Heterodox Economic Journal Rankings Revisited Bruce Cronin, University of Greenwich

Abstract

In 2010 Frederic Lee and Bruce Cronin published an influential ranking of heterodox economic journals, combining traditional citation impact factors with network metrics to indicate a journal's contribution to distinguishing heterodox economics as an academic field distinct from orthodox economics.

Since 2010, and particularly in the context of the global financial crisis and great recession, heterodox economics has further consolidated as a distinctive academic field. At the same time, there has been a growing critique of the limitations of traditional citation impact factors as indicators of quality, including the great reductionism inherent in the method, the greatly variation in citation practices from discipline to discipline and the limited conception of academic interaction and collaboration modeled.

In this paper I revisit the Lee-Cronin (2010) rankings, updating the metrics and comparing these to an alternative model drawing on recent developments in subject-normalized journal impact factors. I argue that a strong case remains for conceiving heterodox economics as a distinct academic field and consider the implications for institutionalization of the field.

Introduction

In an influential paper, Lee and Cronin (2010) considered the place of heterodox economic journals in the increasingly restrictive journal rankings process. We noted the pervasive use of journal rankings in academic appointments, evaluations and promotions and the pressure these place on academic researchers to publish in highly ranked journals. In economics, because well-rated journals are virtually exclusively orthodox, this puts particular pressure on academics pursuing heterodox lines of enquiry. We argued that the pursuit of publication in highly ranked economics journal was a fruitless strategy for heterodox economists because their work actually comprised a distinct body of knowledge from mainstream economics, typically different in theoretical and methodological approach, and reference and citation patterns. We proposed that a more effective publication strategy for heterodox economists would be to target those journals that provided institutional support for this separate discipline. To this end, we developed a ranking of journals in which heterodox published in, in terms of an assessment of their contribution to this particular body of knowledge.

The Lee-Cronin (2010) 'heterodox journal quality score' evaluated the contribution of a journal to the field. This comprised a weighted average of bibliometric impact, position in the network of citations among the journals and a peer evaluation. It represented an attempt to measure multi-dimensional contribution to a field in place of the pervasive 'impact factor', a highly reductionist metric comprising a simple count of citations of papers published in a journal over a standardized period.

The resulting 'Heterodox Economic Journal Rankings' were used by various heterodox economists as an independent validation of publication strategies prioritizing journals outside the mainstream rankings of economic journals. It provided a justification for Departments to

resource heterodox economic research and supported efforts to recruit, evaluate and promote heterodox economists in their own terms. However, construction of journal rankings is a very laborious task, particularly where peer evaluation is used, and plans to subsequently update the exercise were interrupted by the untimely death of Frederic Lee in 2014 (Jo and Todorova, 2015).

In the meantime, there had been major developments in bibliometrics and journal ranking systems amidst the rising 'metric tide' in research quality evaluation (Wilsdon, 2015). Efforts were made to develop standardized bibliometrics that controlled for the varying citation practices in different academic disciplines. And new metrics were developed that attempted to capture wider contributions to a discipline than simply raw citations, notably the Subject Normalised Impact per Paper (SNIP) and the Scimago Journal Ranking (SJR) (González-Pereira et al 2010), which includes a citation network centrality indicator. These developments raise the question of whether bespoke efforts to create Heterodox Economic Journal Rankings are still needed.

In this paper, I revisit the original Heterodox Economic Journal Rankings, comparing these with the rankings of the same journals using the SNIP and SJR metrics. The analysis addresses two questions. First, to what extent do the SNIP and SJR capture the bibliometric and citation network effects that for Lee and Cronin (2010) indicated much of a journal's contribution to the heterodox economics body of knowledge? I address this question with a comparative analysis of the bibliometrics from each approach. Second, it is clear that neither the SNIP nor SJR attempt to capture the third element in the Lee-Cronin quality score, subjective quality evaluation by members of the heterodox economic community; but a question remains as to how much such peer evaluation changes over time. This is unlikely to be highly volatile and so the original peer evaluation may prove of long-lasting value. I address this question by replicating the peer review

undertaken in the original study, comparing the results of the two surveys to estimate the volatility over a ten-year period.

The heterodox journal quality score

The Heterodox Journal Quality Score (HJQS) was an attempt to evaluate the relative contribution of a range of 62 academic journals to the distinctive body of knowledge identified as heterodox economics, which we argued is a distinct subdiscipline of economics, the other being mainstream economics.

As detailed in Lee and Cronin (2010), the HJQS was constructed as the weighted average of three constituent components, a Journal Bibliometric Quality Score (JBQS), a Journal Social Network Quality Score (JNQS), combined as a Total Citation Score (TCS = JBQS + JNQS) and a Journal Peer Evaluation Quality Score (JPEQS). These components were constituted as follows:

$$HJQS = 0.5 (TCS/14 + JPEQS/5)$$
(1)

The JPEQS was a particular novelty for bibliometric analysis. But we saw this as an essential ingredient in assessing the contribution of a journal to the development of an emerging subdiscipline.

¹ The JPEQS component was derived from 405 responses to a questionnaire distributed to subscribers to the Association for Heterodox Economists' email list in 2008, rating the perceived quality of each of 62 heterodox journals on a 1-5 scale, weighted by familiarity on a 3-point scale. Because I revisit this in this paper, it is worth restating its derivation:

$$JPEQS = (1/R) \sum_{i=1}^{n_j} (z_j \times v_j)$$

$$=TS/n_i \times n_i/R \tag{2}$$

where:

R is the total number of respondents;

 n_j is the total number of respondents who had some or considerable familiarity with the jth journal;

 z_j is equal to 1 or 0.5 when the respondent has considerable or some familiarity with the jth journal; and

 V_j is equal to 1 ... 5 depending on the research quality score chosen by the respondent for the jth journal.

TS is the sum of V_j

The HJQS provided a valuable reference point for heterodox economists attempting to expand space for heterodox views in a field dominated by mainstream economics. However, there were a number of practical and theoretical limitations to the HJQS. Construction of the HJQS was labour-intensive. Citation data were drawn manually for each journal from the Web of Science. Citations from and to heterodox journals were manually coded. The administration of the JPEQS questionnaire was also labour-intensive and the response rate relied greatly on Fred Lee's extensive personal network within the heterodox economics community. Theoretical limitations include the somewhat idiosyncratic development of journal quality and network metrics and their combination with the qualitative evaluation, all of which are based on arbitrary assumptions of equal weightings to various components. While a pioneering and valuable tool for many in 2010, each subsequent year delivers a diminishing return from the original investment.

Meanwhile, firmer theoretically-grounded developments in bibliometrics offer potential alternatives.

Recent developments in bibliometric journal ranking

Since the construction of the Lee-Cronin (2010) index there have been some major developments in journal bibliometrics. In the last two decades, Dutch academic publisher Elsevier has been a major investor in the field with the establishment of the Scopus bibliometric database in 2002 disrupting the traditional domination of bibliometrics by Clarivate's Web of Science product, a spin-off from Thomson Reuters.² Elsevier won an agreement over Clarivate to use Scopus as the bibliometric evidence base for the 2014 UK Research Evaluation Framework exercise (REF), though Clarivate regained the contract for the 2021 REF.³ There is some suggestion that REF 2014 evaluators were influenced by the Scopus metrics, either explicitly where citation metrics were formally employed, as with the Economics and Econometrics Panel, or implicitly where citation metrics were formally excluded from evaluation, as in the case of the Business and Management Panel. A comparison of journal impact factors and the REF 2014 assessment of published outputs found a strong association between journals ranked in the first quartile of the Scopus SJR or SNIP metrics and REF evaluations of outputs as 3* or 4* (Wilsdon et al. 2015). As well as providing greater journal coverage than the Web of Science, a more accessible user interface and a free online basic version, Scopus introduced some more sophisticated metrics than the simple citation count-based two-year Journal Impact Factor (JIF), which had been the workhorse of bibliographic research since the 1964 (Garfield 2006). Scopus provides free online access to three principle journal ranking metrics, CiteScore, SNIP and SJR. CiteScore is the three-year mean annual citations of a journal. SNIP, the Source-Normalized Impact per Paper, weights citations by the mean citations of journals in the field, normalizing citation rates by disciplinary practices. SJR, the SCImago Journal Rank is weighted by both subject-specific citation rates and citing journal prestige. As SNIP and SJR are subject-normalised, they can be

used to compare journals in different fields; the mean SNIP and mean SJR values for all journals is 1.0 (Research Intelligence 2018).⁴

While Lee and Cronin (2010) had recognized the *social* role of journals of citation networks in building a disciplinary field and had incorporated network metrics in our journal quality metric, bibliographic researchers had been exploring the *mathematical* value of including network measures in bibliographic metrics to enhance their accuracy. An early attempt to weight journal citations by the number of times the citing journals were cited themselves (Pinsky and Nairn 1976) was found to be inconsistently affected by the size and typology of the particular network of citations. But later applications of the PageRank algorithm developed by Google (Page et al. 1998) iteratively weight citations by the probability of a journal being cited, a function of its current citation rate and citation typology (Palacios-Huerta and Volij 2004, Bollen et al 2006, Ma et al 2006, Bergstrom 2007). The SJR is a subject and size normalized version of this approach, so that a citation from a highly-cited journal within a subject area has more impact than a citation from a less-cited journal within the subject or one outside the subject (Gonzalez-Pereira et al. 2010).

So the subject normalization of the SNIP and SJR and the prestige factor in the SJR metric play a similar roles to the incorporation of subject and network metrics into the Lee-Cronin (2010) journal quality score; journals are given additional weighting where they contribute to the transfer of knowledge within a particular discipline.

Comparing HJQS and new bibliometrics

To what extent do the new subject-normalised journal quality metrics reflect the qualities sought in the HJQS? If the new metrics provide largely similar results to the HJQS then the laborious

task of compiling a separate heterodox journal quality ranking is rendered redundant. However, if the different metrics prove to be measuring substantially different things, then the case for compiling a specialised ranking remains.

The comparison of the SNIP and SJR with the HJQS preceded in three steps. First, the SNIP and SJR metrics for 2008 were downloaded for those HJQS journals listed in Scopus and the characteristics of the series were compared; data were available for 54 of the 62 journals in the HJQS list.⁵ Second, a regression analysis was undertaken of the relationship between the HJQS and the two new bibliographic series. Thirdly, a questionnaire was administered among the heterodox economics community, to determine the extent to which the qualitative evaluation of the journals had changed.

This analysis was then used to develop a proxy for the HJQS in 2008 from the bibliometrics for 2008 and the qualitative evaluation of 2008. The proxy HJQS* were validated by a comparison with the original HJQS. Then the HJQS* for 2017 was estimated from the 2017 bibliometrics for an expanded range of 147 heterodox journals derived from the Heterodox Economics Directory (Kapeller and Springholz 2016).

While the HJQS is actually a ranking, derived from ordinal data, all values are unique, so it is reasonable to treat the HJQS and its component scores as continuous variables and analyse via linear regression. This is more parsimonious and more useful in developing proxy metrics than attempting to derive rankings from the probabilities of an ordinal regression.

A set of simple linear regressions were undertaken between the HJQS and its components and the SNIP and SJR respectively:

$$\mathbf{H} = \alpha + \beta_I \mathbf{B} + \boldsymbol{e} \tag{3}$$

Where:

H is the HJQS and each of its components (JRQS, JNQS, TCS, JPEQS); and

B is each of the new bibliometrics SNIP and SJR.

As the HJQS is comprised of a citation derived element (TCS) and a qualitative evaluation (JPEQS), the new bibliometrics are likely to provide more of a proxy for the former than the latter. So, an alternative model was also tested:

$$\mathbf{H} = \alpha + \beta_1 \mathbf{B} + \beta_2 \mathbf{JPEQS} + e \tag{4}$$

A proxy for the $HJQS_{2008}$ for the 50 journals for which new bibliometrics were available was developed substituting estimations for TCS, derived from equation (3), into the original HJQS equation (1). Since JPEQS is given from the data it does not need to be estimated.

$$TCS^{*}_{j,\,2008} = \alpha + \beta_{I}B_{j,\,2008} \tag{5}$$

$$HJQS_{j,2008}^{*} = 0.5 (TCS_{j,2008}^{*} / 14 + JPEQS_{j,2008} / 5)$$
(6)

Where $j = 1 \dots 54$ journals in common to HJQS and Scopus in 2008.

Then estimates for $HJQS_{2017}$ were derived from the bibliometric data for 2017 for an expanded set of 147 journals.

$$TCS_{j,2017}^{*} = \alpha + \beta_{l}B_{j,2014}$$
(7)

$$HJQS_{i, 2017} = 0.5 (TCS_{i, 2017} / 14 + JPEQS_{i, 2017} / 5)$$
(8)

where $j = 1 \dots 147$ journals from the Heterodox Economics Directory listed in Scopus in 2017.

The 2017 JPEQS for the expanded set of journals are derived from the 54 responses to a questionnaire distributed to subscribers to the Heterodox Economics email list hetecon.jisc.ac.uk. The questionnaire responses also provided an indication of the volatility of the JPEQS. Qualitative evaluation is likely to be more stable and persistent than citation-based bibliometrics as users' evaluations of academic journals take time to develop and are likely to remain settled for some time. Thus, the JPEQS metric is likely to need only periodic updating.

Results

The HJQS, SNIP and SJR have widely differing ranges around different means, as reported in Table 1 for all journals and Table 2 for the subset of 62 journals covered by the HJQS. While the HQJS and SJR data are rankings rather than continuous variables, since all values are unique means and symmetry measures are reported in Table 2 to indicate the approximate distributions.

[Table 1 about here]

[Table 2 about here]

To the extent that the data approximate continuous ranges, as reported in the last column of Table 3, the SJR, HJQS and JPEQS variables are significantly non-normally distributed, HJQS non-normally skewed and the SJR and JPEQS displaying both non-normal skewness and kurtosis. So, to meet the normality distribution assumptions of linear regression, log transformations of the response variables, HJQS and JPEQS were used.

[Table 3 about here]

Unsurprisingly, as reported in Table 4, the SNIP and SJR rankings are strongly correlated. There is a moderate correlation between the HJQS and SNIP and but not between HJQS and SJR, indicating some potential to use the HJQS as a proxy for the HJQS. There are also correlations

between SNIP and the individual components of the HJQS (JRQS, JNQS, TCS and JPEQS), the strongest being with the TCS and which is the only component correlated with the SJR; the TCS is the component that draws on citation counts as the SNIP and SJR do. Surprisingly, despite making use of network metrics, the SJR is not correlated with the JNQS, which was designed to capture network effects.⁶

[Table 4 about here]

Table 5 presents the results of the linear regressions. The models demonstrate that the HJQS and each of its component metrics are significantly associated with SNIP, particularly TCS, which is the only metric associated with SJR. However, the variation in the HJQS and its components explained by the association is modest, with Adj. R^2 values of < 21%, indicating likely individual differences in rank between respective measures.⁷

[Table 5 about here]

To develop a proxy of HJQS from SNIP, an estimated TCS* is derived from the regression model (7) as per equation (4): Since JPEQS is given from the data it does not need to be estimated. An estimated HJQS* can then be derived from SNIP as per equation (5).

For example, taking a median-ranked journal from the HJQS, *Historical Materialism*, with a SNIP₂₀₀₈ of 0.762 and a JPEQS of 0.45851:

TCS*_{*j*, 2008} =
$$\alpha + \beta_I$$
SNIP_{*j*, 2008} = 3.826883 + 1.146537 * 0.762 = 4.701
HJQS*_{*j*, 2008} = 0.5 (4.701 /14 + 0.45851 /5) = 0.2164

These SNIP-derived estimates compare with actual values of 0.2052 for HJQS and 4.3873 for TCS. But while absolute values of the proxy estimates will vary from actual values, more important is the relative ranking of journals. Of the HJQS top 20, three are unranked for want of

SNIP metrics and 5 are ranked outside the HJQS* top 20. 10 journals have lower HJQS* rankings than HJQS and 7 have the same or higher rankings. One journal, *International Labour Review*, has an HJQS* ranking more than one standard deviation from its HJQS ranking.

Among all HJQS journals six were ranked in HJQS* more than one standard deviation from their HJQS rank, all but one higher. 16 journals were ranked lower in HJQS* than in HJQS and 37 the same or higher. As reported in Table 6, the distribution of HJQS* was narrower than the HJQS, reflecting the properties of the SNIP metric for these journals.

[Table 6 about here]

In summary, then, the JPEQS-adjusted SNIP bibliometric provides a reasonable proxy for the HJQS. It is thus feasible to construct annual HJQS* estimates, following the annual update of SNIP, combined with periodic updating of the JPEQS via surveys of the qualitative evaluation of the journals by their principal users – heterodox economists.

To derive HJQS* estimates for 2017 then, it was necessary to construct a 2017 JPEQS. This was derived from an extended version of the original 2008 questionnaire, using equation (2). For the original 62 HJQS journals, the 2017 JPEQS values were highly correlated with those of 2008 (R = 0.9134 ***). 57 journals were ranked the same or higher in 2017 than in 2008 and 25 journals ranked lower. Only one journal ranking was outside the standard deviation in ranking, the *Journal of Development Studies*, 18 ranks higher.

However, as presented in Table 7, the 2017 values were considerably higher than in 2008, most likely reflecting the smaller sample from which the questionnaire responses were drawn. The 54 respondents in 2017 were likely motivated by more highly valuing the contribution of heterodox journals than the much larger sample in 2008. The 2017 sample generally reported greater

familiarity with the journals than the 2008 sample and rated the journal quality considerably higher on average. A linear regression of individual journal JPEQS for 2008 and 2017 indicated $JPEQS*_{2008} = -.1922658 + .6067013 JPEQS_{2017}$ (p = 0.000, Adj. R² = 0.8322). So, to use the 2017 JPEQS as an equivalent proxy for the 2008 JPEQs requires an adjustment in values by these coefficients (eq. 9) and a corresponding adjustment to eq. 8, when calculating HJQS*₂₀₁₇.

$$JPEQS_{j,2017} = -.1922658 + .6067013 JPEQS_{2017}$$
(9)

$$HJQS_{j,2017}^{*} = 0.5 (TCS_{j,2017}^{*} / 14 + JPEQS_{j,2017}^{*} / 5)$$
(10)

where $j = 1 \dots 147$ journals from the Heterodox Economics Directory listed in Scopus in 2017.

[Table 7 about here]

Table A3 in the Appendix presents the derivation of the JPEQS* ₂₀₁₇ estimates for each of the 147 journals. Table A4 presents the HJQS*₂₀₁₇ estimates for the 99 journals where 2017 SNIP metrics were available, in rank order. Finally, Table A5 compares the 2008 HJQS journal rankings with the 2017 proxy rankings of the original cohort. 29 of the original journals were ranked the same or higher in 2017 and 29 were ranked lower. 16 journals changed ranking by more than one standard deviation, all but four lower. This indicates large movements in ranking in a quarter of journals, the qualitative evaluations amplifying citations recorded in the SNIP. The main beneficiaries are cross-disciplinary and specialist journals *Ecological Economics*, *Feminist Economics, History of Political Economy* and the *International Review of Applied Economics*.

Where the correlation between SNIP and Log JPEQS for the original cohort of journals in 2008 was 0.3505**, in 2017 it was 0.3175*, indicating some increased disparity in qualitative

evaluation from citation data in the later period. As discussed earlier, since the 2017 respondents are likely to have a greater appreciation of a wider range of journals, the small increase in disparity may simply represent a more expert evaluation. But the divergence from the SNIP over time is small, pointing to the influence of citation activity on qualitative evaluation. This supports the proposition that qualitative evaluation is not highly volatile and so a sampling at one point of time remains reliable for a lengthy period after.

Conclusion

The results demonstrate that the method presented provides a viable means of generating ongoing annual proxies for the original Lee-Cronin (2010) Heterodox Journal Quality Score. Making use of advances in mainstream bibliometric analysis, such as the SNIP, removes the laborious quantitative effort involved in the construction of the original index. And the low volatility in qualitative evaluation, relative to the bibliometrics, suggests that only infrequent sampling of the views of heterodox journal users is needed to maintain this input in the index or to extend the index to additional journals.

The HJQS journal ranking presented in Appendix Table A4 represents a contemporary extension of the original vision of the index that can provide heterodox economists with a systematic tool to justify the quality of their work in terms of its contribution to a distinctive subdiscipline of economics. This is a more appropriate standard by which to evaluate the efforts of heterodox economists than to judge them in terms of contributions to orthodox economics, a subdiscipline of little relevance to the work of this important group of economists.

References

- Bergstrom, C. (2007) Eigenfactor: measuring the value and prestige of scholarly journals. College & Research Libraries News 68(5), 314–316.
- Bollen, J., Rodriguez, M.A. & van de Sompel, H. (2006). Journal status. *Scientometrics*, 69(3), 669–687.
- Garfield, E. (2006). The history and meaning of the journal impact factor. *JAMA-Journal of the American Medical Association*, 295(1), 90-93.
- González-Pereira, B., Guerrero-Bote, V. P., & Moya-Anegón, F. (2010). A new approach to the metric of journals scientific prestige: The SJR indicator. *Journal of Informetrics*, 4(3), 379–391. <u>http://dx.doi.org/10.1016/j.joi.2010.03.002</u>
- Hudson, J. (2013). Ranking journals. *The Economic Journal*, 123, F202–F222. http://dx.doi.org/10.1111/ecoj.1206
- Jo, T.-H. & Todorova, Z. (2015). Introduction: Frederic S. Lee's contributions to heterodox economics. In Tae-Hee Jo and Zdravka Todorova (Eds.) Advancing the frontiers of heterodox economics: essays in honor of Frederic S. Lee (pp. 1-18). London and New York: Routledge. <u>https://mpra.ub.uni-muenchen.de/62568/1/MPRA_paper_62568.pdf</u>
- Kapeller, J. & Springholz, F. (2016). Heterodox economics directory: your guide to heterodox economics, 6th edn. <u>http://heterodoxnews.com/directory/</u>
- Lee, F.S. & Cronin, B., with McConnell, S. and Dean, E. (2010). Research quality rankings of heterodox economic journals in a contested discipline. *American Journal of Economics* and Sociology, 69(5), 1409-52. DOI: 10.1111/j.1536-7150.2010.00751.x

- Ma, N., Guan, J. & Zhao, Y. (2008). Bringing PageRank to the citation analysis. *Information Processing and Management*, 44(2), 800-810.
- Page, L., Brin, S., Motwani, R. & Winograd, T. (1998). *The PageRank citation ranking: Bringing order to the Web.* Technical report. Stanford, CA: Stanford University.
- Palacios-Huerta, I & Volij, O. (2004). The measurement of intellectual influence. *Econometrica*, 72(3), 963-977.
- Pinski, G. & Narin, F. (1976), Citation influence for journal aggregates of scientific publications: Theory, with application to the literature of physics. *Information Processing and Management*, 12, 297-312.
- Research Intelligence (2018). *Research metrics guidebook*. Elsevier. <u>https://www.elsevier.com/research-intelligence/resource-library/research-metrics-guidebook</u>
- Wilsdon, J. et al. (2015). The metric tide: report of the independent review of the role of metrics in research assessment and management. Bristol, UK: Higher Education Funding Council of England. DOI: 10.13140/RG.2.1.4929.1363

Endnotes

¹ Hudson (2013) has since attempted to model the qualitative evaluation effect for orthodox economics subdiscipline by examining the variation in banding of journals among different ranking lists. He found the Association of Business School's Journal Quality List as an outlier, rating highly journals of little interest to orthodox economists.

² <u>https://www.elsevier.com/about/press-releases/science-and-technology/scopus-comes-of-age</u>. Scopus underpins Elsevier's expansion into research impact benchmarking (SciVal, Pure) and research networking (Mendeley, SSRN).

³ <u>https://www.ref.ac.uk/news/clarivate-analytics-will-provide-citation-data-during-ref-2021/</u>

⁴ Elsevier's competitors have not ignored these developments and both Clarivate and Wiley have introduced journal prestige metrics, though these remain less accessible, propriety rather than open sources.

⁵ Scopus bibliometrics were only available from 2009 for *Econ Journal Watch*, the *Journal of Australian Political Economy* and the *Quarterly Review of Austrian Economics*. In these three cases, the 2009 values were used on the assumption that these were unlikely to be greatly different from 2008.

⁶ An examination of the more precise Spearman rank coefficients finds the same pattern in terms of SNIP but does find modest correlations of the SJR with HJQS (0.3113*) and JRQS (0.3551*). ⁷ An ordered logistic regression found the SNIP associated with the HJQS and its components in a similar manner, though a less significant association with TCS and JPEQS and lower model fit, Pseudo R^{2s} of < 4%. SJR was also similarly weakly associated with TCS but no other variables.

Appendix

SNIP	SNIP 1.0000	SJR	HJQS	JRQS	JNQS	TCS	JPEQS
SJR	0.8866 ***	1.0000					
HJQS	0.4846**	0.3397 *	1				
JRQS	0.4162 **	0.3414 *	0.6004 ***	1.0000			
JNQS	0.2589 *	0.1433	0.7173 ***	0.0992	1.0000		
TCS	0.4552 ***	0.3355 *	0.8879 ***	0.7680 ***	0.6993 ***	1.0000	
JPEQS	0.4188 **	0.2952	0.8617 ***	0.2774 *	0.5690 **	0.5656 ***	1.0000

Table A1. Spearman rank correlations

Observations: 54; * p < 0.05, ** p < 0.01, *** p < 0.000.

 Table A2. Comparison of linear and ordered logit regression models

	Line	ear	Ordered logit		
	SNIP sig.	Adj. R ²	SNIP sig.	Pseudo R ²	
HJQS	***	0.1830	***	0.0278	
JRQS	**	0.1269	**	0.0186	
JNQS	*	0.0938	*	0.0109	
TCS	***	0.2073	**	0.0301	
JPEQS	**	0.1060	*	0.0165	

Table A3. JPEQS 2017

		Total Score		Average Score	Familiarity Weighting		
Journal	Cohort	(TS)	(ni)	(TS/ni)	(nj/R)	JPEOS	JPEOS*
Advances in Austrian Economics	Original	28	11	2.545	0.204	0.519	0.122
American Journal of Economics and	0	-					
Sociology	Original	105	32	3.281	0.593	1.944	0.987
Antipode	Original	53	16	3.313	0.296	0.981	0.403
Cambridge Journal of Economics	Original	205	48	4.271	0.889	3.796	2.111
Capital & Class	Original	120	37	3.243	0.685	2.222	1.156
Capitalism, Nature, Socialism	Original	52	14	3.714	0.259	0.963	0.392
Cepal Review	Original	38	12	3.167	0.222	0.704	0.235
Constitutional Political Economy	Original	25	9	2.778	0.167	0.463	0.089
Contributions to Political Economy	Original	109	31	3.516	0.574	2.019	1.032
Critical Perspectives on International	0						
Business	Original	8	4	2.000	0.074	0.148	-0.102
Critical Sociology	Original	33	12	2.750	0.222	0.611	0.178
Debatte	Original	8	3	2.667	0.056	0.148	-0.102
Development and Change	Original	67	19	3.526	0.352	1.241	0.560
Ecological Economics	Original	95	26	3.654	0.481	1.759	0.875
Econ Journal Watch	Original	48	17	2.824	0.315	0.889	0.347
Economic Systems Research	Original	39	12	3.250	0.222	0.722	0.246
Economics and Philosophy	Original	97	26	3.731	0.481	1.796	0.898
Economy and Society	Original	127	34	3.735	0.630	2.352	1.235
European Journal of Economics and	onginar	127	51	51755	0.020	2.302	1.200
Economic Policies: Intervention	Original	90	24	3.750	0.444	1.667	0.819
European Journal of the History of	U						
Economic Thought	Original	139	35	3.971	0.648	2.574	1.369
Feminist Economics	Original	85	22	3.864	0.407	1.574	0.763
Forum for Social Economics	Original	75	25	3.000	0.463	1.389	0.650
Historical Materialism	Original	71	25	2.840	0.463	1.315	0.605
History of Economics Review	Original	70	20	3.500	0.370	1.296	0.594
History of Political Economy	Original	120	31	3.871	0.574	2.222	1.156
International Journal of Green	C						
Economics	Original	13	6	2.167	0.111	0.241	-0.046
International Journal of Political							
Economy	Original	92	27	3.407	0.500	1.704	0.841
International Journal of Social		• •	0		o 4 6 -	. .	o .
Economics	Original	30	9	3.333	0.167	0.556	0.145
International Labor Review	Original	46	14	3.286	0.259	0.852	0.325
International Review of Applied	Original	07	26	2 721	0.401	1 706	0 000
Lournel of Australian Political	Original	97	20	5./51	0.481	1./90	0.898
Feenomy	Original	40	12	3 077	0 241	0.741	0.257
Leurnal of Dovelonment Studios	Original	40 50	15	2 125	0.241	0.741	0.237
Journal of Economic Behavior and	Original	50	10	5.125	0.290	0.920	0.309
Organization	Original	127	30	4 233	0 556	2 352	1 235
Journal of Economic Issues	Original	154	39	3 949	0.722	2.352	1.235
Journal of Economic Methodology	Original	94	24	3 917	0.722	1 741	0.864
Journal of Evolutionary Economics	Original	27 80	2⊤ 24	3.709	0.444	1.771	0.004
Journal of Income Distribution	Original	07 79	2 4 10	2 800	0.444	0.510	0.000
Journal of Institutional Economics	Original	20 20	25	2.000	0.103	1 619	0.122
Journal of Interdiscipliness Essential	Original	09 10	23 7	5.300	0.403	1.048	0.808
Journal of Interdisciplinary Economics	Original	18	/	2.5/1	0.130	0.333	0.010
Journal of Post Keynesian Economics	Original	160	41	3.902	0./59	2.963	1.605
Journal of Socio-Economics	Original	/2	22	3.2/3	0.407	1.333	0.617

Thought	Original	110	27	4.074	0.500	2.037	
Metroeconomica	Original	122	30	4 067	0.556	2 2 5 9	
New Left Review	Original	108	29	3 724	0.537	2.000	
New Political Economy	Original	71	18	3 944	0.333	1 315	
Organization & Environment	Original	9	4	2,250	0.074	0 167	
Oxford Development Studies	Original	31	9	3 444	0.167	0.107	
Ouarterly Journal of Austrian	originar	51	,	5.111	0.107	0.071	
Economics	Original	24	9	2.667	0.167	0.444	
Research in the History of Economic	e						
Thought and Methodology	Original	50	14	3.571	0.259	0.926	
Rethinking Marxism	Original	79	24	3.292	0.444	1.463	
Review of African Political Economy	Original	19	6	3.167	0.111	0.352	
Review of Austrian Economics	Original	29	10	2.900	0.185	0.537	
Review of Black Political Economy	Original	22	7	3.143	0.130	0.407	
Review of International Political							
Economy	Original	87	21	4.143	0.389	1.611	
Review of Political Economy	Original	128	32	4.000	0.593	2.370	
Review of Radical Political Economics	Original	142	37	3.838	0.685	2.630	
Review of Social Economy	Original	105	29	3.621	0.537	1.944	
Revista de Economia Politica/							
Brazilian Journal of Political Economy	Original	33	10	3.300	0.185	0.611	
Science & Society	Original	98	27	3.630	0.500	1.815	
Structural Change and Economic	Original	05	24	2 059	0 444	1 750	
Studies in Delitical Economics	Original	95	24	3.938	0.444	1./39	
Studies in Political Economy	Original	21	0	3.300	0.111	0.389	
A constinue Operations and Society	Original Estended	49	12	4.083	0.222	0.907	
Accounting, Organizations and Society	Extended	5	1	5.000	0.019	0.093	
Alternative Routes	Extended	5 10	1	5.000	0.019	0.093	
Basic Income Studies:	Extended	10	3	3.333	0.056	0.185	
Combridge Journal of Regions	Extended	28	9	3.111	0.167	0.519	
Economy and Society	Extended	43	10	4 300	0.185	0 796	
Comercio Exterior	Extended	5	10	5.000	0.105	0.790	
Competition and Change	Extended	32	8	4 000	0.148	0.075	
Critical Perspectives on Accounting	Extended	5	1	5.000	0.148	0.093	
Critique	Extended	22	0	3.556	0.019	0.093	
Cuadamas da Facanamía	Extended	52	9	5.550	0.107	0.393	
Economía e Sociedade	Extended	14	1	3.000	0.019	0.093	
Economic and Political Weekly	Extended	25	3 7	4.007	0.030	0.239	
Economic and Fontical weekly	Extended	25	/ 0	<i>3.371</i>	0.130	0.403	
Economic Geography	Extended	20	0	4.300	0.148	0.007	
Economics and Labour Relations	Extended	50	9	5.555	0.107	0.550	
Review	Extended	37	10	3 700	0.185	0.685	
Economics and Policy of Energy and	Extended	57	10	5.700	0.105	0.005	
the Environment	Extended	5	1	5.000	0.019	0.093	
Economie Appliquée	Extended	30	11	2.727	0.204	0.556	
Environmental Values	Extended	10	2	5.000	0.037	0.185	
Erasmus Journal for Philosophy and		÷					
Economics	Extended	47	15	3.133	0.278	0.870	
Evolutionary and Institutional							
Economic Review	Extended	11	3	3.667	0.056	0.204	
Gender, Work, and Organization	Extended	25	6	4.167	0.111	0.463	
History of Economic Ideas	Extended	59	16	3.688	0.296	1.093	
Industrial and Corporate Change	Extended	50	12	4.167	0.222	0.926	
Innovations (Revue d'économie et de							
management de l'innovation)	Extended	5	1	5.000	0.019	0.093	

Interdisciplinary Journal of Economics							
and Business Law	Extended	7	2	3.500	0.037	0.130	-(
Interface: A Journal for and about							
Social Movements	Extended	5	1	5.000	0.019	0.093	-(
International Critical Thought International Journal of Development	Extended	12	3	4.000	0.056	0.222	-(
Issues International Journal of Green	Extended	5	2	2.500	0.037	0.093	-(
Economics International Journal of Pluralism and	Extended	8	2	4.000	0.037	0.148	-
Economics Education	Extended	61	21	2.905	0.389	1.130	1
International Journal of Public Policy	Extended	12	3	4.000	0.056	0.222	_(
International Review of Applied							
Economics	Extended	65	16	4.063	0.296	1.204	
International Socialism: A Quarterly							
Journal of Socialist Theory	Extended	12	3	4.000	0.056	0.222	-1
Interventions Économiques	Extended	7	2	3.500	0.037	0.130	-
Investigación Económica Journal des Économistes et des Études	Extended	13	3	4.333	0.056	0.241	-
Humaines	Extended	5	1	5.000	0.019	0.093	-
Journal of Agrarian Change	Extended	16	4	4.000	0.074	0.296	-'
Journal of Economic and Social Policy	Extended	5	1	5.000	0.019	0.093	-1
Journal of Economic Geography	Extended	17	4	4.250	0.074	0.315	-
Journal of Heterodox Economics	Extended	14	5	2.800	0.093	0.259	-
Journal of Human Development and							
Capabilities Journal of Innovation Economics &	Extended	13	3	4.333	0.056	0.241	-
Management	Extended	5	1	5.000	0.019	0.093	-
Journal of Philosophical Economics	Extended	17	5	3.400	0.093	0.315	_
Journal of World-Systems Research	Extended	20	6	3.333	0.111	0.370	
Labor Studies Journal	Extended	8	2	4.000	0.037	0.148	_(
Local Economy	Extended	18	5	3.600	0.093	0.333	
Momentum Quarterly	Extended	8	2	4.000	0.037	0.148	-
New Labor Forum	Extended	8	2	4.000	0.037	0.148	-
New Proposals: Journal of Marxism							
and Interdisciplinary Inquiry	Extended	5	1	5.000	0.019	0.093	-
New School Economic Review	Extended	23	10	2.300	0.185	0.426	
Nova Economía	Extended	12	4	3.000	0.074	0.222	-
OEconomia	Extended	27	8	3.375	0.148	0.500	
OIKOS - Revista de Economia	Esstern de d	0	2	2 000	0.056	0 167	
Heterodoxa	Extended	9	3	3.000	0.056	0.10/	-
Ola Financiera	Extended	10	3	3.333	0.056	0.185	-
On the Horizon	Extended	17	4	4.250	0.074	0.315	-
Panoeconomicus	Extended	19	5	3.800	0.093	0.352	
Papers in Political Economy	Extended	16	4	4.000	0.074	0.296	-
Problemas del Desarrollo	Extended	13	3	4.333	0.056	0.241	-
PROKLA	Extended	10	2	5.000	0.037	0.185	-
PSL Quarterly Review	Extended	44	12	3.667	0.222	0.815	
Public Policy Research Quarterly Journal of Austrian	Extended	5	1	5.000	0.019	0.093	-
Economics	Extended	11	4	2.750	0.074	0.204	-
Realidad Economica Régulation Review. Capitalism,	Extended	15	3	5.000	0.056	0.278	-1
Institutions, Powers	Extended	30	8	3.750	0.148	0.556	
Research in Political Economy Research in the History of Economic	Extended	25	8	3.125	0.148	0.463	

Review of Capital as Power	Extended	9	3	3.000	0.056	0.167	-0.0
Review of Keynesian Economics	Extended	90	25	3.600	0.463	1.667	0.8
Review of Social Economy	Extended	68	17	4.000	0.315	1.259	0.5
Revista Circus	Extended	9	2	4.500	0.037	0.167	-0.0
Revista de Economía Institucional	Extended	5	1	5.000	0.019	0.093	-0.1
Revista de Economía Mundial/Journal							
of World Economy	Extended	28	8	3.800	7.368	0.148	-0.1
Revista Outubro	Extended	8	2	4.000	0.037	0.148	-0.1
Revue Française de Socio-Economie	Extended	5	1	5.000	0.019	0.093	-0.
Social and Economic Studies	Extended	5	1	5.000	0.019	0.093	-0.
Socio-Economic Review	Extended	39	9	4.333	0.167	0.722	0.
Structural Change and Economic							
Dynamics	Extended	55	13	4.231	0.241	1.019	0.
Studies in Political Economy	Extended	11	3	3.667	0.056	0.204	-0.
Thesis Eleven	Extended	15	4	3.750	0.074	0.278	-0.
Transformation: Critical Perspectives							
on Southern Africa	Extended	5	1	5.000	0.019	0.093	-0.
tripleC: Communication, Capitalism &							
Critique	Extended	7	2	3.500	0.037	0.130	-0.
Urbani Izziv (Urban Change)	Extended	5	1	5.000	0.019	0.093	-0.
Work Organisation, Labour and							
Globalisation	Extended	5	1	5.000	0.019	0.093	-0.
World Economic Review	Extended	46	15	3.067	0.278	0.852	0.
World Review of Political Economy	Extended	16	6	2.667	0.111	0.296	-0.

Journal	Cabart	SNIP	TCS*	JPEQS*	HJQS*	HJQS*
Journal	Conort	2017	2017	2017	2017	Rank
Cambridge Journal of Economics	Original	2.299	2.299	6.463	2.111	1
Journal of Post Keynesian Economics	Original	0.996	0.996	4.969	1.605	2
Journal of Economic Issues	Original	0.766	0.766	4.705	1.538	3
Review of Radical Political Economics	Original	0.906	0.906	4.866	1.403	4
European Journal of the History of Economic Thought	Original	1.047	1.047	5.027	1.369	5
Review of Political Economy	Original	0.91	0.91	4.87	1.246	6
Economy and Society	Original	1.852	1.852	5.95	1.235	7
Journal of Economic Behavior and Organization	Original	1.351	1.351	5.376	1.235	8
Metroeconomica	Original	1.143	1.143	5.137	1.178	9
History of Political Economy	Original	1.159	1.159	5.156	1.156	10
Capital and Class	Original	0.861	0.861	4.814	1.156	11
Journal of the History of Economic Thought	Original	0.652	0.652	4.574	1.044	12
Contributions to Political Economy	Original	2.996	2.996	7.262	1.032	13
New Left Review	Original	3.927	3.927	8.329	1.021	14
American Journal of Economics and Sociology	Original	0.584	0.584	4.496	0.987	15
Review of Social Economy	Original	0.392	0.392	4.276	0.987	16
Science and Society	Original	0.581	0.581	4.493	0.909	17
Economics and Philosophy	Original	1.156	1.156	5.152	0.898	18
International Review of Applied Economics	Original	0.613	0.613	4.53	0.898	19
Ecological Economics	Original	1.702	1.702	5.778	0.875	20
Structural Change and Economic Dynamics	Original	1.68	1.68	5.753	0.875	21
Journal of Economic Methodology	Original	0.922	0.922	4.884	0.864	22
Review of Keynesian Economics	Extended	1.059	1.059	5.041	0.819	23
Journal of Institutional Economics	Original	1.258	1.258	5.269	0.808	24
Journal of Evolutionary Economics	Original	0.773	0.773	4.713	0.808	25
Review of International Political Economy	Original	2.072	2.072	6.203	0.785	26
Feminist Economics	Original	1.193	1.193	5.195	0.763	27
Rethinking Marxism	Original	0.68	0.68	4.607	0.695	28
Journal of Socio-Economics (renamed Journal of Behavioral and Experimental Economics)	Original	0.86	0.86	4.813	0.617	29
New Political Economy	Original	1.728	1.728	5.808	0.605	30
Historical Materialism	Original	0.681	0.681	4.608	0.605	31
Review of Social Economy	Extended	0.392	0.392	4.276	0.572	32
Development and Change	Original	1.461	1.461	5.502	0.56	33
International Review of Applied Economics	Extended	0.613	0.613	4.53	0.538	34
History of Economic Ideas	Extended	0.342	0.342	4.219	0.471	35
Structural Change and Economic Dynamics	Extended	1.68	1.68	5.753	0.426	36
Antipode	Original	2.412	2.412	6.592	0.403	37
Capitalism, Nature, Socialism	Original	0.274	0.274	4.141	0.392	38
Industrial and Corporate Change	Extended	1.544	1.544	5.597	0.369	39
Journal of Development Studies	Original	1.25	1.25	5.26	0.369	40

Table A4. Heterodox Journal Quality Score Ranking 2017

Research in the History of Economic Thought and Methodology	Original	0.657	0.657	4.58	0.369	41
Work, Employment and Society	Original	1.775	1.775	5.862	0.358	42
Econ Journal Watch	Original	0.408	0.408	4.295	0.347	43
Erasmus Journal for Philosophy and Economics	Extended	0.013	0.013	3.842	0.336	44
International Labour Review	Original	0.925	0.925	4.887	0.325	45
Cambridge Journal of Regions, Economy and Society	Extended	2.069	2.069	6.199	0.291	46
Journal of Australian Political Economy	Original	0.239	0.239	4.101	0.257	47
Socio-Economic Review	Extended	2.179	2.179	6.325	0.246	48
Economic Systems Research	Original	1.344	1.344	5.368	0.246	49
Cepal Review	Original	0.3	0.3	4.171	0.235	50
Economic and Labour Relations Review	Extended	0.631	0.631	4.55	0.223	51
Economic Geography	Extended	2.363	2.363	6.536	0.212	52
Revista de Economia Politica/ Brazilian Journal of Political Economy	Original	1.262	1.262	5.274	0.178	53
Critical Sociology	Original	1.22	1.22	5.226	0.178	54
Competition and Change	Extended	1.296	1.296	5.313	0.167	55
Critique	Extended	0.635	0.635	4.555	0.167	56
Oxford Development Studies	Original	0.83	0.83	4.779	0.156	57
Research in the History of Economic Thought and Methodology	Extended	0.657	0.657	4.58	0.145	58
International Journal of Social Economics	Original	0.544	0.544	4.451	0.145	59
Review of Austrian Economics	Original	0.611	0.611	4.527	0.134	60
Advances in Austrian Economics	Original	0.514	0.514	4.416	0.122	61
Gender, Work and Organization	Extended	1.505	1.505	5.552	0.089	62
Economic and Political Weekly	Extended	0.765	0.765	4.704	0.089	63
Constitutional Political Economy	Original	0.678	0.678	4.604	0.089	64
Research in Political Economy	Extended	0.387	0.387	4.271	0.089	65
Quarterly Journal of Austrian Economics	Original	0.234	0.234	4.095	0.077	66
Review of Black Political Economy	Original	0.413	0.413	4.3	0.055	67
Studies in Political Economy	Original	0.361	0.361	4.241	0.044	68
Review of African Political Economy	Original	1.256	1.256	5.267	0.021	69
Panoeconomicus	Extended	0.847	0.847	4.798	0.021	70
Journal of Interdisciplinary Economics	Original	0.823	0.823	4.77	0.01	71
Local Economy	Extended	0.658	0.658	4.581	0.01	72
Journal of Economic Geography	Extended	2.634	2.634	6.847	-0.001	73
On the Horizon	Extended	0.396	0.396	4.281	-0.001	74
Journal of Agrarian Change	Extended	1.776	1.776	5.863	-0.013	75
Thesis Eleven	Extended	0.411	0.411	4.298	-0.024	76
Journal of Human Development and Capabilities	Extended	0.985	0.985	4.956	-0.046	77
Problemas del Desarrollo	Extended	0.62	0.62	4.538	-0.046	78
International Journal of Green Economics	Original	0.253	0.253	4.117	-0.046	79
International Journal of Public Policy	Extended	0.258	0.258	4.123	-0.057	80
Studies in Political Economy	Extended	0.361	0.361	4.241	-0.069	81
Quarterly Journal of Austrian Economics	Extended	0.234	0.234	4.095	-0.069	82
Environmental Values	Extended	0.84	0.84	4.79	-0.08	83

Basic Income Studies	Extended	0.448	0.448	4.341	-0.08	84
Organization and Environment	Original	2.28	2.28	6.441	-0.091	85
OIKOS	Extended	1.322	1.322	5.343	-0.091	86
Critical Perspectives on International Business	Original	0.741	0.741	4.676	-0.102	87
Labor Studies Journal	Extended	0.322	0.322	4.196	-0.102	88
International Journal of Green Economics	Extended	0.253	0.253	4.117	-0.102	89
Debatte	Original	0.096	0.096	3.937	-0.102	90
tripleC	Extended	0.768	0.768	4.707	-0.114	91
Critical Perspectives on Accounting	Extended	1.953	1.953	6.066	-0.136	92
Accounting, Organizations and Society	Extended	1.816	1.816	5.909	-0.136	93
Transformation	Extended	0.331	0.331	4.206	-0.136	94
Urbani Izziv	Extended	0.296	0.296	4.166	-0.136	95
Innovations	Extended	0.288	0.288	4.157	-0.136	96
Social and Economic Studies	Extended	0.219	0.219	4.078	-0.136	97
International Journal of Development Issues	Extended	0.116	0.116	3.96	-0.136	98
Economics and Policy of Energy and the Environment	Extended	0.111	0.111	3.954	-0.136	99

Journal	Rank 2008	Rank 2017	Change
Advances in Austrian Economics	56	61	-5
American Journal of Economics and Sociology	11	15	-4
Antipode	36	37	-1
Cambridge Journal of Economics	1	1	0
Capital and Class	12	11	1
Capitalism, Nature, Socialism	28	38	-10
Cepal Review	43	50	-7
Constitutional Political Economy	35	64	-29
Contributions to Political Economy	31	13	18
Critical Perspectives on International Business	61	87	-26
Critical Sociology	52	54	-2
Debatte	62	90	-28
Development and Change	6	33	-27
Ecological Economics	42	20	22
Econ Journal Watch	48	43	5
Economic Systems Research	49	49	0
Economics and Philosophy	26	18	8
Economy and Society	5	7	-2
European Journal of Economics and Economic Policies: Intervention	14	NA	
European Journal of the History of Economic Thought	18	5	13
Feminist Economics	47	27	20
Forum for Social Economics	38	NA	
Historical Materialism	39	31	8
History of Economics Review	23	NA	
History of Political Economy	58	10	48
International Journal of Green Economics	29	79	-50
International Journal of Political Economy	27	NA	
International Journal of Social Economics	10	59	-49
International Labour Review	25	45	-20
International Review of Applied Economics	59	19	40
Journal of Australian Political Economy	50	47	3
Journal of Development Studies	21	40	-19
Journal of Economic Behavior and Organization	9	8	1
Journal of Economic Issues	2	3	-1
Journal of Economic Methodology	22	22	0
Journal of Evolutionary Economics	19	25	-6
Journal of Income Distribution (ceased 2000)	40	NA	
Journal of Institutional Economics	34	24	10
Journal of Interdisciplinary Economics	57	71	-14
Journal of Post Keynesian Economics	3	2	1
Journal of Socio-Economics (renamed Journal of Behavioral and Experimental Economics)	33	29	4
Journal of the History of Economic Thought	16	12	4

Table A5. Original cohort – comparison of rankings

New Left Review 30	14	16
New Political Economy 32	30	2
Organization and Environment 54	85	-31
Oxford Development Studies 41	57	-16
Quarterly Journal of Austrian Economics 51	66	-15
Research in the History of Economic Thought and Methodology 53	41	12
Rethinking Marxism 20	28	-8
Review of African Political Economy 45	69	-24
Review of Austrian Economics 37	60	-23
Review of Black Political Economy 60	67	-7
Review of International Political Economy 8	26	-18
Review of Political Economy 7	6	1
Review of Radical Political Economics 4	4	0
Review of Social Economy 15	16	-1
Revista de Economia Politica/Brazilian Journal of Political 46 Economy	53	-7
Science and Society 17	17	0
Structural Change and Economic Dynamics 24	21	3
Studies in Political Economy 44	68	-24
Work, Employment and Society55	42	13