

Research Performance Comparison of Research Institutes of Economics and Social Sciences in Japan (2012)

1 . Introduction

In many academic disciplines of science, how many articles were published in internationally distinguished academic journals and how many times these articles were cited, are important indicators of research performance. In many fields of social sciences including economics, such statistics are also important for research evaluation. When academic works such as articles and books are cited, it is considered that the importance of such articles and books is recognized by third parties, and the number of citations is considered as objective indexes of the quality of academic works. Internationally distinguished academic journals strictly review articles in refereeing processes, and the number of publications in such journals is considered as an objective index of the quality of academic works.

However, the numbers of publications and citations vary enormously among different academic fields and need to be carefully compared. To use a figure of speech, in sports, it makes no sense to compare the annual goal scores between a soccer player and a basketball player. Professional football players making several dozens of goals occupy high positions in goal rankings in their leagues. On the other hand, basketball players making similar numbers of goals are only mediocre. This difference is because the annual numbers of football games are smaller than for basketball. Further, the average number of goals of football games is much smaller than that for basketball. Only a few goals are usually scored in a football game, while it is not unusual to score over 100 goals in a basketball game. Similarly, it makes no sense to compare the numbers of citations and publications of researchers of different academic fields. The citation speeds, the numbers of the academic journals, the numbers of articles published annually in journals, and the acceptance rates of journals vary widely among academic fields. Thus, it is no wonder that the numbers of citations also vary widely among different academic fields. In fact, Thomson Scientific, which offers the data on the numbers of citations, encourages us to be cautious when comparing the numbers of citations of different academic fields.¹

Hence, to evaluate the research performance of the Institute of Social and Economic Research of Osaka University, we compare its numbers of citations and articles published in internationally distinguished academic journals with those of other research institutes of economics and social sciences attached to national universities in Japan. The other research institutes are the Institute of Social Science of the University of Tokyo, the Institute of Economic Research of Hitotsubashi University, the Institute of Economic Research of Kyoto University, and the Research Institute for Economic and Business Administration of Kobe University. In the following, we explain how to compare research achievements and their results.

2 . Lists of Academic Staff of Institutes

The research achievements of each institute are evaluated as the total research achievements made by the academic staff of the institute. Here, we define the “list of academic staff” of an institute as the institute’s professors, associate professors, and assistant professors in full-time employment as of April 1, 2012.² Researchers in the positions of visiting researchers, part-time academic staff, etc., typically belong to institutes for short time periods, and it is not appropriate to count their research achievements to evaluate the achievements of the institutes. Thus, our definition of academic staff of institutes excludes researchers of such positions.³

3 . Comparison by Publications in Internationally Distinguished Journals

3.1. List of Journals

To evaluate research achievements, defining a list of journals is essential for counting publications. Of course, important and prestigious academic journals in economics must be included in the list. Moreover, the neutrality of journal lists is important. If academic journals in favor of researchers in some universities are included in the list,

¹ “Bibliometrics Method for Evaluation of Researches” by Thomson Scientific, 2007.

² We gathered this information from the homepages of each institution, and confirmed it by its members.

³ We also exclude members whom we considered nonacademic staff from the list of academic staff of the institutes.

the results will be biased toward such universities. For strict neutrality, we made lists of journals as mechanically as possible based on a standard academic database.

Our comparison is based on the Web of Science by Thomson Reuters, a widely utilized database for academic researchers in various academic fields. Web of Science publicizes article influence score (AIS) as an index of academic journals' influences in various academic fields based on citation data. However, the AIS ranking of academic journals in the field of economics fluctuates even in a short period. Thus, we have defined four economics journal lists, "TOP20," "TOP50," "TOP100," and "TOP200," based on the annual rankings for the past 5 years (from 2007 to 2011) as follows:

TOP20: Journals ranked at least **twice** within the top **20** during the past 5 years (**19** journals);

TOP50: Journals ranked at least **twice** within the top **50** during the past 5 years (**54** journals);

TOP100: Journals ranked at least **twice** within the top **100** during the past 5 years (**110** journals); and

TOP200: Journals ranked continuously within the top **200** during the past 5 years or listed in the "TOP100" defined above (**167** journals).

Here, we use journals' functions to review the qualities of articles neutrally. Thus, we excluded journals that mainly publish solicited articles or do not accept general submissions.⁴ These four journal lists are attached in the Appendix.

Top-ranked academic economics journals are listed in the TOP20. Top-ranked academic journals in major subdisciplines of economics and highly ranked general journals in economics are listed in the TOP50. Highly ranked journals in various subdisciplines of economics are also listed in the TOP100. Various other journals are included in the TOP200.

Since the review criteria of highly ranked journals are generally higher, the list of such journals is suitable to evaluate high-quality researches. However, academic journals have their own targets and editorial policies, and even a top-quality article may be rejected by a journal if the article does not fit the journal's editorial policies. Thus, some articles published in low-ranked journals may be top quality. Most of the highly ranked journals are edited in Europe or the United States, and tend to publish articles on their specific regional economic issues rather than ones for Japan. The *Japanese Economic Review*, the official publication of the Japanese Economic Association, *Journal of the Japanese and International Economies* and *World Economy* that publish many articles on Japanese economic issues are included in the TOP200. Thus, we use the above four lists to evaluate academic achievements from various points of views.

Researchers in the academic fields other than economics are also affiliated with the institutes compared here. We also made an "Extended List" including journals of academic fields other than economics to count academic achievements made by such researchers as follows:

Extended List: Journals included are:

i) Top200 above;

ii) Social Sciences Citation Index (SSCI)'s following categories: business (113 journals); business, finance (84 journals); management (172 journals); law (144 journals); sociology (140 journals); history (59 journals); history of social sciences (31 journals); political science (153 journals); industrial relations and labor (23 journals); area studies (67 journals); international relations (82 journals); urban studies (37 journals); and

iii) Science Citation Index (SCI)'s following categories: mathematics (294 journals); mathematics, applied (246 journals); mathematics, interdisciplinary applications (24 journals); operation research and management sciences (20 journals); statistics & probability (37 journals).

The institutes including many noneconomics researchers may have disadvantages in the numbers of publications in economics journal lists, namely, TOP20, TOP50, TOP100, and TOP200. However, the number of journals in the Extended List is much larger than in the TOP200 (167 journals). That is, the Extended List includes more noneconomics journals than economics journals. Moreover, all the journals of fields other than economics in categories of ii) and iii) above are included in the Extended List regardless of their AIS rankings

⁴ In examining the journal Websites, we excluded *Brooking Papers on Economic Activity*, *Economic Policy*, *Journal of Economic Literature*, *Journal of Economic Perspectives*, *Annual Review of Economics*, *National Tax Journal*, and *Oxford Review of Economic Policy* based on this rule.

while only journals ranked above a certain level are included in lists of economics journals. Thus, the Extended List considerably mitigates the disadvantages of the institutes including many noneconomics researchers.

3.2. Counting Rule for Publications

The publication of an article by several authors is counted after dividing by the number of authors. For example, when three authors publish a joint article, we count as each having published 1/3 of an article. Some journals publish articles as editors, book reviews, etc. Since such articles are not original research works, we do not count them. Some journals publish issues of proceedings. Since articles in proceedings are typically reviewed by different standards from regular issues, we do not count any articles in such issues.⁵ Further, we do not count any corrigenda that correct errors in the articles the same author published previously. For example, when an author publishes the article A first, and then the same author publishes the article B to correct errors in the article A, we count the article A but not the article B.

3.3. Publication Counting Periods

We count publications in the above journal lists by the rules described above during certain periods. It takes longer than many fields of natural sciences to publish an article in journals of economics. The review processes in journals of economics often take more than one year to complete and publication takes sometimes another year after articles are accepted. To evaluate research achievement in such a field properly, we need to set the counting period to be long. On the other hand, if the counting period were too long, it would be inadequate to evaluate the current research activities of institutes. To evaluate research activities from both points of view, we count publications in the following three periods:

- (1) Past 5 years (January 1, 2008 – December 31, 2012)
- (2) Past 10 years (January 1, 2003 – December 31, 2012)
- (3) Past 20 years (January 1, 1993 – December 31, 2012)

3.4. Publication Counting Results

The three tables below show publication counts for the past 5, 10, and 20 years, respectively. Each table shows publication numbers in the TOP20, TOP50, TOP100, TOP200, and Extended List. “#Faculty” denotes the number of academic staff in each institute. “Total” denotes the total publications of each institute counted by the above rule. “Per Capita” denotes the average publications of each institute, *i.e.*, Per Capita = Total ÷ #Faculty. Per capita takes account of the sizes of the institutions in evaluating their research achievements, but sometimes a small number of researchers influence it excessively. Therefore, we also compute the “Median” for each institute. The median of an institute is the number of publications of the researcher of the middle point when the institution’s researchers are arrayed in descending order of number of publications. In each table, institutions (denoted by university names) are arrayed along with per capita publication in the Extended List.

Publication in International Journals: 5 Years (2008–2012)																
	Institute #	TOP20			TOP50			TOP100			TOP200			Extended List		
		Total	Per Capita	Median	Total	Per Capita	Median	Total	Per Capita	Median	Total	Per Capita	Median	Total	Per Capita	Median
Osaka	14	1.83	0.13	0.00	13.83	0.99	0.42	20.17	1.44	1.17	34.45	2.46	2.00	35.28	2.52	2.14
Kyoto	21	6.25	0.30	0.00	9.75	0.46	0.00	19.67	0.94	0.50	30.08	1.43	0.75	34.67	1.65	0.75
Kobe	19	0.50	0.03	0.00	4.33	0.23	0.00	11.50	0.61	0.00	18.33	0.96	0.00	26.50	1.39	0.50
Hitots.	30	1.50	0.05	0.00	3.67	0.12	0.00	7.37	0.25	0.00	23.32	0.78	0.50	29.02	0.97	0.92
Tokyo	36	0.33	0.01	0.00	1.67	0.05	0.00	2.17	0.06	0.00	12.17	0.34	0.00	24.00	0.67	0.00
Sum.	120	10.41	0.09		33.25	0.28		60.88	0.51		118.35	0.99		149.47	1.25	
Average	(Sum)	(Sum)	(Average)		(Sum)	(Average)		(Sum)	(Average)		(Sum)	(Average)		(Sum)	(Average)	

⁵ Following this rule, we do not count any articles in proceedings issues (May, No. 5) of the *American Economic Review*.

Publication in International Journals: 10 Years(2003-2012)																
	# Faculty	TOP20			TOP50			TOP100			TOP200			Extended List		
		Total	Per Capita	Median	Total	Per Capita	Median	Total	Per Capita	Median	Total	Per Capita	Median	Total	Per Capita	Median
Osaka	14	5.33	0.38	0.00	22.83	1.63	1.00	36.67	2.62	1.75	63.28	4.52	3.14	66.62	4.76	3.56
Kyoto	21	11.42	0.54	0.00	18.42	0.88	0.00	37.33	1.78	0.50	62.58	2.98	1.83	73.00	3.48	2.00
Kobe	19	2.75	0.14	0.00	7.58	0.40	0.00	18.92	1.00	0.00	31.75	1.67	0.00	41.25	2.17	1.08
Hitots.	30	2.50	0.08	0.00	7.50	0.25	0.00	17.03	0.57	0.00	47.95	1.60	1.35	57.32	1.91	1.35
Tokyo	36	1.67	0.05	0.00	3.50	0.10	0.00	7.50	0.21	0.00	24.33	0.68	0.00	49.83	1.38	0.75
Sum, Average	120	23.67	0.20		59.83	0.50		117.45	0.98		229.89	1.92		288.02	2.40	
		(Sum)	(Sum)	(Average)	(Sum)	(Average)		(Sum)	(Average)		(Sum)	(Average)		(Sum)	(Average)	

Publication in International Journals: 20 Years(1993-2012)																
	# Faculty	TOP20			TOP50			TOP100			TOP200			Extended List		
		Total	Per Capita	Median	Total	Per Capita	Median	Total	Per Capita	Median	Total	Per Capita	Median	Total	Per Capita	Median
Osaka	14	21.17	1.51	0.00	44.50	3.18	2.17	65.33	4.67	2.83	113.03	8.07	6.56	116.87	8.35	6.98
Kyoto	21	27.00	1.29	0.33	44.00	2.10	1.83	74.42	3.54	2.50	118.50	5.64	4.33	131.75	6.27	5.17
Kobe	19	5.25	0.28	0.00	15.08	0.79	0.00	35.92	1.89	0.00	56.25	2.96	0.00	65.75	3.46	1.50
Hitots.	30	3.50	0.12	0.00	12.33	0.41	0.00	26.53	0.88	0.00	71.45	2.38	1.92	85.82	2.86	2.33
Tokyo	36	2.67	0.07	0.00	6.00	0.17	0.00	11.33	0.31	0.00	40.00	1.11	0.00	80.09	2.22	1.75
Sum, Average	120	59.59	0.50		121.91	1.02		213.53	1.78		399.23	3.33		480.28	4.00	
		(Sum)	(Sum)	(Average)	(Sum)	(Average)		(Sum)	(Average)		(Sum)	(Average)		(Sum)	(Average)	

Except for the TOP20, per capita and median publications in each economics journal list of the Institute of Social and Economic Research of Osaka University are ranked first among the five institutes and several times as high as the average of the five institutes in all of the three periods (Past 5 Years, Past 10 Years, Past 20 Years). Furthermore, Osaka University's difference between the per capita and the median publications is relatively small. This implies that most researchers in Osaka University publish many articles in journals in those lists. Even in the TOP20, per capita publications of Osaka University are ranked second and much higher than the third institution. As we explained above, the Extended List includes many journals of fields other than economics, but per capita and median publications in the Extended List of Osaka University are similarly higher than those for other institutions. These statistics of publications suggest that many researchers in Osaka University perform excellently in research.

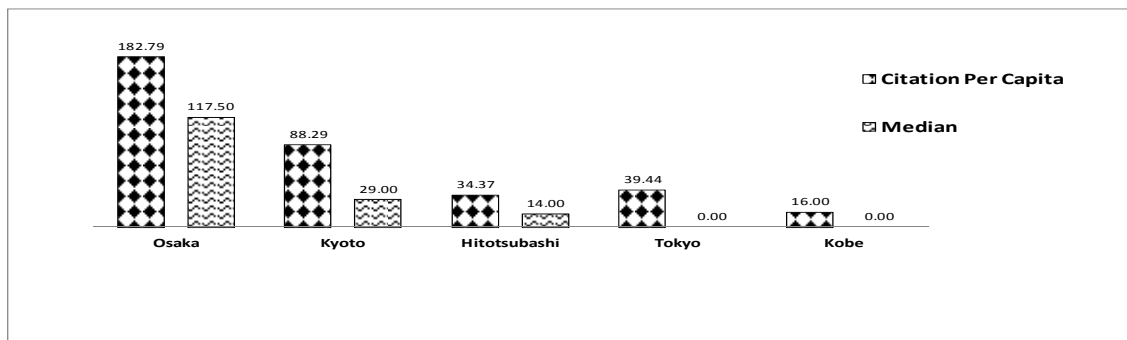
4 . Comparison by Citations

4.1. Citation-Counting Rule

We count citations in the following way. First, we prepared the curriculum vitae and publication lists of researchers by searching Websites and several databases. Next, we searched the citations by each researcher in the SSCI (Web of Science) as of November 19, 2012. We picked up works cited at least three times from the search results, and checked that they were for the appropriate researchers. We counted only the works cited at least three times since it is difficult to identify authors correctly in less frequently cited works and smaller numbers of citations are often citations by the authors themselves.

4.2. Citation-Counting Results

The graph below shows the citation-counting results. The citations per capita of Osaka University (182.79) is ranked first among the five institutes and three times as high as the average of the five institutes (59.73). The differences between the medians for Osaka University and other institutions are even larger. These citation statistics also suggest that many researchers in Osaka University perform excellently in research.



5 . Conclusion

Compared with other research institutes of economics and social sciences attached to national universities in Japan, the statistics of citations of publications in internationally distinguished journals suggest that the Institute of Social and Economic Research of Osaka University has achieved excellent research performance. Since the other research institutes in this comparison are prestigious in Japan, the statistics imply that the Institute of Social and Economic Research of Osaka University conducts distinguished research activities in Japan.

Appendix: List of Economics Journals

Journals in the TOP200 are listed below. Journals in the TOP20, TOP50, and TOP100 are denoted by *, **, and ***, respectively.

Agricultural Economics; *American Economic Journal - Applied Economics***;*American Economic Journal - Economic Policy***;*American Economic Journal-Microeconomics***;*American Economic Review****;*American Journal of Agricultural Economics**;*American Journal of Economics and Sociology*; *Applied Economics*; *Australian Journal of Agricultural and Resource Economics*; *Bulletin of Indonesian Economic Studies*; *Cambridge Journal of Economics*; *Canadian Journal of Economics**; *China Economic Review*; *Contemporary Economic Policy*; *Defense and Peace Economics*; *Developing Economies*; *Ecological Economics**; *Econometric Reviews**; *Econometric Theory***;*Econometrica****; *Econometrics Journal**; *Economic Development and Cultural Change**; *Economic Development Quarterly*; *Economic Geography***;*Economic History Review**; *Economic Inquiry**; *Economic Journal****; *Economic Modelling*; *Economic Studies Quarterly*; *Economic Record*; *Economic Theory**; *Economica**; *Economics and Philosophy*; *Economics Letters*; *Economics of Education Review**; *Economics of Transition**; *Economist - Netherlands*; *Economy and Society**; *Energy Economics**; *Energy Journal**; *Environmental and Resource Economics**; *European Economic Review***;*European Review of Agricultural Economics**; *Europe-Asia Studies*; *Experimental Economics****; *Explorations in Economic History**; *Federal Reserve Bank of St Louis Review**; *Feminist Economics**; *Fiscal Studies*; *Food Policy**; *Futures*; *Games and Economic Behavior***;*Geneva Risk and Insurance Review*; *Health Economics**; *IMF Staff Papers**; *Industrial and Corporate Change**; *Information Economics and Policy*; *Insurance Mathematics and Economics*; *International Economic Review***;*International Journal of Forecasting**; *International Journal of Game Theory**; *International Journal of Industrial Organization**; *International Review of Law and Economics*; *International Tax and Public Finance**; *Jahrbucher fur Nationalokonomie und Statistik*; *Japan and the World Economy*; *Japanese Economic Review*; *JCMS-Journal of Common Market Studies**; *Journal of Accounting and Economics****; *Journal of African Economies*; *Journal of Agricultural and Resource Economics*; *Journal of Agricultural Economics*; *Journal of Applied Econometrics***;*Journal of Applied Economics***;*Journal of Banking and Finance**; *Journal of Business and Economic Statistics***;*Journal of Comparative Economics**; *Journal of Development Economics***;*Journal of Development Studies**; *Journal of Econometrics****; *Journal of Economic Behavior and Organization***;*Journal of Economic Dynamics and Control**; *Journal of Economic Geography***;*Journal of Economic Growth****; *Journal of Economic History**; *Journal of Economic Psychology**; *Journal of Economic Surveys***;*Journal of Economic Theory****; *Journal of Economics*; *Journal of Economics and Management Strategy***;*Journal of Environmental Economics and Management***;*Journal of Evolutionary Economics*; *Journal of Finance****; *Journal of Financial and Quantitative Analysis***;*Journal of Financial Economics****; *Journal of Health Economics***;*Journal of Housing Economics*; *Journal of Human Resources****; *Journal of Industrial Economics***;*Journal of Institutional and Theoretical Economics*; *Journal of International Economics***;*Journal of Labor Economics****; *Journal of Law and Economics***;*Journal of Law Economics and Organization***;*Journal of Macroeconomics*; *Journal of Mathematical Economics**; *Journal of Media Economics*; *Journal of Monetary Economics****; *Journal of Money, Credit and Banking***;*Journal of Policy Analysis and Management**; *Journal of Policy Modeling*; *Journal of Political Economy****; *Journal of Population Economics**; *Journal of Post Keynesian Economics*; *Journal of Productivity Analysis*; *Journal of Public Economics***;*Journal of Real Estate Finance and Economics*; *Journal of Regional Science**; *Journal of Regulatory Economics**; *Journal of Risk and Insurance**; *Journal of Risk and Uncertainty***;*Journal of the European Economic Association***;*Journal of the Japanese and International Economies*; *Journal of Transport*

*Economics and Policy**; *Journal of Urban Economics***; *Kyklos*; *Labour Economics**; *Land Economics**; *Macroeconomic Dynamics**; *The Manchester School*; *Mathematical Finance***; *National Tax Journal*; *Open Economies Review*; *Oxford Bulletin of Economics and Statistics**; *Oxford Economic Papers-New Series***; *Pharmacoeconomics**; *Post-Soviet Affairs**; *Public Choice*; *Quarterly Journal of Economics****; *Rand Journal of Economics****; *Real Estate Economics**; *Regional Science and Urban Economics**; *Resource and Energy Economics**; *Review of Economic Dynamics***; *Review of Economic Studies****; *Review of Economics and Statistics****; *Review of Environmental Economics and Policy***; *Review of Financial Studies****; *Review of Income and Wealth*; *Review of Industrial Organization*; *Review of International Political Economy**; *Review of World Economics*; *Scandinavian Journal of Economics***; *Scottish Journal of Political Economy*; *Small Business Economics*; *Social Choice and Welfare**; *Southern Economic Journal*; *Studies in Nonlinear Dynamics and Econometrics*; *The World Economy*; *Theory and Decision*; *Tijdschrift voor Economische en Sociale Geografie*; *Value in Health**; *Work Employment and Society**; *World Bank Economic Review***; *World Bank Research Observer***; *World Development**; *Zeitschrift für Nationalökonomie*