WORKING PAPERS IN ECONOMICS

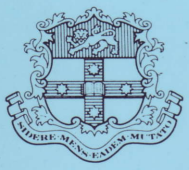
The Research Output of Australian Econometrics and Economics Department: 1988-93

by

J.B. Towe & D.J. Wright*

No. 208 **July 1994**

DEPARTMENT OF ECONOMICS



The University of Sydney
Australia 2006

The Research Output of Australian Econometrics and Economics Department: 1988-93

by

J.B. Towe & D.J. Wright*

No. 208 July 1994

Abstract

This paper attempts to measure an important component of the research output of econometrics and economics departments, namely, the number of pages published, during the period 1988-93, in journals listed by the *Journal of Economic Literature*. Based on standardized page counts it is found that econometrics and economics department rankings are similar over a broad range of journal groupings. It is also found that the median number of pages published by senior lecturers, associate professors is quite small indicating research output is highly concentrated.

National Library of Australia Card Number and ISBN 0 86758 845 4

* Department of Economics, University of Sydney, NSW 2006, Australia. The authors thank Denzil Fiebig, Colin Simkin and Judy Yates for helpful comments.

CONTENTS

I. Introduction

In an environment in which Australian University research funding has become dependent on research output a method of measuring this output is required. This paper measures one component of the research output of Australian econometrics and economics departments, namely, the number of pages published, during the period 1988-93, in journals listed on the *Journal of Economic Literature's* CD-rom database. It is recognized that this is just one component of research output, but its use is justified on the grounds that data on journal publications is readily available and has been used in previous studies [Graves, Marchand, and Thompson (1982) and Hirsch, Austin, Brooks, and Moore (1984)]. In addition, a recent report by Hill and Murphy (1994) identifies journal publications as the major form of research output in the economics discipline in Australia.[1]

A broader approach for measuring the research output of Australian economics departments was undertaken by Harris (1988) who collected data on many types of research output for the period 1974-83. Points were awarded to each different type, for example, a first rank journal publication was awarded 10 points while a research book received 35 points. One weakness of such an approach was that the size of the journal article or book was not taken into account so that a small note was awarded the same number of points as a major journal article. This study, although narrower in approach, does explicitly take into account the size of journal articles through page counts.

In section II of this paper, the data base is described while section III provides comparisons of departmental research output. It is found that economics departmental rankings are similar over a broad range of journal groupings with Melbourne, Monash, Sydney, Tasmania, and ANU consistently ranked in the top

third. The econometrics departments that consistently ranked highly under the same journal groupings were Monash and Sydney.

Comparisons of the research output of senior lecturers, associate professors, and professors are made in section IV. It is found that the median number of pages published by senior lecturers, associate professors, and professors is quite small indicating that research output is highly concentrated. Furthermore among active journal publishers the median number of pages published in any journal during the sample period is around 28 pages for senior lecturers, associate professors, and professors. Section V contains some concluding remarks.

II. Data Base

Staff lists for 5 econometrics and 23 economics departments were obtained from department heads as of the 31st March 1994.[2] Only teaching departments were considered. The number of pages published during the period 1988-93 in *Journal of Economic Literature* listed journals was obtained for each staff member (lecturer and above) using the *Journal of Economic Literature's* CD-rom database.[3] This measure of output is a stock rather than a flow. Previous studies [Hall (1987), Harris (1988) and Hirsch *et al* (1984)] have assigned pages to departments on the affiliation of the author at the time of publication and so used a flow measure. However, a stock measure gives an indication of the research output of departments as constituted at a particular point in time which in itself is useful information.

In table 1 the journals are classified into four groups to reflect their differing impact. Group 1 consists of the 12 journals which, according to Diamond (1989), were most frequently cited in the core journals of economics. This group contained 7 of the 8 journals listed in Hill and Murphy (1994, p117) as being the most

important journals in a survey of Australian academic economists.[4] Group 2 consists of 23 journals which, when added to Group 1, constitutes the 27 *Core Journals of Economics* listed in Diamond (1989) plus 8 additional ones. The latter are statistics and economics journals that ranked highly in terms of impact in Liebowitz and Palmer (1984). It should be noted that 25 of the 35 journals in groups 1 and 2 were listed in Laband and Piette (1994) as among the 28 top economics journals in the world.[5] Group 3 consists of 36 journals which together with groups 1 and 2 constitutes the 63 journals abstracted by the *Journal of Economic Literature* plus 8 additional ones [*Journal of Economic Literature*, (1993, September, v--ix)]. These additional journals are statistics and econometrics journals drawn from Hall (1987), namely, *Econometric Reviews, Econometric Theory, Journal of the American Statistics Association* and *Journal of the Royal Statistics Association (Series A)* as well as *American Economic Review Papers and Proceedings, Australian Economic Papers, Economics Letters,* and *Journal of Economic Literature*. Finally, Group 4 consists of any other journal appearing in the *Journal of Economic Literature* CD-rom database.[6]

To adjust for varying journal size, page counts were standardized by the number of characters published on one page of the *American Economic Review*. The conversion factors, shown in table 1, were only calculated for journals in groups 1, 2, and 3. For group 4 journals, page counts were not standardized. Where there are n authors, each author is apportioned $1/n$ of the pages.

Before a comparison of departments is made it is worthwhile to examine in table 1 the journals in which Australian academic economists have published. Not surprisingly *Australian Economic Papers* and the *Economic Record* account for the greatest number of pages published, the former contributing 19.4% and the latter

TABLE 1: Journal Groups and Total Number of Pages Published by Department Members

			C.F.[a]	Pages[b]
Group 1	1	American Economic Review	1.00	40.00
	2	Econometrica	0.80	19.20
	3	Economic Journal	0.82	55.76
	4	International Economic Review	0.85	51.34
	5	J. of Economic Theory	0.72	11.52
	6	J. of Finance	0.84	0
	7	J. of Financial Economics	0.73	0
	8	J. of Political Economy	0.69	28.29
	9	Quarterly J. of Economics	0.80	10.20
	10	Rand J. of Economics	1.06	2.70
	11	Review of Economics & Statistics	1.08	42.58
	12	Review of Economic Studies	0.99	26.63
Group 2	13	American Economic Review P&P	1.00	0
	14	Brookings Papers on Econ. Act.	0.62	0
	15	Canadian J. of Economics	0.84	52.25
	16	Economic Inquiry	0.90	0
	17	Economica	0.87	3.92
	18	Economics Letters	1.01	138.27
	19	European Economic Review	0.73	35.77
	20	J. of American Statistical Assoc.	1.63	28.20
	21	J. of Business	0.76	0
	22	J. of Development Economics	0.73	84.10
	23	J. of Econometrics	0.73	144.76
	24	J. of Economic Literature	0.89	0
	25	J. of Human Resources	0.81	0
	26	J. of International Economics	0.73	39.27
	27	J. of Labor Economics	0.73	0
	28	J. of Law and Economics	0.68	0
	29	J. of Mathematical Economics	0.73	0
	30	J. of Monetary Economics	0.73	0
	31	J. of Money, Credit & Banking	0.85	11.05
	32	J. of Public Economics	0.73	23.00
	33	J. of the Royal Statistical Society	0.87	0
	34	Oxford Economic Papers	0.80	113.44
	35	Scandinavian J. of Economics	0.64	8.32
Group 3	36	American J. of Agricultural Economics	1.17	64.35
	37	Australian Economic Papers	0.92	596.62
	38	Cambridge J. of Economics	1.01	54.06
	39	Carnegie-Rochester C. S. on Public P.	0.73	0
	40	Econometric Reviews	0.65	67.67
	41	Econometric Theory	0.71	14.91
	42	Economic Dev. & Cultural Change	0.72	33.12
	43	Economic History Review	0.80	47.20
	44	Economic Record	1.20	534.12
	45	Explorations in Economic History	0.73	21.54
	46	History of Political Economy	0.62	112.23
	47	Industrial & Labor Relations Review	1.03	7.21
	48	International J. of Industrial Org.	0.73	0
	49	IMF (UN) Staff Papers	0.74	20.42
	50	J. of Business & Economic Statistics	1.43	50.34
	51	J. of Comparative Economics	0.73	16.43
	52	J. of Economic Behav & Organization	0.73	10.22
	53	J. of Economic History	0.73	0
	54	J. of Economic Perspectives	0.80	0
	55	J. of Financial Intermediation	0.75	0
	56	J. of Health Economics	0.73	0
	57	J. of Industrial Economics	0.76	22.80
	58	J. of International Money & Finance	0.90	57.15
	59	J. of Post Keynesian Economics	0.64	39.68
	60	J. of Regional Science	0.82	7.79
	61	J. of Urban Economics	0.68	0
	62	Kyklos	0.71	41.18
	63	Land Economics	1.07	34.78
	64	Manchester School of Economics & S. S.	0.79	62.41
	65	National Tax Journal	0.97	0
	66	Oxford Bulletin of Econ. & Statistics	0.81	38.07
	67	Public Choice	0.74	0
	68	Review of Income & Wealth	0.88	9.68
	69	Scottish J. of Political Economy	0.81	70.15
	70	Southern Economic Journal	1.00	11.10
	71	Weltwirtschaftliches Archiv	0.64	58.37
Group 4		Other JEL journals[c]		6,114.80

NOTES: a. Standardized pages conversion factor b. Total number of standardized pages published by department members during the sample period
c. Non standardized pages

contributing 17.4% of the pages published in group 1, 2, and 3 journals. Of the remaining journals in groups 1, 2, and 3, the *Journal of Econometrics, Economics Letters, Oxford Economic Papers,* and the *History of Political Economy* contribute over 100 pages. From table 1 it is clear that members of econometrics and economics departments publish in a wide range of journals including the most prestigious.

III. Department Comparisons

Table 2 presents comparisons of standardized pages published per staff member for econometrics and economics departments. These comparisons are made for the journal groupings of table 1.[7] The number of pages published per staff member in group 1 journals is quite small and so comparisons are very sensitive to individual publications. For example, Adelaide's .59 is one paper published in the *Economic Journal*, if it had not been published in the period 1988-93, then Adelaide would have dropped to equal last position. On the other hand if one more equivalent paper had been published by an Adelaide staff member, then Adelaide would have risen to third position. Because of this sensitivity, comparisons based on group 1 page counts are unreliable and omitted.

From table 2 it is evident that econometrics departments have more success in publishing in group 1 and 2 journals than economics departments. This is highlighted by the fact that pages published in group 1 and 2 journals as a percentage of pages published in group 1-4 journals is 47% for Monash and Sydney econometrics departments, 24% for UNE and UNSW econometrics departments, 29% for ANU economics department, and around 10% for Melbourne, Monash, Sydney, Tasmania, and UNSW economics departments.

TABLE 2 : Departmental Comparisons by Journal Groups
(pages per staff member, 1988-1993)

Groups 1 & 2		Groups 1, 2 & 3		Groups 1 - 4		Group 1	
ECONOMETRICS							
Sydney	10.44	Sydney	13.99	UNE	22.84	Sydney	3.81
Monash	8.78	Monash	11.75	Sydney	22.24	Monash	1.31
UNE	5.39	UNE	8.64	Monash	18.56	UNE	0.95
UNSW	3.71	UNSW	8.53	UNSW	15.53	UNSW	0.54
ANU	0.27	ANU	3.79	ANU	6.95	ANU	0.27
ECONOMICS							
ANU	6.58	Melbourne	14.83	Monash	33.16	ANU	1.95
Melbourne	4.08	UWA	11.32	Melbourne	31.88	Monash	1.25
Monash	3.39	Tasmania	10.51	UNE	28.71	UWA	1.06
Sydney	2.41	Sydney	10.40	Queensland	26.18	Melbourne	1.03
Tasmania	2.09	ANU	9.88	Bond	26.14	La Trobe	0.96
UNSW	2.06	Monash	8.72	Tasmania	25.75	UNSW	0.84
UWA	1.93	UNE	7.52	Sydney	25.40	Bond	0.67
Wollongong	1.85	Griffith	6.43	La Trobe	24.76	Sydney	0.64
La Trobe	1.71	UNSW	5.93	ANU	22.46	Adelaide	0.59
Bond	1.34	La Trobe	5.91	Murdoch	21.41	Queensland	0.48
Queensland	1.16	Queensland	5.60	UNSW	21.17	Curtin	0.23
Adelaide	0.92	Bond	5.50	UWA	20.49	Flinders	0.21
Deakin	0.59	Macquarie	5.25	Wollongong	17.48	Deakin	0
Macquarie	0.47	Wollongong	4.89	Newcastle	15.48	Griffith	0
RMIT	0.44	Flinders	4.33	Adelaide	14.74	James Cook	0
Curtin	0.39	Adelaide	3.54	Curtin	12.92	Macquarie	0
Flinders	0.21	Newcastle	2.82	Griffith	12.05	Murdoch	0
UTS	0.06	Curtin	2.16	Macquarie	10.71	UNE	0
Newcastle	0	Murdoch	1.64	Flinders	9.47	Newcastle	0
Murdoch	0	RMIT	1.26	Deakin	7.44	Tasmania	0
James Cook	0	Deakin	0.80	RMIT	2.74	UTS	0
Griffith	0	UTS	0.36	UTS	1.04	Wollongong	0
UNE	0	James Cook	0	James Cook	0	RMIT	0

Rather than using one particular journal grouping for comparisons of econometrics and economics departments, an overall picture is more revealing. For econometrics departments, Monash and Sydney rank high regardless of journal groupings. The picture is more complicated for economics departments, therefore, in

table 2 they were divided into thirds according to the ranking provided by each journal grouping. As mentioned above, the ranking provided by group 1 journals is ignored. There are 4 departments which are ranked in the top third under all three journal groupings, namely, Melbourne, Monash, Sydney, and Tasmania. There are 3 departments which are ranked in the top third twice and the middle third once, Australian National (ANU), New England, and Western Australia. Furthermore, there are 5 departments which are ranked in the top third once and in the middle third twice, Bond, Latrobe, Queensland, New South Wales, and Wollongong. There is one department, Adelaide, ranked in the middle third three times; two departments, Curtin and Macquarie, ranked in the middle third twice and the bottom third once; one department, Griffith, ranked in the top third once and in the bottom third twice; 5 departments, Deakin, Flinders, Murdoch, Newcastle, and Royal Melbourne Institute of Technology (RMIT), ranked in the middle third once and the bottom third twice. Finally, there are 2 departments ranked in the bottom third three times, namely, James Cook and University of Technology Sydney (UTS).

A Spearman rank-order correlation coefficient was calculated for the rankings provided by columns 1 and 2, 1 and 3, and 2 and 3 and found to be .69 (.138), .567 (.165), and .752 (.1) respectively.[8] This suggests a **positive correlation** between the rankings provided by the different journal groupings.

Most universities do not have separate econometrics and economics departments. Given the relative success of econometrics departments in publishing in group 1 and 2 journals, a better comparison of economics departments might be provided by combining econometrics departments, where they exist, with economics departments. This would strengthen the position of Monash and Sydney in particular.

When calculating pages per staff member one should keep in mind that this measure can be unduly influenced by the research output of one or two department members. To avoid this problem the median number of pages published was calculated for each department. For the journals in groups 1, 2, and 3 the median was 0 for all departments except Tasmania (5.3) and Griffith (3.9) indicating that research output is highly concentrated. In addition, the number of pages published by the staff member in the 75th percentile was calculated for each department and shown in table 3. For the ANU, 25% of its economics department has published more than 15.8 pages in group 1, 2, and 3 journals during the sample period. In comparing departments this may be a better measure of a department's overall performance than pages per staff member. It should be noted that if tables 2 and 3 are compared, the ranking provided by using pages per staff member is very similar to that provided by using the 75th percentile. This is confirmed by a Spearman rank-order correlation coefficient of .884 (.046) for the two rankings.

For the journals in groups 1-4 the median for each department was calculated and is shown in table 3. A Spearman rank-order correlation coefficient of .804 (.056) confirms a positive correlation between rankings according to pages per staff member and the median.

Comparing these results to the study of Harris (1988) is quite revealing. Harris found the ANU and, to a lesser extent, Newcastle to be the largest producers of research output while all other economics departments produced similar output. This is not so in table 2, where Newcastle is clearly dominated by several other departments and where there is quite a wide dispersion in the number of pages published between departments. Obviously the time period of the study matters as does the measure of research output being used.

TABLE 3: Departmental Comparisons by Journal Group
(pages, 1988 - 1993)

	Groups 1, 2 & 3 (75th percentile)		Groups 1 - 4 (median)	
ECONOMETRICS				
	Sydney	21.4	UNE	30.3
	Monash	17.7	Monash	19.0
	UNSW	15.1	UNSW	15.1
	UNE	11.1	Sydney	9.6
	ANU	3.8	ANU	3.7
ECONOMICS				
	ANU	15.8	Bond	25.8
	Sydney	14.6	Tasmania	24.9
	Tasmania	13.1	Monash	16.2
	Monash	12.7	Sydney	14.5
	Melbourne	11.8	UNSW	13.2
	UNSW	11.7	Melbourne	11.8
	La Trobe	10.4	La Trobe	11.6
	Griffith	9.3	Wollongong	9.0
	UNE	8.1	UNE	8.1
	Queensland	5.6	Queensland	7.0
	UWA	4.5	Murdoch	6.0
	Flinders	4.8	UWA	5.7
	Wollongong	3.9	Griffith	5.4
	Bond	3.8	ANU	0
	Adelaide	3.2	Adelaide	0
	Curtin	0	Curtin	0
	Deakin	0	Deakin	0
	James Cook	0	Finders	0
	Macquarie	0	James Cook	0
	Murdoch	0	Macquarie	0
	Newcastle	0	Newcastle	0
	RMIT	0	RMIT	0
	UTS	0	UTS	0

In a recent paper, Anderson and Blandy (1992) report the results of a survey in which economics professors were asked to rank the research output and staff members of all departments. The result of that survey placed ANU, Melbourne, Monash and New South Wales as the leading four departments. This contrasts with

the results of this paper in which Melbourne, Monash, Sydney, Tasmania, and ANU consistently rank most highly. One explanation for this difference may be that professors ranked departments according to the research output and quality of a few *superstars* rather than the research output and quality of the entire department.

IV. Staff Comparisons

Tables 4a, 4b, and 4c provide information concerning the research output of senior lecturers, associate professors, and professors in *Journal of Economic Literature* listed journals during the sample period. The research output of lecturers is not presented in table 4 since lecturers in general produced zero research output.[9] In the sample there are 181 senior lecturers, 100 associate professors, and 62 professors. For the journals in groups 1, 2, and 3 the median numbers of pages published by all senior lecturers and associate professors was 0 while for all professors it was 4. This highlights the fact that the individual data contains a large number of zero research outputs.

For a further and more interesting comparison a subset of all staff members was defined and called *active journal publishers*. This subset included only those staff members who had published, in the sample period, any pages in any *Journal of Economic Literature* listed journal, that is, any pages in journals in groups 1-4. By their actions these staff members were viewed as having a predisposition to publish in *Journal of Economic Literature* listed journals. The subset of active journal publishers consisted of 85 senior lecturers, 67 associate professors, and 53 professors.

From table 4a it is seen that for group 1 and 2 journals the median number of pages published by senior lecturers, associate professors and professors was 0 even

for the subset of active journal publishers. For a senior lecturer/associate professor/professor to have published more than 0/7.4/10.6 pages in this group of journals during the sample period places that individual in the top 25% of active journal publishers.

Table 4b shows that for group 1, 2, and 3 journals the median number of pages published by senior lecturers and associate professors was still 0 for the set of all staff members. However, for the subset of active journal publishers the median number of pages published is between 6 and 9 depending on the individuals academic position. For a senior lecturer/associate professor/professor to have published more than 16.8/19.4/19.7 pages in this group of journals places that individual in the top 25% of active journal publishers.

Table 4c reveals, for the journals in groups 1-4, that the median number of pages published by senior lecturers is still 0 for the set of all staff members. The median number of pages published by active senior lecturers/associate professors/professors is 28.5/27/29.8.

An interesting feature of tables 4a, 4b, and 4c is that, for the subset of active journal publishers, the median number of pages published is similar across academic grade while the mean number of pages published is greater than the median and increases as academic grade moves from senior lecturer to associate professor and professor. Therefore, within an academic grade the data is positively skewed (skewed to the right) and this positive skewness increases with academic grade. The mean is getting pulled above the median by the research output of a few large producers and this effect is greatest for professors. It is to be expected that the mean increases with academic grade, but why does dispersion increase as well? Perhaps this can be explained by the fact that as individuals progress through the

academic grades more administrative responsibilities are given to them. Associate professors and professors who can successfully avoid these resposibilties produce large journal page counts while those who do not produce little research output.

TABLE 4: Staff Comparisons by Journal Groups
(1988 - 1993)

4a: Journal Groups 1 & 2

		Senior Lecturer	Associate Professor	Professor
(All Staff Members)	Mean	1.07	3.40	5.61
	Median	0	0	0
	75 th percentile	0	3.03	6.14
(Active Journal Publishers)	Mean	2.29	5.07	6.56
	Median	0	0	0
	75 th percentile	0	7.35	10.59

4b: Journal Groups 1, 2 & 3

		Senior Lecturer	Associate Professor	Professor
(All Staff Members)	Mean	5.12	9.35	14.92
	Median	0	0	3.95
	75 th percentile	7.49	13.82	18.86
(Active Journal Publishers)	Mean	10.89	13.95	17.46
	Median	8.79	8.06	6.57
	75 th percentile	16.80	19.42	19.72

4c: Journal Groups 1 - 4

		Senior Lecturer	Associate Professor	Professor
(All Staff Members)	Mean	16.70	23.76	45.25
	Median	0	14.11	26.77
	75 th percentile	27.52	34.68	54.49
(Active Journal Publishers)	Mean	35.57	35.46	52.94
	Median	28.46	27.00	29.82
	75 th percentile	48.50	51.28	64.52

V. Concluding Remarks

This paper has measured one output of an econometrics or economics department, namely, pages published in journals listed in the *Journal of Economic Literature* CD-rom database. Research published in books, government reports, and journals not listed by the *Journal of Economic Literature* such as interdisciplinary journals and those aimed at a non-professional readership have not been measured nor has teaching been considered. Nevertheless, this paper does provide a valuable first step in measuring and comparing the outputs of departments and individual staff members.

Endnotes

[1] In 1991, journal publications accounted for 33.2% of research output, published and unpublished conference proceedings accounted for 13.5% of research output, books accounted for 6.1% of research output and unpublished monographs (policy reports to government) accounted for 20.3% of research output [Hill and Murphy (1994, p42).

[2] Recently formed universities such as the University of Western Sydney were not included in the study as they were not in existence for all of the sample period. For universities with many campuses only staff at the older main campus were considered.

[3] The CD-rom used was dated December 1993. This meant that articles published in the second half of 1993 were not included in the analysis since there is a lag between the date an article is published and when it is listed in the *Journal of Economic Literature.*

[4] The *Economic Record* is the journal viewed by Australian academic economists as important, but not included in Group 1.

[5] The 3 journals included by Laband and Piette (1994), but not included in groups 1 or 2 are the *American Journal of Agricultural Economics, National Tax Journal,* and *Southern Economic Journal.*

[6] This database includes all the 332 journals appearing in the printed version of the *Journal of Economic Literature* plus a number of others.

[7] For the grouping including all journals, standardized pages are only calculated for journals in groups 1, 2, and 3. As most conversion factors are less than one the number of pages per staff member that appears in group 4 journals is biased upwards.

[8] Asymptotic standard errors are in brackets.

[9] The lack of research output from lecturers can be partially explained by publication lag, that is, by the time their *forthcomings* are published they have often been promoted to senior lecturer.

References

Anderson, M. and R. Blandy (1992), 'What Australian Economics Professors Think', *Australian Economic Review*, 17-40.

Diamond, A. M. (1989), 'The Core Journals of Economics', *Current Contents*, January 2, 4-11.

Graves, P. E., Marchand, J. R. and R. Thompson (1982), 'Economics Deparment Rankings: Research Incentives, Constraints, and Efficiency', *American Economic Review*, **72**, 1131-1141.

Hall, A. D. (1987), 'Worldwide Rankings of Research Activity in Econometrics: 1980-1985', *Econometric Theory*, **3**, 171-194

Harris, G. T. (1988), 'Research Output in Australian University Economics Departments, 1974-83', *Australian Economic Papers*, **27**, 102-110.

Hill, S. and P. Murphy (1994), *Quantitative Indicators of Australian Academic Research*, Australian Government Printing Service, Canberra.

Hirsch, B. T., Austin, R., Brooks, J, and J. B. Moore (1984), 'Economics Deparmental Rankings: Comment', *American Economic Review*, **74**, 822-826.

Laband, D. N. and M. J. Piette (1994), 'Favouritism Versus Search for Good Papers: Empirical Evidence Regarding the Behaviour of Journal Editors', *Journal of Political Economy*, **102**, 194-203.

Liebowitz, S. J. and J. P. Palmer (1984), 'Assessing the Relative Impact of Economics Journals', *Journal of Economic Literature*, **22**, 77-88.

Working Papers in Economics

160	C. Karfakis	Monetary Policy and the Velocity of Money in Greece: A Cointegration Approach; July 1991
161	B. Rao	Disaggregation, Disequilibrium and the New Classical Model; July 1991
162	Y. Varoufakis	Postmodern Challenges to Game Theory; August 1991
163	Y. Varoufakis	Freedom within Reason from Axioms to Marxian Praxis; August 1991
164	D.J. Wright	Permanent vs. Temporary Infant Industry Assistance; September 1991
165	C. Karfakis & A.J. Phipps	Covered Interest Parity and the Efficiency of the Australian Dollar Forward Market: A Cointegration Analysis Using Daily Data; November 1991
166	W. Jack	Pollution Control Versus Abatement: Implications for Taxation Under Asymmetric Information; November 1991
167	C. Karfakis & A. Parikh	Exchange Rate Convenience and Market Efficiency; December 1991
168	W. Jack	An Application of Optimal Tax Theory to the Regulation of a Duopoly; December 1991
169	I.J. Irvine & W.A. Sims	The Welfare Effects of Alcohol Taxation; December 1991
170	B. Fritsch	Energy and Environment in Terms of Evolutionary Economies; January 1992
171	W.P. Hogan	Financial Deregulation: Fact and Fantasy; January 1992
172	P.T. Vipraio	An Evolutionary Approach to International Expansion: A Study for an Italian Region; January 1992
173	C. Rose	Equilibrium and Adverse Selection; February 1992
174	D.J. Wright	Incentives, Protection and Time Consistency; April 1992
175	A.J. Phipps, J. Sheen & C. Wilkins	The Slowdown in Australian Productivity Growth: Some Aggregated and Disaggregated Evidence; April 1992
176	J.B. Towe	Aspects of the Japanese Equity Investment in Australia; June 1992
177	P.D. Groenewegen	Alfred Marshall and the Labour Commission 1891-1894; July 1992
178	D.J. Wright	Television Advertising Regulation and Programme Quality; August 1992
179	S. Ziss	Moral Hazard with Cost and Revenue Signals; December 1992
180	C. Rose	The Distributional Approach to Exchange Rate Target Zones; December 1992
181	W.P. Hogan	Markets for Illicit Drugs; January 1993
182	E. Jones	The Macroeconomic Fetish in Anglo-American Economies; January 1993
183	F. Gill	Statistics in the Social Sciences A Mixed Blessing? March 1993
184	Y. Varoufakis & S. Hargreaves-Heap	The Simultaneous Evolution of Social Roles and of Cooperation; April 1993
185	C. Karfakis & D.M. Moschos	The Information Content of the Yield Curve in Australia; April 1993
186	C. Karfakis & A. Parikh	Uncovered Interest Parity Hypothesis for Major Currencies; May 1993

187	C. Karfakis & A.J. Phipps	Do Movements in the Forward Discount on the Australian Dollar Predict Movements in Domestic Interest Rates? Evidence from a Time Series Analysis of Covered Interest Parity in Australia in the late 1980s; May 1993
188	J.B. Towe	Citation Analysis of Publications on the Australian Tariff Debate, 1946-1991; August 1993
189	C. Karfakis & S-J Kim	Exchange Rates, Interest Rates and Current Account News: Some Evidence from Australia; September 1993
190	A.J. Phipps & J.R. Sheen	Unionisation, Industrial Relations and Labour Productivity Growth in Australia: A Pooled Time-Series/Cross-Section Analysis of TFP Growth; September 1993
191	W.P. Hogan	Market Value Accounting in the Financial Sector; November 1993
192	Y. Varoufakis & W. Kafouros	The Transferability of Property Rights and the Scope of Industrial Relations' Legislation: Some Lessons from the NSW Road Transport Industry; November 1993
193	P.D. Groenewegen	Jacob Viner and the History of Economic Thought; January 1994
194	D. Dutta & A. Hussain	A Model of Share-Cropping with Interlinked Markets in a Dual Agrarian Economy; March 1994
195	P.E. Korsvold	Hedging Efficiency of Froward and Option Currency Contracts; March 1994
196	J. Yates	Housing and Taxation: An Overview; March 1994
197	P.D. Groenewegen	Keynes and Marshall: Methodology, Society and Politics; March 1994
198	D.J. Wright	Strategic Trade Policy and Signalling with Unobservable Costs; April 1994
199	J. Yates	Private Finance for Social Housing in Australia; April 1994
200	L. Haddad	The Disjunction Between Decision-Making and Information Flows: The Case of the Former Planned Economies; April 1994
201	P.D. Groenewegen & S. King	Women as Producers of Economic Articles: A Statistical Assessment of the Nature and the Extent of Female Participation in Five British and North American Journals 1900-39; June 1994
202	P.D. Groenewegen	The French Connection: Some Case Studies of French Influences on British Economics in the Eighteenth Century; June 1994
203	F. Gill	Inequality and the Wheel of Fortune: Systemic Causes of Economic Deprivation; July 1994
204	M. Smith	The Monetary Thought of Thomas Tooke; July 1994
205	A. Aspromourgos	Keynes on the Australian Wages System; July 1994
206	W. Kafouros & Y. Varoufakis	Bargaining and Strikes: From an Equilibrium to an Evolutionary Framework; July 1994
207	A. Oswald & I. Walker	Rethinking Labor Supply: Contract Theory and Unions; July 1994
208	J.B. Towe & D.J. Wright	The Research Output of Australian Econometrics and Economics Department: 1988-93; July 1994

Copies are available upon request from:

Department of Economics
The University of Sydney
N.S.W. 2006, Australia

Working Papers in Economics Published Elsewhere

2	I.G. Sharpe & R.G. Walker	*Journal of Accounting Research, 13(2)*, Autumn 1975
3	N.V. Lam	*Journal of the Developing Economies, 17*(1), March 1979
4	V.B. Hall & M.L. King	*New Zealand Economic Papers, 10*, 1976
5	A.J. Phipps	*Economic Record, 53*(143), September 1977
6	N.V. Lam	*Journal of Development Studies, 14*(1), October 1977
7	I.G. Sharpe	*Australian Journal of Management*, April 1976
9	W.P. Hogan	*Economic Papers*, 55, The Economic Society of Australia and New Zealand, October 1977
12	I.G. Sharpe & P.A. Volker	*Economics Letters*, 2, 1979
13	I.G. Sharpe & P.A. Volker	*Kredit and Kapital, 12*(1), 1979
14	W.P. Hogan	*Some Calculations in Stability and Inflation*, A.R. Bergström et al (eds.), J. Wiley & Sons, 1978
15	F. Gill	*Australian Economic Papers, 19*(35), December 1980
18	I.G. Sharpe	*Journal of Banking and Finance, 3*(1), April 1978
21	R.L. Brown	*Australian Journal of Management, 3*(1), April 1978
23	I.G. Sharpe & P.A. Volker	*The Australian Monetary System in the 1970s*, M. Porter (ed.), Supplement to Economic Board 1978
24	V.B. Hall	*Economic Record, 56*(152), March 1980
25	I.G. Sharpe & P.A. Volker	*Australian Journal of Management*, October 1979
27	W.P. Hogan	*Malayan Economic Review, 24*(1), April 1979
28	P. Saunders	*Australian Economic Papers, 19*(34), June 1980
29	W.P. Hogan I.G. Sharpe & P.A. Volker	*Economics Letters*, 6 (1980), 7 (1981)
30	W.P. Hogan	*Australian Economic Papers*, 18(33), December 1979
32	R.W. Bailey, V.B. Hall & P.C.B. Phillips	*Keynesian Theory, Planning Models, and Quantitative Economics*, G. Gandolfo and F. Marzano (eds.), 1987
38	U.R. Kohli	*Australian Economic Papers, 21*(39), December 1982
39	G. Mills	*Journal of the Operational Research Society* (33) 1982
41	U.R. Kohli	*Canadian Journal of Economics, 15*(2), May 1982
42	W.J. Merrilees	*Applied Economics*, 15, February 1983
43	P. Saunders	*Australian Economic Papers, 20*(37), December 1981
45	W.J.Merrilees	*Canadian Journal of Economics, 15*(3), August 1982
46	W.J. Merrilees	*Journal of Industrial Economics, 31*, March 1983
49	U.R. Kohli	*Review of Economic Studies, 50*(160), January 1983
50	P. Saunders	*Economic Record, 57*(159), December 1981

53	J. Yates	AFSI, *Commissioned Studies and Selected Papers*, AGPS, IV 1982
54	J. Yates	*Economic Record*, *58*(161), June 1982
55	G. Mills	*Seventh Australian Transport Research Forum-Papers*, Hobart 1982
56	V.B. Hall & P. Saunders	*Economic Record*, *60*(168), March 1984
57	P. Saunders	*Economic Record*, *59*(166), September 1983
58	F. Gill	*Économie Appliquée*, *37*(3-4), 1984
59	G. Mills & W. Coleman	*Journal of Transport Economics and Policy*, 16(3), September 1982
60	J. Yates	*Economic Papers*, Special Edition, April 1983
61	S.S. Joson	*Australian Economic Papers*, *24*(44), June 1985
62	R.T. Ross	*Australian Quarterly*, *56*(3), Spring 1984
63	W.J. Merrilees	*Economic Record*, *59*(166), September 1983
65	A.J. Phipps	*Australian Economic Papers*, *22*(41), December 1983
67	V.B. Hall	*Economics Letters*, 12, 1983
69	V.B. Hall	*Energy Economics*, *8*(2), April 1986
70	F. Gill	*Australian Quarterly*, *59*(2), Winter 1987
71	W.J. Merrilees	*Australian Economic Papers*, *23*(43), December 1984
73	C.G.F. Simkin	*Singapore Economic Review*, *29*(1), April 1984
74	J. Yates	*Australian Quarterly*, *56*(2), Winter 1984
77	V.B. Hall	*Economics Letters*, 20, 1986
78	S.S. Joson	*Journal of Policy Modeling*, *8*(2), Summer 1986
79	R.T. Ross	*Economic Record*, *62*(178), September 1986
81	R.T. Ross	*Australian Bulletin of Labour*, *11*(4), September 1985
82	P.D. Groenewegen	*History of Political Economy*, *20*(4), Winter 1988 and *Scottish Journal of Political Economy*, *37*(1) 1990
84	E.M.A. Gross, W.P. Hogan & I.G. Sharpe	*Australian Economic Papers*, *27*(50), June 1988
85	F. Gill	*Australian Bulletin of Labour*, *16*(4), December 1990
94	W.P. Hogan	*Company and Securities Law Journal*, 6(1), February 1988
95	J. Yates	*Urban Studies*, *26*, 1989
96	B.W. Ross	*The Economic and Social Review*, *20*(3), April 1989
97	F. Gill	*Australia's Greatest Asset: Human Resources in the Nineteenth and Twentieth Centuries*, D. Pope (ed.), Federation Press, 1988
98	A.J. Phipps	*Australian Economic Papers*, *31*(58), June 1992
99	R.T. Ross	*Australian Bulletin of Labour*, *15*(1), December 1988
100	L. Haddad	*Hetsa Bulletin*, (11), Winter 1989
101	J. Piggott	*Public Sector Economics - A Reader*, P. Hare (ed.), Basil Blackwell, 1988
102	J. Carlson & D. Findlay	*Journal of Macroeconomics*, *13*(1), Winter 1991
102	J. Carlson & D. Findlay	*Journal of Economics and Business*, *44*(1), February 1992

104	P.D. Groenewegen	*Decentralization, Local Government and Markets: Towards a Post-Welfare Agenda*, R.J. Bennet (ed.) Oxford University Press, 1990
107	B.W. Ross	*Prometheus*, 6(2), December 1988
108	S.S. Joson	*Rivista di diritto valutario e di economia internazionale*, *35*(2), June 1988
112	P. Groenewegen	*NeoClassical Economic Theory 1870 to 1930*, K. Hennings and W. Samuels (eds.), Boston Kluwer-Nighoff, 1990
113	V.B. Hall T.P. Truong V.A. Nguyen	*Energy Economics*, *12*(4) October 1990
114	V.B. Hall T.P. Truong & V.A. Nguyen	*Australian Economic Review*, (87) 1989(3)
115	F. Gill	*Australian Journal of Social Issues*, *25*(2), May 1990
116	G. Kingston	*Economics Letters*, 15 (1989)
117	V.B. Hall & D.R. Mills	*Pacific and Asian Journal of Energy*, *2*(2), December 1988
118	W.P. Hogan	*Abacus*, *25*(2), September 1989
120	P. Groenewegen	*Flattening the Tax Rate Scale: Alternative Scenarios & Methodologies*, (eds.) J.G. Head and R. Krever, 1990
122	W.P. Hogan & I.G. Sharpe	*Economic Analysis and Policy*, *19*(1), March 1989
123	G. Mills	*Journal of Transport Economics and Policy*, *23*, May 1989
126	F. Gill	*The Australian Quarterly*, *61*(4), 1989
128	S. Lahiri & J. Sheen	*The Economic Journal*, *100*(400), 1990
130	J. Sheen	*Journal of Economic Dynamics and Control*, 16, 1992
135	Y. Varoufakis	*Économie Appliquée*, *45*(1), 1992
136	L. Ermini	*The Economic Record*, *69*(204), March 1993
138	D. Wright	*Journal of International Economics*, *35*, (1/2) 1993
139	D. Wright	*Australian Economic Papers*, *32*, 1993
141	P. Groenewegen	*Australian Economic Papers*, *31*, 1992
143	C. Karfakis	*Applied Economics*, *23*, 1991
144	C. Karfakis & D. Moschos	*Journal of Money, Credit and Banking*, *22*,(3), 1990
147	J. Yates	*Housing Studies*, 7, (2), April 1992
158	W.P. Hogan	*Economic Papers*, *10*(1), March 1991
159	P.Groenewegen	*Local Government and Market Decentralisation: Experiences in Industialised, Developing and Former Eastern Block Countries*, R. J. Bennett (ed.) UN University Press, 1994
160	C. Karfakis	*Applied Financial Economics*, *1*(3), September 1991
162	Y. Varoufakis	*Erkenntnis*, *38*, 1993
163	Y. Varoufakis	*Science and Society*, *56*(4), 1993
173	C. Rose	*The Rand Journal of Economics*, *24*(4), Winter 1993
177	P. Groenewegen	*European Journal of the History of Economic Thought*, *1*(2) Spring 1994
190	A.J. Phipps & J.R. Sheen	*Labour Economics and Productivity*, *6*(1), March 1994