.

References

- Anderson, David L. and John Tressler (2008), 'Research Output in New Zealand Economics Departments 2000-2006', *New Zealand Economic Papers*, 42(2), pp. 155-189.
- Bairam, Erkin I. (1994), 'Institutional Affiliation of Contributors to Top Economic Journals', *Journal of Economic Literature*, 32(3), pp. 674-679.
- Bairam, Erkin I. (1996), 'Research Productivity in New Zealand University Economics Departments', *New Zealand Economic Papers*, 30(2), pp. 229-241.
- Bairam, Erkin I. (1997), 'Corrigendum: Research Productivity in New Zealand University Economics Departments', *New Zealand Economic Papers*, 31(1), pp. 133-134.
- Bauwens, Luc (1998), 'A New Method to Rank University Research and Researchers in Economics in Belgium', unpublished paper, CORE, Universite Catholique de Louvain, Louvain, Belgium. (www.core.ucl.ac.be/econometrics/bauwens/rankings/method.doc)
- Coupe, T. (2003), 'Revealed Performances: Worldwide Rankings of Economists and Economics Departments, 1990-2000', *Journal of the European Economic Association*, 1(6), pp. 1309-1345.
- Dalziel, Paul, Ross Cullen and Caroline Saunders (2002), 'Ranking Research Records of Economics Departments in New Zealand: Comment', *New Zealand Economic Papers*, 36(1), pp. 113-122.
- Gibson, John (2000), 'Research Productivity in New Zealand University Economics Departments: Comments and Update', *New Zealand Economic Papers*, 34, pp. 73-87.

- Gibson, John, John Tressler and David L. Anderson (2008), 'Do Research Assessment Exercises Raise the Returns to Publication Quality? Evidence from the New Zealand Market for Academic Economists', Working Papers in Economics 11/08, Department of Economics, University of Waikato, www.repec.org.
- Kalaitzidakis, Pantelis, Theofanis Mamuneas, and Thanasis Stengos (2003), 'Rankings of Academic Journals and Institutions in Economics', *Journal of the European Economic Association*, 1(6), pp. 1346-1366.
- King, Ian (2001), 'Quality versus Quantity: Ranking Research Records of Economics Departments in New Zealand', *New Zealand Economic Papers*, 35(2), pp. 97-112.
- King, Ian (2002), 'Ranking Research Records of Economics Departments in New Zealand: Reply', *New Zealand Economic Papers*, 36(1), pp. 123-126.
- Macri, Joseph and Dipendra Sinha (2006), 'Rankings Methodology for International Comparisons of Institutions and Individuals: An Application to Economics in Australia and New Zealand', *Journal of Economic Surveys*, 20, pp. 111-156.
- Macri, Joseph and Dipendra Sinha (2008), 'How Much Influence Do Economics Professors Have on Rankings? The Case of Australia and New Zealand', *Applied Economics*, forthcoming.
- Mason, Paul, Jeffrey Steagall, and Michael Fabritius (1997), 'Economics Journal Rankings by Type of School: Perceptions Versus Citations', *Quarterly Journal of Business and Economics*, 36(1), pp.69-79.
- Sinha, Dipendra, Joseph Macri and Michael McAleer (2008), 'On the Robustness of Alternative Rankings Methodologies: Australian and New Zealand Economics Departments, 1988-2002', *Applied Economics*, forthcoming.
- Tertiary Education Commission (2007), *PBRF Quality Evaluation: 2006 Release Summary*, Wellington, New Zealand, Tertiary Education Commission.
- Zimmerman, Christian (2007), 'Academic Rankings with RePEc', Working paper 2007-36, Department of Economics, University of Connecticut, www.repec.org.