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Ranking Economics and Econometrics ISI Journals by Quality Weighted Citations

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Ranking Economics and Econometrics ISI Journals by Quality Weighted Citations *

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Abstract

The paper analyses academic journal quality and impact using quality weighted citations that are based on the widely-used Thomson Reuters ISI Web of Science citations database (ISI). A recently developed Index of Citations Quality (ICQ), based on quality weighted citations, is used to analyse the top 276 Economics and top 10 Econometrics journals in the ISI Economics category using alternative quantifiable Research Assessment Measures (RAMs). It is shown that ICQ is a useful additional measure to the 2-Year Impact Factor (2YIF) and other well known RAMs available in ISI for the purpose of evaluating journal impact and quality, as well as ranking, of Economics and Econometrics journals as it contains information that has very low correlations with the information contained in alternative wellknown RAMs. Among other findings, the top Econometrics journals have some of the highest ICQ scores in the ISI category of Economics.

Keywords: Research assessment measures, Impact factors, Eigenfactor, Article Influence, Quality weighted citations, Index of citations quality, Economics journal rankings.

JEL Classifications: C18, C81, Y10.

1. Introduction

It is widely accepted that an objective assessment of the quality, impact and influence of academic journals should be based on quantifiable bibliometric Research Assessment Measures (RAMs). Most well-known and influential RAMs are based on alternative transformations of citations data. The citations data may be based on total citations or they may be weighted by quality, as defined according to some quantifiable measure.

One of the leading databases for generating RAMs to evaluate research performance and quality is the Thomson Reuters ISI Web of Science (2013) database (hereafter ISI). It would be safe to state that ISI is the benchmark against which other databases, such as SciVerse Scopus, Google Scholar and Microsoft Academic Search, are compared. Although there are important and widely-accepted caveats regarding the methodology and data collection methods underlying any citations database, including ISI, the ISI citations database is certainly one of the most widely-accessed sources of citations-based RAMs.

The use of any RAM based on citations data presumes that journals would prefer to have a higher number of citations, and hence greater impact and influence, in general. In this context, the most well known citations measures are the ISI 2-year impact factor (2YIF) and 5-year impact factor (5YIF). However, both of these RAMs include journal self citations. Self citations do not necessarily reflect any bias in citations-based RAMs, but it may reasonably be argued that some, if not many, journals self inflate the number of citations through coercive practices.

Chang and McAleer (2014) and Chang et al. (2011, 2014), among others, have argued that disproportionate journal self citations, which may arise from the editorial practices of journals or through pressure from the publishers of journals, can inflate and distort the impact factor of a journal. The latter type of journal self citation is widely regarded as coercive behaviour, and hence is unprofessional.

New RAMs have been developed in recent years to try to reduce the effects of coercive journal self citations. For example, impact factors that exclude journal self citations can be constructed, although this has the effect of reducing impact factors, which is generally unappealing to editors and publishers of journals. RAMs that exclude journal self citations

include the Eigenfactor and Article Influence scores, which will be discussed in the next section. It is widely accepted that journal editors, publishers and publishing authors would prefer to have higher Eigenfactor and Article Influence scores, in general, than lower.

The paper follows closely the outline of Chang and McAleer (2014), who suggested a new RAM, namely an Index of Citations Quality (ICQ) that is based on quality weighted citations data. They also applied their new measure to the top 500 journals, selected on the basis of the 2-year impact factor (2YIF), in each of the Sciences and Social Sciences.

In this paper it is shown that ICQ is a useful additional measure to 2YIF and other well known RAMs available in ISI for the purpose of evaluating journal impact and quality, as well as ranking, of Economics and Econometrics journals as it contributes information that has a very low correlation with the information contained in alternative well-known RAMs. Among other findings, the top Econometrics journals have some of the highest ICQ scores in the ISI category of Economics.

The plan of the remainder of the paper is as follows. In Section 2, alternative Research Assessment Measures (RAMs) for total citations and quality weighted citations are discussed. In Section 3, the recently developed Index of Citations Quality (ICQ) is discussed. Section 4 presents an analysis of rankings based on quality weighted citations for the top 276 economics journals and the top 10 econometrics journals in the ISI Economics category. Some concluding remarks are given in Section 5.

2. RAMs for Total Citations and Quality Weighted Citations

The Thomson Reuters ISI Web of Science (2013) is perhaps the most widely-used citations database for evaluating journal impact and quality. As discussed in, for example, Chang and McAleer (2013, 2014), Chang, Maasoumi and McAleer 92014), and Chang, McAleer and Oxley (2011a, b, c), among others, the RAMs are intended as descriptive statistics to capture journal impact and performance, and are not based on a theoretical model. These authors have emphasized that there is no optimization or estimation required to calculate the alternative RAMs that are based on citations data. With two exceptions, namely Eigenfactor

and Article Influence, existing RAMs are reported separately for the Sciences and Social Sciences.

The definitions and descriptions of the RAMs discussed in this paper have been analysed critically in, for example, Chang and McAleer (2013, 2014) and Chang, Maasoumi and McAleer (2014). The annual RAMs given below are calculated for a Journal Citations Reports (JCR) calendar year, which is the year before the annual RAMs are released. For example, the RAMs were released in late-June 2013 for the JCR calendar year 2012.

As the definitions of the RAMs that are used in this paper may not be widely known, they are reproduced below to facilitate ease of presentation. Although 2YIF is not required for purposes of calculating the new Index of Citations Quality (ICQ) of Chang and McAleer (2014), 2YIF is included as it is the most widely-used RAM and also to facilitate comparisons with the rankings based on ICQ.

(1) 2-year impact factor including journal self citations (2YIF):

The classic 2-year impact factor including journal self citations (2YIF) of a journal is typically referred to as "the impact factor", is calculated annually, and is defined as "Total citations in a year to papers published in a journal in the previous 2 years / Total papers published in a journal in the previous 2 years". It is widely held in the academic community, and certainly by the editors and publishers of journals, that a higher 2YIF is better than lower.

(2) 5-year impact factor including journal self citations (5YIF):

The 5-year impact factor including journal self citations (5YIF) of a journal is calculated annually, and is defined as "Total citations in a year to papers published in a journal in the previous 5 years, including journal self citations" / "Total papers published in a journal in the previous 5 years." It is widely held in the academic community that a higher 5YIF is preferred to lower.

(3) Eigenfactor (or Journal Influence):

The Eigenfactor score (see Bergstrom (2007), Bergstrom and West (2008), Bergstrom, West and Wiseman (2008)) is calculated annually (see www.eigenfactor.org), and is defined as: "The Eigenfactor Score calculation is based on the number of times articles from the journal published in the past five years have been cited in the JCR year, but it also considers which journals have contributed these citations so that highly cited journals will influence the network more than lesser cited journals. References from one article in a journal to another article from the same journal are removed, so that Eigenfactor Scores are not influenced by journal self-citation." The value of the threshold that separates 'highly cited' from 'lesser cited' journals, as well as how the former might 'influence the network more' than the latter, are based on the Eigenfactor score of the citing journal. Thus, Eigenfactor might usefully be interpreted as a quality weighted citations score, or a "Journal Influence" measure, namely "Total citations, excluding journal self citations, in the previous 5 years, weighted by journal quality" (see Chang, Maasoumi and McAleer (2014)). A higher Eigenfactor score would be preferred to lower.

(4) Article Influence (or Journal Influence per Article):

Article Influence (see Bergstrom (2007), Bergstrom and West (2008), Bergstrom, West and Wiseman (2008)) measures the relative importance of a journal's citation influence on a perarticle basis. Despite the misleading suggestion of measuring "Article Influence", as each journal has only a single "Article Influence" score, this RAM is actually a "Journal Influence per Article" score (see Chang, Maasoumi and McAleer (2014)). Article Influence is a scaled Eigenfactor score, is calculated annually, is standardized to have a mean of one across all journals in the Thomson Reuters ISI database, and is defined as "Eigenfactor score divided by the fraction of all articles published by a journal in the previous five years", or equivalently, "Total citations, excluding journal self citations, in the past 5 years, weighted by journal quality, divided by the fraction of all articles published by a journal". A higher Article Influence would be preferred to lower.

3. An Index of Citations Quality (ICQ)

Wilhite and Fong (2012) and Chang, McAleer and Oxley (2013), among others, have argued that the pervasive practice of coercive journal citations by both editors and publishers can and does distort the inherent meaning and interpretation of journal impact and influence. The exclusion of journal self citations is one, though not the only, reason for the development of new RAMs such as Eigenfactor and Article Influence (AI) scores to measure journal impact and influence.

The definitions of the RAMs in the previous section show that a 5-year period is used to calculate 5YIF, Eigenfactor and AI. As 5YIF includes journal self citations and does not weight citations by quality, whereas Eigenfactor and AI exclude journal self citations and use quality weighted citations, it is clear that there are significant differences between 5YIF, on the one hand, and Eigenfactor and AI, on the other.

Chang and McAleer (2014) suggested the following Index of Citations Quality (ICQ) as a new RAM, wherein it is regarded as obvious that a higher ICQ would generally be preferred to lower:

Definition: Index of Citations Quality (ICQ)

ICQ = AI / 5YIF = Quality Weighted Citations / Total Citations

= "Quality weighted citations in the past 5 years, excluding journal self citations" /"Total citations in the previous 5 years, including journal self citations"

The next section calculates ICQ for the top 276 Economics journals in the ISI category of Economics, and a subset of the top 10 Econometrics journals, for which there are data on both 5YIF and AI, compares the correlations among 2YIF, 5YIF, Eigenfactor, AI and ICQ, and calculates the correlations between the rankings based on 2YIF and ICQ. Although 2YIF is not used in the calculation of ICQ, 2YIF is nevertheless presented because it is the most widely-used RAM from ISI.

4. Analysis of Rankings based on Quality Weighted Citations for the Top 276 Economics and Top 10 Econometrics Journals

For purposes of ranking journals by ICQ, data were downloaded from ISI on 2YIF, 5YIF, Eigenfactor and AI for the 333 journals in the ISI category of Economics. Chang and McAleer (2014) observed that the leading 21 journals, and 24 of the leading 25 journals, of the top 500 journals in the Social Sciences, for which there are 3,047 Journals, were from the Economics category.

The journal acronyms are taken from ISI, and the data were downloaded from ISI on 21 February 2014. As 57 of the 333 journals in Economics do not have data on both 5YIF and AIs, these journals are deleted to obtain the top 276 Economics journals and a subset of the top 10 econometrics journals (see Tables 1 and 2).

The rankings of journals in Tables 1 and 2 are based on ICQ. It is noted from Table 1 for the top 276 Economics journals that the mean ICQ is 0.679, its standard deviation is 0.37, its range is (0.058, 1.772), the means of 2YIF and 5YIF are 1.151 and 1.506, respectively, and the mean AI is 1.236.

Compared with the 2YIF rankings, the largest jump in the rankings according to ICQ is 265, with only one journal increasing its ranking by more than 200 of the possible maximum of 275 positions. The largest drop in rankings from 2YIF to ICQ is 248, with 10 journals dropping by more than 200 positions. It is clear that rankings according to ICQ and 2YIF lead to very different outcomes.

In comparison with Economics, it can be seen from Table 2 for the top 10 Econometrics journals that the mean ICQ is much higher at 1.255, its standard deviation is lower at 0.262, its range is much smaller at (0.862, 1.687), the mean 2YIF and mean 5YIF are much higher at 1.665 and 2.437, respectively, and the mean AI is considerably higher at 3.162, arising primarily from the highest ranked journal.

In Table 2, the ICQ are ranked according to the cohort of the top 10 Econometrics journals and also by the cohort of the 276 Economics journals. It is clear that the top 10 Econometrics journals fare very well in comparison with the top 276 Economics journals as a whole, with 2 journals in the top 5, 5 in the top 30, 8 in the top 50, and all 10 journals in the top 73.

The correlations of ICQ Rank and 2YIF Rank for the 276 Economics and 10 Econometrics journals are given in Tables 3 and 5, respectively. The correlation of the rankings based on ICQ and 2YIF for Economics is 0.302 and for Econometrics it is 0.338. Bearing in mind that the numbers of journals are very different at 276 and 10, respectively, for Economics and Econometrics, the correlations are similar and also quite low. As was shown in Chang and McAleer (2014) for the top 500 journals chosen on the basis of 2YIF in both the Sciences and Social Sciences, ICQ is a useful additional RAM to 2YIF for the purpose of ranking journals as it contributes information that has a very low correlation with the information that is contained in 2YIF.

The correlations of 2YIF, 5YIF, Eigenfactor, AI and ICQ are given in Tables 4 and 6 for Economics and Econometrics, respectively. The highest correlations in both tables are between 2YIF and 5YIF, at virtually identical values of 0.952 and 0.957 for Economics and Econometrics, respectively. The correlations of AI with each of 2YIF and 5YIF are very high at 0.949 and 0.955, respectively, for Econometrics, but the corresponding correlations for Economics are slightly lower at 0.808 and 0.883, respectively. The correlations of ICQ with 2YIF, 5YIF and Eigenfactor for Economics are 0.373, 0.426 and 0.487, respectively, and the corresponding correlations for Econometrics are 0.464, 0.301 and 0.391, respectively, all of which are relatively low. The correlations of ICQ and AI are higher at 0.676 and 0.543 for Economics and Econometrics, respectively.

Overall, as in Chang and McAleer (2014) for the top 500 journals chosen on the basis of 2YIF in both the Sciences and Social Sciences, the low correlations of the 2YIF Ranks and ICQ Ranks, and the relatively low correlations of ICQ with each of 2YIF, 5YIF, Eigenfactor and AI, suggest that ICQ is a useful additional RAM for purposes of evaluating and ranking the impact and quality of the leading journals in Economics and Econometrics.

5. Concluding Remarks

The paper evaluated the ranking of academic journal quality and impact using the Thomson Reuters ISI Web of Science (2013) citations database (hereafter ISI) for the top 276 Economics and top 10 Econometrics journals which had data on both Article Influence (AI) and 5YIF. The journals were chosen from the ISI Economics category, and were ranked according to the recently developed RAM, namely the Index of Citations Quality (ICQ).

There were considerable differences between the alternative RAMs for Economics and Econometrics, with the impact factors and AI scores being much higher, on average, for the top 10 Econometrics journals than for the top 276 Economics journals. The ICQ scores were also higher, on average, for the Econometrics journals than for their Economics counterparts.

It was shown that ICQ is a useful addition to 2YIF and other well known RAMs for the purpose of evaluating the impact and quality, as well as ranking, of journals as it contributes information that has a very low correlation with the information that is contained in 2YIF and other well known RAMs for both Economics and Econometrics.

Chang and McAleer (2014) showed that, of the leading journals in the Social Sciences selected on the basis of 2YIF, the journals with the highest ICQ were generally from the Economics category. This paper has shown that a similar comment would also seem to apply to the top Econometrics journals in the ISI category of Economics.

References

Bergstrom C. (2007), Eigenfactor: Measuring the value and prestige of scholarly journals, C&RL News, 68, 314-316.

Bergstrom, C.T. and. J.D. West (2008), Assessing citations with the Eigenfactor[™] metrics, *Neurology*, 71, 1850–1851.

Bergstrom, C.T., J.D. West and M.A. Wiseman (2008), The Eigenfactor[™] metrics, *Journal* of *Neuroscience*, 28(45), 11433–11434 (November 5, 2008).

Chang, C.-L. and M. McAleer (2013), Ranking leading econometrics journals using citations data from ISI and RePEc, Econometrics, 1(3), 217-235.

Chang, C.-L. and M. McAleer (2014), Quality weighted citations versus total citations in the sciences and social sciences, Tinbergen Institute Discussion Paper 14-023/III, Tinbergen Institute, The Netherlands.

Chang, C.-L., E. Maasoumi and M. McAleer (2014), Robust ranking of journal quality: An application to economics, to appear in *Econometric Reviews*.

Chang, C.-L., M. McAleer and L. Oxley (2011a), Great expectatrics: Great papers, great journals, great econometrics, Econometric Reviews, 30(6), 583-619.

Chang, C.-L., M. McAleer and L. Oxley (2011b), What makes a great journal great in economics? The singer not the song, Journal of Economic Surveys, 25(2), 326-361.

Chang, C.-L., M. McAleer and L. Oxley (2011c), What makes a great journal great in the sciences? Which came first, the chicken or the egg?, *Scientometrics*, 87(1), 17-40.

Chang, C.-L., M. McAleer and L. Oxley (2013), Coercive journal self citations, impact factor, journal influence and article influence, *Mathematics and Computers in Simulation*, 93, 190-197.

ISI Web of Science (2014), *Journal Citation Reports, Essential Science Indicators*, Thomson Reuters ISI.

Wilhite, A.W. and E.A. Fong (2012), Coercive citation in academic publishing, *Science*, 335 (6068), 542-543.

Journal Title	ICQ Rank	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
ANNU REV FINANC ECON	1	173	1.772	0.694	0.627	0.00099	1.111
REV ECON STUD	2	18	1.748	2.86	4.111	0.03063	7.188
REV ECON DYNAM	3	68	1.71	1.602	1.625	0.00971	2.779
ECONOMETRICA	4	5	1.687	3.823	5.702	0.04571	9.622
ECONOMET THEOR	5	77	1.683	1.477	1.473	0.01273	2.479
AM ECON J-MACROECON	6	15	1.682	3.191	4.092	0.01046	6.882
J POLIT ECON	7	9	1.675	3.483	5.506	0.0248	9.222
IMF ECON REV	8	25	1.63	2.529	2.559	0.00248	4.172
AM ECON J-MICROECON	9	51	1.586	1.884	1.978	0.00488	3.138
ECON CHIL	10	275	1.576	0.031	0.033	0.00008	0.052
J ECON THEORY	11	113	1.523	1.069	1.522	0.0253	2.318
Q J ECON	12	2	1.498	5.278	8.147	0.04647	12.205
J MONETARY ECON	13	63	1.48	1.649	2.529	0.02718	3.742
AM ECON J-APPL ECON	14	7	1.443	3.539	3.836	0.01064	5.537
ANNU REV ECON	15	80	1.443	1.44	2.268	0.00406	3.273
RAND J ECON	16	78	1.429	1.47	2.095	0.01103	2.994
J FINANC	17	3	1.427	4.333	6.185	0.05733	8.824
BE J THEOR ECON	18	217	1.416	0.419	0.442	0.00216	0.626
ECONOMET J	19	120	1.372	1	1.252	0.00417	1.718
AM ECON REV	20	20	1.358	2.792	4.16	0.10035	5.65
REV FINANC STUD	21	13	1.349	3.256	5.367	0.06476	7.242
INT ECON REV	22	103	1.332	1.162	1.922	0.01096	2.561
AM ECON J-ECON POLIC	23	44	1.316	2	2.304	0.00418	3.032
ECONOMET REV	24	147	1.316	0.811	1.321	0.00425	1.738
BROOKINGS PAP ECO AC	25	6	1.292	3.68	5.556	0.0079	7.181

Table 1. Top 276 Economics Journals Ranked by ICQ

Journal Title	ICQ Rank	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
J LABOR ECON	26	60	1.259	1.729	3.009	0.00747	3.787
J BUS ECON STAT	27	48	1.254	1.932	2.369	0.01027	2.97
J FINANC ECON	28	10	1.244	3.424	5.087	0.05835	6.327
J FINANC QUANT ANAL	29	64	1.242	1.636	2.13	0.01169	2.645
GAME ECON BEHAV	30	121	1.229	1	1.356	0.01619	1.667
J IND ECON	31	101	1.202	1.194	1.539	0.0054	1.85
J ECONOMETRICS	32	61	1.199	1.71	2.713	0.04063	3.254
QME-QUANT MARK ECON	33	92	1.164	1.276	1.77	0.00266	2.06
J EUR ECON ASSOC	34	42	1.159	2.049	2.49	0.01472	2.887
INT J GAME THEORY	35	188	1.154	0.584	0.609	0.00264	0.703
REV ECON STAT	36	28	1.153	2.346	3.669	0.02639	4.232
J ECON PERSPECT	37	8	1.143	3.489	5.864	0.02587	6.703
J MATH ECON	38	232	1.104	0.321	0.454	0.00351	0.501
J FINANC ECONOMET	39	126	1.091	0.976	1.58	0.00301	1.724
IMF STAFF PAPERS	40	29	1.082	2.312	1.344	0.00244	1.454
ASIAN ECON POLICY R	41	238	1.052	0.28	0.629	0.00072	0.662
FED RESERVE BANK ST	42	180	1.051	0.64	0.748	0.00185	0.786
J ECON LIT	43	1	1.046	6.667	10.16	0.01745	10.628
J PUBLIC ECON THEORY	44	201	1.031	0.494	0.511	0.00212	0.527
J HUM RESOUR	45	45	1.03	1.985	3.132	0.00941	3.226
J LAW ECON ORGAN	46	131	1.018	0.932	1.932	0.00402	1.967
MATH FINANC	47	122	1.016	1	1.463	0.00382	1.486
BE J ECON ANAL POLI	48	194	1.011	0.551	0.76	0.00552	0.768
ECON POLICY	49	22	1.004	2.688	3.013	0.00423	3.025
ECON THEOR	50	108	1.001	1.095	1.063	0.0091	1.064

Journal Title	ICQ Rank	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
J INT ECON	51	40	0.995	2.086	3.27	0.01956	3.255
J LAW ECON	52	145	0.995	0.828	1.73	0.00457	1.721
J MONEY CREDIT BANK	53	107	0.995	1.104	1.7	0.0127	1.691
EUR J HIST ECON THOU	54	252	0.989	0.227	0.276	0.00069	0.273
ECON J	55	38	0.988	2.118	3.095	0.02296	3.057
J ECON HIST	56	154	0.982	0.766	1.096	0.00312	1.076
SOC CHOICE WELFARE	57	203	0.979	0.485	0.711	0.00421	0.696
BE J MACROECON	58	246	0.974	0.244	0.503	0.00162	0.49
J PUBLIC ECON	59	74	0.967	1.52	2.197	0.02111	2.124
EXP ECON	60	41	0.961	2.069	3.853	0.00879	3.701
J ECON GROWTH	61	32	0.941	2.25	3.85	0.0038	3.622
J ECON MANAGE STRAT	62	137	0.940	0.878	1.709	0.00511	1.607
J APPL ECONOMET	63	53	0.934	1.867	2.521	0.00995	2.355
ECON HIST REV	64	117	0.925	1.045	1.073	0.00307	0.993
MACROECON DYN	65	216	0.921	0.42	0.609	0.00228	0.561
SCAND J ECON	66	178	0.915	0.645	1.249	0.00377	1.143
ECON INQ	67	110	0.886	1.09	1.31	0.00614	1.161
HIST POLIT ECON	68	253	0.883	0.227	0.266	0.00088	0.235
INT J IND ORGAN	69	133	0.883	0.914	1.325	0.00748	1.17
THEOR DECIS	70	158	0.876	0.762	0.735	0.00246	0.644
MATH SOC SCI	71	211	0.867	0.452	0.497	0.00215	0.431
ECON DEV CULT CHANGE	72	130	0.862	0.943	1.357	0.00264	1.17
OXFORD B ECON STAT	73	170	0.862	0.707	1.767	0.00503	1.523
ECONOMICA	74	100	0.839	1.194	1.526	0.00438	1.28
ECON LETT	75	200	0.839	0.509	0.682	0.01566	0.572

Journal Title	ICQ Rank	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
EUR REV ECON HIST	76	98	0.832	1.206	1.405	0.00161	1.169
EUR ECON REV	77	86	0.823	1.331	1.648	0.00834	1.357
J POLICY ANAL MANAG	78	57	0.823	1.781	2.281	0.00548	1.878
ANN ECON FINANC	79	239	0.821	0.278	0.363	0.00047	0.298
J INST THEOR ECON	80	212	0.813	0.443	0.417	0.00107	0.339
J RISK UNCERTAINTY	81	58	0.806	1.771	2.016	0.0036	1.625
LABOUR ECON	82	112	0.794	1.076	1.483	0.00768	1.178
CESIFO ECON STUD	83	192	0.792	0.561	0.75	0.00133	0.594
GER ECON REV	84	162	0.789	0.736	0.843	0.00147	0.665
J ECON DYN CONTROL	85	148	0.788	0.807	1.21	0.01207	0.954
NATL TAX J	86	172	0.788	0.698	0.732	0.00211	0.577
WORLD BANK ECON REV	87	88	0.781	1.325	2.704	0.00398	2.111
FISC STUD	88	237	0.779	0.295	0.616	0.00083	0.48
J DEV ECON	89	27	0.767	2.353	2.92	0.01518	2.24
REV INCOME WEALTH	90	184	0.766	0.607	1.086	0.00272	0.832
WORLD BANK RES OBSER	91	43	0.749	2.045	2.314	0.00154	1.734
OXFORD ECON PAP	92	155	0.748	0.765	1.136	0.00273	0.85
SOUTH ECON J	93	214	0.747	0.427	0.767	0.00292	0.573
INT TAX PUBLIC FINAN	94	204	0.746	0.479	0.904	0.00209	0.674
CAN J ECON	95	179	0.744	0.642	0.878	0.00335	0.653
J ECON BEHAV ORGAN	96	115	0.731	1.065	1.451	0.01421	1.061
J POPUL ECON	97	84	0.731	1.336	1.462	0.00461	1.069
PORT ECON J	98	255	0.711	0.227	0.418	0.00029	0.297
J JPN INT ECON	99	157	0.709	0.763	0.804	0.00137	0.57
J ENVIRON ECON MANAG	100	46	0.693	1.969	2.97	0.00834	2.059

Journal Title	ICQ Rank	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
EXPLOR ECON HIST	101	174	0.693	0.686	0.873	0.00167	0.605
J URBAN ECON	102	50	0.689	1.91	2.87	0.00953	1.977
CLIOMETRICA	103	66	0.689	1.615	1.153	0.00082	0.794
JPN ECON REV	104	268	0.689	0.143	0.305	0.00055	0.21
J COMP ECON	105	177	0.680	0.657	1.552	0.00337	1.056
SINGAP ECON REV	106	266	0.679	0.152	0.184	0.00033	0.125
ASTIN BULL	107	171	0.678	0.698	0.898	0.00156	0.609
PAC ECON REV	108	167	0.676	0.722	0.645	0.00152	0.436
PUBLIC CHOICE	109	138	0.672	0.878	1.255	0.00813	0.843
SCOT J POLIT ECON	110	225	0.668	0.367	0.575	0.00107	0.384
REG SCI URBAN ECON	111	97	0.666	1.228	1.628	0.00473	1.084
QUANT FINANC	112	146	0.661	0.824	0.957	0.0046	0.633
INT J FORECASTING	113	81	0.654	1.424	1.779	0.00551	1.164
J ECON SURV	114	124	0.654	0.986	1.975	0.00365	1.292
REV ENV ECON POLICY	115	12	0.651	3.273	3.975	0.00366	2.587
INT LABOUR REV	116	189	0.644	0.58	0.738	0.00089	0.475
FINANZARCHIV	117	249	0.641	0.229	0.312	0.00038	0.2
J AFR ECON	118	190	0.637	0.575	0.849	0.00163	0.541
J COMPET LAW ECON	119	135	0.636	0.899	0.889	0.00151	0.565
STUD NONLINEAR DYN E	120	199	0.635	0.511	0.939	0.0012	0.596
J PROD ANAL	121	114	0.634	1.068	1.299	0.00255	0.824
J FORECASTING	122	152	0.632	0.769	0.876	0.00188	0.554
ANNU REV RESOUR ECON	123	129	0.626	0.949	1.426	0.00106	0.893
CEPAL REV	124	244	0.620	0.259	0.25	0.00039	0.155
J MACROECON	125	187	0.620	0.589	0.778	0.00289	0.482

Journal Title	ICQ Rank	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
JAHRB NATL STAT	126	227	0.618	0.351	0.461	0.00089	0.285
J WORLD TRADE	127	256	0.612	0.226	0.209	0.00051	0.128
J ACCOUNT ECON	128	4	0.61	3.912	4.023	0.00741	2.453
GENEVA RISK INS REV	129	166	0.602	0.722	0.732	0.00032	0.441
ECON SOC	130	70	0.598	1.551	2.031	0.00278	1.214
REAL ESTATE ECON	131	119	0.594	1.02	1.307	0.00172	0.777
ENERG J	132	26	0.588	2.434	2.591	0.00527	1.524
AM J ECON SOCIOL	133	223	0.584	0.389	0.365	0.00082	0.213
WORLD ECON	134	141	0.583	0.872	1.244	0.00508	0.725
J REGUL ECON	135	90	0.581	1.293	1.166	0.00172	0.677
INF ECON POLICY	136	153	0.576	0.767	0.985	0.0013	0.567
J HEALTH ECON	137	69	0.574	1.6	3.028	0.01309	1.739
ENVIRON RESOUR ECON	138	56	0.573	1.795	2	0.0089	1.145
ECON EDUC REV	139	125	0.568	0.981	1.527	0.00619	0.868
MANCH SCH	140	210	0.561	0.454	0.515	0.00119	0.289
J APPL ECON	141	207	0.561	0.469	0.41	0.00033	0.23
INT REV LAW ECON	142	186	0.56	0.594	0.671	0.00104	0.376
RESOUR ENERGY ECON	143	76	0.557	1.495	1.819	0.00294	1.013
CAMB J ECON	144	128	0.553	0.951	1.477	0.00395	0.817
CONTEMP ECON POLICY	145	175	0.551	0.671	0.673	0.00141	0.371
REV IND ORGAN	146	142	0.551	0.87	0.878	0.00153	0.484
EMPIR ECON	147	183	0.545	0.614	0.967	0.00305	0.527
ECON REC	148	229	0.545	0.337	0.593	0.00121	0.323
ECON PHILOS	149	191	0.544	0.565	0.935	0.00068	0.509
ECONOMIST-NETHERLAND	150	150	0.541	0.795	1	0.00088	0.541

Journal Title	ICQ Rank	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
OXFORD REV ECON POL	151	139	0.539	0.875	1.81	0.00278	0.976
LAND ECON	152	93	0.535	1.261	1.507	0.00297	0.806
J DEV STUD	153	140	0.531	0.872	1.08	0.00387	0.573
REV WORLD ECON	154	144	0.529	0.829	1.102	0.0017	0.583
J AGR RESOUR ECON	155	176	0.528	0.671	0.808	0.00116	0.427
ECON J WATCH	156	104	0.528	1.147	0.973	0.00066	0.514
AM J AGR ECON	157	123	0.528	0.99	1.507	0.00753	0.796
J ECON EDUC	158	254	0.526	0.227	0.308	0.00049	0.162
REV INT POLIT ECON	159	62	0.524	1.661	1.373	0.00222	0.719
ECON TRANSIT	160	151	0.522	0.782	1.091	0.00142	0.57
REV INT ECON	161	169	0.521	0.708	0.84	0.00258	0.438
IND CORP CHANGE	162	87	0.519	1.331	2.197	0.00486	1.141
J REGIONAL SCI	163	30	0.519	2.279	1.947	0.00335	1.011
AUST J AGR RESOUR EC	164	82	0.519	1.415	1.691	0.00233	0.878
J ECON PSYCHOL	165	111	0.519	1.081	1.749	0.00536	0.907
J CULT ECON	166	34	0.518	2.222	1.945	0.00128	1.007
J ECON	167	197	0.515	0.512	0.646	0.00113	0.333
SERIES-J SPAN ECON	168	231	0.512	0.326	0.326	0.00013	0.167
WORLD DEV	169	73	0.502	1.527	2.205	0.01433	1.107
JPN WORLD ECON	170	218	0.5	0.414	0.506	0.00068	0.253
AUST ECON PAP	171	262	0.5	0.171	0.358	0.00034	0.179
NEW POLIT ECON	172	49	0.5	1.93	1.493	0.0018	0.746
INSUR MATH ECON	173	109	0.499	1.095	1.37	0.00629	0.683
J HOUS ECON	174	165	0.498	0.723	1.292	0.00127	0.644
J TRANSP ECON POLICY	175	143	0.492	0.86	1.462	0.00133	0.719

Journal Title	ICQ Rank	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
J MEDIA ECON	176	247	0.484	0.24	0.5	0.00024	0.242
INT FINANC	177	185	0.482	0.6	0.927	0.00064	0.447
B INDONES ECON STUD	178	85	0.479	1.333	1.053	0.00066	0.504
J REAL ESTATE RES	179	132	0.478	0.925	1.069	0.0009	0.511
EUROPE-ASIA STUD	180	208	0.477	0.464	0.692	0.00199	0.33
HEALTH ECON	181	33	0.477	2.232	2.786	0.01157	1.328
AUST ECON REV	182	235	0.475	0.3	0.276	0.00046	0.131
DEFENCE PEACE ECON	183	195	0.473	0.551	0.696	0.00098	0.329
FEM ECON	184	136	0.472	0.896	1.267	0.00121	0.598
JCMS-J COMMON MARK S	185	67	0.468	1.603	1.624	0.00396	0.76
AUST ECON HIST REV	186	226	0.464	0.355	0.414	0.00023	0.192
J RISK INSUR	187	96	0.463	1.237	1.39	0.00225	0.643
J BANK FINANC	188	91	0.463	1.287	1.721	0.01566	0.796
ECON HUM BIOL	189	55	0.459	1.797	2.511	0.00366	1.152
REV ECON POLIT	190	272	0.458	0.057	0.153	0.00021	0.07
ASIAN ECON J	191	257	0.454	0.211	0.381	0.00029	0.173
J AGRAR CHANGE	192	36	0.453	2.191	2.01	0.00167	0.91
APPL ECON PERSPECT P	193	65	0.453	1.621	1.655	0.00076	0.749
AGR ECON-BLACKWELL	194	118	0.451	1.03	1.349	0.00384	0.609
REV DEV ECON	195	196	0.451	0.548	0.638	0.00135	0.288
HACIENDA PUBLICA ESP	196	228	0.451	0.35	0.43	0.00034	0.194
J INT TRADE ECON DEV	197	250	0.449	0.228	0.385	0.00041	0.173
J EVOL ECON	198	164	0.448	0.723	1.23	0.00146	0.551
KYKLOS	199	149	0.448	0.797	1.217	0.00149	0.545
EUR REV AGRIC ECON	200	54	0.448	1.854	2	0.0018	0.895

Journal Title	ICQ Rank	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
J REAL ESTATE FINANC	201	181	0.446	0.621	1.203	0.00217	0.536
PAC ECON BULL	202	245	0.445	0.256	0.263	0.00024	0.117
CAMB J REG ECON SOC	203	59	0.44	1.764	1.941	0.00152	0.855
OPEN ECON REV	204	220	0.432	0.404	0.537	0.00076	0.232
S AFR J ECON	205	234	0.43	0.315	0.328	0.00049	0.141
REV ECON APL-SPAIN	206	264	0.429	0.158	0.17	0.00012	0.073
APPL ECON LETT	207	236	0.427	0.295	0.302	0.00322	0.129
MAR RESOUR ECON	208	94	0.427	1.261	1.411	0.00136	0.602
CHINA WORLD ECON	209	206	0.423	0.476	0.591	0.00094	0.25
TRANSPORT RES B-METH	210	16	0.422	2.944	3.52	0.00953	1.487
J AGR ECON	211	75	0.422	1.5	1.679	0.00204	0.709
ANN REGIONAL SCI	212	134	0.415	0.901	1.155	0.00237	0.479
CHINA ECON REV	213	83	0.413	1.39	1.727	0.00306	0.714
CAN J AGR ECON	214	163	0.41	0.724	0.808	0.0009	0.331
HITOTSUB J ECON	215	273	0.407	0.048	0.167	0.00007	0.068
INDEP REV	216	243	0.407	0.273	0.391	0.00036	0.159
PAP REG SCI	217	71	0.396	1.541	1.731	0.00223	0.686
ECON MODEL	218	193	0.396	0.557	0.699	0.00373	0.277
J ECON GEOGR	219	23	0.394	2.6	3.955	0.00485	1.56
TRANSPORT RES E-LOG	220	31	0.39	2.272	2.764	0.00692	1.077
TIJDSCHR ECON SOC GE	221	159	0.388	0.753	1.236	0.00188	0.479
INT J TRANSP ECON	222	222	0.387	0.393	0.333	0.00019	0.129
APPL ECON	223	213	0.385	0.437	0.655	0.00634	0.252
FOOD POLICY	224	35	0.384	2.212	2.78	0.0061	1.067
EASTERN EUR ECON	225	258	0.379	0.211	0.38	0.00034	0.144

Journal Title	ICQ Rank	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
DEV ECON	226	215	0.378	0.424	0.519	0.00028	0.196
J SPORT ECON	227	160	0.371	0.743	0.896	0.00106	0.332
WORK EMPLOY SOC	228	95	0.37	1.255	1.965	0.00257	0.727
ASIAN-PAC ECON LIT	229	230	0.366	0.333	0.306	0.00012	0.112
ECON DEV Q	230	182	0.366	0.618	0.938	0.00077	0.343
TRANSPORT RES A-POL	231	21	0.361	2.725	3	0.00699	1.084
POST-SOV AFF	232	89	0.361	1.31	1.014	0.00047	0.366
REG STUD	233	79	0.36	1.465	2.165	0.00577	0.779
ESTUD ECONOMIA	234	265	0.354	0.154	0.158	0.00006	0.056
SMALL BUS ECON	235	105	0.353	1.13	2.228	0.00374	0.787
J ASIA PAC ECON	236	263	0.353	0.159	0.306	0.00027	0.108
ECON GEOGR	237	11	0.346	3.389	4.897	0.00258	1.696
VALUE HEALTH	238	37	0.343	2.191	2.903	0.01259	0.997
EUR J HEALTH ECON	239	39	0.343	2.095	1.976	0.00291	0.678
J AUST POLIT ECON	240	219	0.342	0.412	0.313	0.00016	0.107
ENERG ECON	241	24	0.34	2.538	3.291	0.01309	1.12
J FOREST ECON	242	99	0.338	1.204	1.389	0.00078	0.469
J POST KEYNESIAN EC	243	248	0.337	0.234	0.41	0.0004	0.138
ECOL ECON	244	19	0.336	2.855	3.732	0.0295	1.255
J ECON POLICY REFORM	245	198	0.335	0.511	0.462	0.00032	0.155
TRIMEST ECON	246	260	0.333	0.175	0.108	0.00011	0.036
POST-COMMUNIST ECON	247	202	0.332	0.492	0.503	0.00043	0.167
J ECON ISSUES	248	224	0.33	0.376	0.379	0.00071	0.125
PHARMACOECONOMICS	249	17	0.328	2.861	3.543	0.00747	1.162
AGRIBUSINESS	250	156	0.315	0.763	0.806	0.00069	0.254

Journal Title	ICQ Rank	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
TRANSPORT POLICY	251	72	0.315	1.541	2.161	0.00318	0.681
J TRANSP GEOGR	252	47	0.294	1.942	2.52	0.00448	0.742
J POLICY MODEL	253	161	0.291	0.737	1.082	0.00181	0.315
J CONSUM AFF	254	116	0.285	1.047	1.481	0.00096	0.422
INVEST ECON-MEX	255	270	0.274	0.079	0.084	0.00004	0.023
ACTA OECON	256	241	0.268	0.273	0.28	0.0001	0.075
REV ECON MUND	257	251	0.264	0.228	0.178	0.00013	0.047
FUTURES	258	106	0.253	1.111	1.054	0.00215	0.267
CHINA AGR ECON REV	259	205	0.238	0.476	0.462	0.00018	0.11
S AFR J ECON MANAG S	260	269	0.222	0.113	0.135	0.00009	0.03
BALT J ECON	261	267	0.182	0.143	0.077	0.00001	0.014
TECHNOL ECON DEV ECO	262	14	0.180	3.224	1.972	0.00131	0.355
ECON COMPUT ECON CYB	263	240	0.173	0.274	0.168	0.00012	0.029
EKON CAS	264	259	0.172	0.194	0.232	0.0002	0.04
J KOREA TRADE	265	274	0.171	0.033	0.076	0.00002	0.013
POLIT EKON	266	168	0.171	0.722	0.556	0.00033	0.095
EKON ISTRAZ	267	242	0.165	0.273	0.176	0.0001	0.029
J BUS ECON MANAG	268	52	0.151	1.881	1.558	0.00068	0.236
ECON POLIT-ITALY	269	233	0.133	0.318	0.225	0.00005	0.03
REV CIENC SOC-VENEZ	270	276	0.129	0.01	0.031	0.00002	0.004
TRANSFORM BUS ECON	271	209	0.127	0.459	0.513	0.0003	0.065
ZB RAD EKON FAK RIJE	272	261	0.124	0.172	0.314	0.00005	0.039
INZ EKON	273	127	0.12	0.972	0.828	0.00047	0.099
ROM J ECON FORECAST	274	221	0.11	0.394	0.335	0.00017	0.037
EMERG MARK FINANC TR	275	102	0.07	1.19	1.213	0.00033	0.085
REV ETUD COMP EST-O	276	271	0.058	0.074	0.103	0.00001	0.006

Journal Title	ICQ Rank	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
Mean			0.679	1.151	1.506	0.006	1.236
Standard Deviation			0.37	0.959	1.353	0.011	1.771
Maximum			1.772	6.667	10.16	0.1	12.205
Minimum			0.058	0.01	0.031	0	0.004

INITIAL0.0580.010.03100.004Notes: The top 276 Economics journals for which there are data on 5YIF and AI are ranked according to ICQ. The journal acronyms are taken from ISI. The data were downloaded from ISI on 21 February 2014.

Journal Title	ICQ Rank (Econometrics)	ICQ Rank (Economics)	2YIF Rank	ICQ	2YIF	5YIF	Eigenfactor	AI
ECONOMETRICA	1	4	5	1.687	3.823	5.702	0.04571	9.622
ECONOMET THEOR	2	5	77	1.683	1.477	1.473	0.01273	2.479
ECONOMET J	3	19	120	1.372	1	1.252	0.00417	1.718
ECONOMET REV	4	24	147	1.316	0.811	1.321	0.00425	1.738
J BUS ECON STAT	5	27	48	1.254	1.932	2.369	0.01027	2.97
J ECONOMETRICS	6	32	61	1.199	1.71	2.713	0.04063	3.254
REV ECON STAT	7	36	28	1.153	2.346	3.669	0.02639	4.232
J FINANC ECONOMET	8	39	126	1.091	0.976	1.58	0.00301	1.724
J APPL ECONOMET	9	63	53	0.934	1.867	2.521	0.00995	2.355
OXFORD B ECON STAT	10	73	170	0.862	0.707	1.767	0.00503	1.523
Mean				1.255	1.665	2.437	0.016	3.162
Standard Deviation				0.262	0.885	1.305	0.015	2.3
Maximum				1.687	3.823	5.702	0.046	9.622
Minimum				0.862	0.707	1.252	0.003	1.523

Table 2. Top 10 Econometrics Journals Ranked by ICQ

Notes: The top 10 Econometrics journals for which there are data on 5YIF and AI are ranked according to ICQ. The journal acronyms are taken from ISI. The data were downloaded from ISI on 21 February 2014.

Table 3

Correlation of 2YIF Ranks and ICQ Rank for Top 276 Economics Journals

	2YIF Rank	ICQ Rank
2YIF Rank	1	
ICQ Rank	0.302	1

Table 4

Correlations of 5 RAMs for Top 276 Economics Journals

	2YIF	5YIF	Eigenfactor	AI	ICQ
2YIF	1				
5YIF	0.952	1			
Eigenfactor	0.578	0.651	1		
AI	0.808	0.883	0.725	1	
ICQ	0.373	0.426	0.487	0.676	1

Table 5

Correlation of 2YIF Rank and ICQ Rank for Top 10 Econometrics Journals

	2YIF Rank	ICQ Rank
2YIF Rank	1	
ICQ Rank	0.338	1

Table 6

Correlations of 5 RAMs for Top 10 Econometrics Journals

	2YIF	5YIF	Eigenfactor	AI	ICQ
2YIF	1				
5YIF	0.957	1			
Eigenfactor	0.811	0.845	1		
AI	0.949	0.955	0.824	1	
ICQ	0.464	0.301	0.391	0.543	1