New Rankings of Economics Journals: Documenting and Explaining the Rise of the New Society Journals*

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Abstract

We update citation-based rankings of economics journals to study the relative ranking of new society journals. We employ two ranking methods: a standard iterative eigenfactor methodology adjusted for reference intensity and a novel top-5 citation alternative. We find that the American Economic Association journals (*AEJ-Applied*, *AEJ-Macro*, *AEJ-Micro* and *AEJ-Policy*) and the Econometric Society journals (*Quantitative Economics* and *Theoretical Economics*), are the top-ranked within their respective fields, and the *Journal of the European Economic Association* is similarly highly ranked. We explore different mechanisms to investigate the rapid rise and consistently strong performance of these new society journals in economics.

Keywords: citations, rankings, impact factors

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1 Introduction

Journal rankings influence researchers' decisions on where to publish, and provide information to administrators, grant agencies, and researchers to help assess the quality of research output. These rankings therefore matter for hiring, promotion, and the awarding of research grants. In economics, numerous studies have provided such rankings based on quality-adjusted impact factors, in which citations are adjusted for the quality of the citing journal (e.g. Liebowitz and Palmer, 1984; Laband and Piette, 1994; Kalaitzidakis et al., 2003 and 2011; Palacio-Huerta and Volij, 2004; Kodrzycki and Yu, 2006). However, these studies give an incomplete picture of the current standing of journals because there was dramatic increase in the supply of high quality journals in the last 20 years with the introduction of the new society journals produced by the *American Economic Association* (*AEA*), the *Econometric Society* (*ES*), and the *European Economic Association* (*EEA*).[1] The introduction of these journals had the potential to have a seismic effect on journal rankings, but there is essentially no research to date to determine their impact on the rankings.[2]

We make three main contributions. First, we use impact factors to provide an updated journal ranking that includes the new society journals. We find that the new society journals rank among the best journals in economics outside of the top-5,[3], and that this rise to the "top" was achieved almost immediately after their launch. Second, we use econometric analysis to investigate the extent to which controlling for journal characteristics can help explain the rise of the new society journals. Third, we contribute to the more general journal ranking literature in economics in terms of ranking methodologies and their implementation.

Our starting point to measure impact factors, and to hence rank journals, is Palacios-Huerta and Volij (2004), which takes the now quite standard iterative eigenfactor approach

[1]The *EEA* started publishing the *Journal of the European Economic Association* (*JEEA*) in 2003. The *ES* started *Theoretical Economics* (*TE*) and *Quantitative Economics* (*QE*) in 2006 and 2010 respectively. The *AEA* started the four *American Economic Journals* (*AEJs*) in 2009: *AEJ: Applied Economics* (*AEJ-Applied*), *AEJ: Macroeconomics* (*AEJ-Macro*), *AEJ: Microeconomics* (*AEJ-Micro*), and *AEJ: Economic Policy* (*AEJ-Policy*). The *AEA* started *AER: Insights* in 2018, but this is too late to usefully incorporate in our analysis.

[2]One exception is Kalaitzidakis et al. (2011), which included *JEEA* in its ranking. The (*SJR*) ranking includes all new journals, but we argue below why it is less suitable for use by economics departments.

[3]These are: *American Economic Review* (*AER*), *Econometrica* (*ECMA*), *Journal of Political Economy* (*JPE*), *Review of Economics Studies* (*RES*) and *Quarterly Journal of Economics* (*QJE*).

to measure impact factors. Their approach allows one to work out the impact per article after removing citations from the same journal, and adjusting the impact per article for reference intensity of the citing journals to better account for the tendency of articles in some fields to have more references than others (*the invariant approach*). For our initial ranking exercise, we purchased and used 2015–2019 citation data from the *Journal Citation Report* (*JCR*) database under its "Economics" classification, where each year for a particular journal captures citations by articles in that year of articles in other journals from the current and previous four years. Using this approach, we find the ranking of the so-called "top-5" economics journals is consistent with earlier studies in which these journals occupy the top five positions. However, we also find that the new society journals, namely, *AEJ-Applied*, *AEJ-Macro*, *AEJ-Micro*, *AEJ-Policy*, *QE* and *TE*, dominate their respective top field journals, and *JEEA* outperforms its comparable general-interest journals outside of the top-5. Furthermore, we find that the new society journals perform consistently well across all of the alternative ranking methods that we employ, i.e., not adjusting for reference intensity, including non-standard economics journals, including the *JCR* journals we did not classify as economics, and using only citations from the top-5 economics journals. The introduction of these new society journals caused the rankings of other excellent journals to fall. To put it loosely, the new journals can be viewed as occupying the highest positions outside of the top-5.

Motivated by the exceptional performance of the new society journals, we explore the factors that are correlated with their high rankings in the years after their launch. However, the purchased *JCR* data are not well-suited to doing this because of the rigid form of the data. Therefore, we develop alternative ranking methods based on publicly available data. Specifically, we calculate impact factors based solely on citations from the top-5, and find similar ranking results for the top-30 or so journals. We were able to construct such rankings in several different forms, allowing us to conduct our empirical analysis and perform a relatively large number of robustness checks.

Using the impact factors based on the top-5 citations, we compare each of the new journals to selected top field and general interest comparison journals, and find that: (i) all the new society journals achieved statistically significantly higher impact factors right after

their inception compared to their respective comparison journals; (ii) a number of factors are correlated with the performance of the new journals relative to their comparison journals; however, taken together, these factors do not reduce the high rankings of the new journals; (iii) *AEA* journals and *ES* journals appear to receive relatively more citations from their parent journals (*AER* and *ECMA*, respectively) than do their comparison journals; however, correcting for this bias has little effect on the new journal, or the Association, estimated coefficients in the regressions; (iv) on average, the new society journals published a smaller number of articles per year than their respective comparison journals; (vii) accounting for the fact that their associations held prestigious conferences open only to their respective members did not significantly affect their impact factors; and (viii) compared to their comparison journals, the new society journals are led by editors who have affiliations at more highly ranked departments and who have more experience in editing highly ranked journals.

In addition to documenting and explaining the strong performance of the new society journals, we contribute to the more general journal ranking literature in economics by proposing: (i) a way to identify whether a journal is considered an economics journal; (ii) a much less data-intensive ranking method based on citations only in top-5 economics journals — we show that this is a good proxy for more comprehensive ranking methodologies when ranking the top 30 or so journals; and (iii) a new forward impact factor measure, which we use to measure journal performance in different publication years. An additional contribution from a journal ranking perspective is that we handle *AEA Papers and Proceedings* separately from the *AER,* rather than lumping them together — as is the norm in the existing literature — which leads to anomalous ranking results for the *AER*.

Some authors, such as Palacios-Huerta and Volij (2004, 2014), Koczy and Nichifor (2013), and Demange (2014) have identified theoretical properties that an ideal ranking mechanism should satisfy, and proposed approaches consistent with these. Among these approaches, we will use the Palacios-Huerta and Volij (2004) invariant method. This approach avoids weighting journals higher in certain fields where authors may tend to have denser citing patterns just because their articles tend to have more references. It is also the most widely used approach in the literature.[4]

[4]For example, Kodrzycki and Yu (2006), Ritzberger (2008), Bao et al. (2010), and Lo and Bao (2016) all

Our proposed alternative measure (the top-5 impact factor), which captures the average number of times articles in a journal are cited in the top-5, is inspired by Engemann and Wall (2009). They used a similar measure based on articles published in 2008 to rank 69 journals based on citations from the top-5, the *Review of Economics and Statistics*, and the *Economic Journal*. They argue that this set of journals provides a good coverage of high-quality citations while covering the different fields of economics. Our exclusive focus on the top-5 attempts to keep the quality of the citations more uniform and reduces the data collection that is required.

The theoretically justified invariant method and the simple top-5 method we adopt contrast sharply with the *SCImago Journal Ranks* (*SJR*) produced by SCImago, which is a publicly available and constantly updated ranking based on the Scopus database. We believe there are several drawbacks to economics departments in using the *SJR* approach. First, *SJR* use an ad-hoc methodology which involves assigning arbitrary weights of 0.0001, 0.0999 and 0.9 to three quite different measures that they then take the weighted sum of.[5] Second, within the economics, econometrics and finance subject category, which is the one that includes the new society journals, *SJR* includes many journals that we classify as non-economics. Third, and perhaps due to the above point, cross-disciplinary journals such as finance journals that publish both finance and economics articles are ranked surprisingly high. We constructed the geometric mean of the *SJR* rankings for 2015–2019. On this basis, the *SJR* ranks the *Journal of Finance* above all economics journals except the *QJE*, and the *Review of Financial Studies* and the *Journal of Financial Economics* above the *AER* and all the new society journals. This may make sense for a finance department but does not seem reasonable for an economics department. Similar findings, albeit less extreme, arise for other cross-disciplinary journals.[6] Potentially, the *SJR* rankings for economics journals will

apply this approach in their ranking studies.

[5]See Gonzalez-Pereira et al. (2010).

[6]Examples include: *the Journal of Accounting and Economics* being ranked above the *Journal of Monetary Economics*, the *Review of Economics and Statistics*, *TE*, *QE*, and *AEJ-Micro*; *Economic Geography* and the *Journal of Economic Geography* being ranked above the *Journal of Applied Econometrics*, the *Journal of Money Credit and Banking*, the *Journal of Urban Economics*, and *Experimental Economics*; the *Socio-Economic Review*, *Energy Economics* and the *Review Of International Organizations* being ranked above the *European Economic Review*, *Games and Economic Behavior*, the *Journal of Economic History* and the *Journal of Law and Economics*.

be affected by citations from these cross-disciplinary journals. Fourth, the *SJR* rankings do not include some important economics journals, such as the *Journal of Health Economics*, which does reasonably well in our rankings. Despite these differences, it is worth noting that the *SJR* rankings reinforce our findings that the new society journals are near the top of all economics journals outside the top-5.

In the next section, we describe our data and ranking methodology, with the new ranking results discussed in Section 3. In Section 4, we detail our empirical methodology, which we implement in Section 5. Our methodology includes exploring how different features of the journals are correlated with impact factors using regression analysis, and whether the new society journals (excluding *JEEA*) receive preferential treatment in citations by their parent journals. Section 6 concludes the paper.

2 Journal Ranking Methodology and Data

In this section, we detail the data and methodology used to arrive at our invariant rankings, our top-5 alternative rankings, and other alternative rankings, which we will use to conduct robustness checks.

2.1 Data utilization

Our data for the journal rankings come from two sources: purchased data from the *JCR* database as well as data collected manually from the *Web of Science*. For our regression analysis in Section 5, we also make use of a range of publicly available data. As one might expect, our data collection and the creation of variables were rather labor intensive. For most tasks, two research assistants worked independently. Their results were cross checked and we resolved discrepancies. We detail the data collection process in Section A of the Online Appendix, available at `https://app.scholarsite.io/s/1c5e5f` and the authors' websites.

We provide yearly journal rankings and the corresponding geometric mean rankings for the period 2015–2019 based on the invariant and top-5 methodologies. For any particular year in 2015–2019, our citation data is obtained from citations by articles published in that

year of articles published in the current and preceding four years as recorded by the *JCR*. For example, in the case of the *JCR* 2019 edition, the data we obtain is for citations by articles published in 2019 of articles published between 2015 and 2019 (i.e., for a 5-year window).[7] This allows us to follow the now standard Palacios-Huerta and Volij methodology. The earliest edition of the *JCR* dataset that we purchased is 2015, which covers publications in the 2011–2015 window; all the new society journals (hereafter "new journals") had been established for at least a year by 2011. Our *JCR* data is limited to journals classified as "economics" by the *JCR*.[8]

In the *JCR* data set, citations to and from the *AEA Papers and Proceedings* (i.e., the May issue of the *AER*) are not separated from the rest of the issues in the *AER* up until 2018.[9] Given that these proceedings consist exclusively of short articles that do not undergo a standard refereeing process, we have separately identified citations to and from the *AEA Papers and Proceedings*. To do this, we rely on the *Web of Science* to manually retrieve the citation data and the number of articles for *AEA Papers and Proceedings*, and then remove these from the *AER* in the *JCR* data.

2.2 Our baseline journals

In this section, we provide details on how we further refine the *JCR* data to arrive at our set of baseline journals.

2.2.1 Classifying economics journals

Some authors (e.g., Kodrzycki and Yu, 2006) have criticized the *JCR* "economics" classification, as their classification criteria is not transparent and tends to include many journals that are more closely associated with other disciplines. In practice, it is difficult to draw a

[7]This 5-year window is consistent with Kalaitzidakis et al. (2003), who focus on citations in 1998 of articles published between 1994 and 1998. Some previous studies (e.g. Kalaitzidakis et al., 2011) focused on citations of articles published in the preceding ten years. Since the new journals of interest were launched as late as 2010, using a 10-year window would mean restricting the citation data to just 2020, the data for which was not even available at the time we conducted our study.

[8]The total number of journals included in the *JCR* "economics"dataset is 346, 345, 354, 363 and 372 for the years 2015, 2016, 2017, 2018, and 2019, respectively.

[9]Since 2018, *AEA Papers and Proceedings* has no longer been published as the May issue of the *AER*. See `https://www.aeaweb.org/journals/pandp/about-pandp`

clear boundary between economics and some other disciplines such as finance, management, and statistics. Academics have long disagreed over whether finance should be deemed a subfield of economics or a discipline with its own concepts and methodologies (Pieters and Baumgartner, 2002, Kodrzycki and Yu, 2006). To provide a within-discipline ranking in which citations by all other journals in the same discipline are counted (but not citations by journals outside the discipline), some dividing line is required when using a procedure in which all journals included ultimately influence the quality weighting applied to each of the other journals. To proceed, we propose a two-stage mechanism for defining economics journals.

We summarize our two-stage mechanism, leaving the full details to Section A.1 of the Online Appendix. The first stage involves identifying a set of economics journals based on whether the majority of their editorial board have economics affiliations. To keep things manageable, we collect affiliation information of the first ten eligible editors (including associate editors and editorial board members) as listed on each journal's website and compute the proportion of these editors who have an economics affiliation. If this proportion is at least one half, we initially classify it as an economics journal.[10]

Using this only as a starting point, in stage 2(a) we classify a journal as an economics journal if at least half the citations received by a journal are from the group of journals previously classified as economics journals. We iterate this procedure in stage two until no more journals shift between the economics and non-economics group. The idea is to classify a journal as an economics journal if it is cited more by economics journals than by non-economics journals, where these are recursively defined.

We then repeat the exercise in stage two by starting again with our initial classification from stage one, but instead classifying a journal as an economics journal if at least half the citations a journal makes are to the group of journals previously classified as economics journals. We call this stage 2(b). The idea with this alternative to stage 2(a) is to classify a journal as an economics journal if it cites more economics journals than non-economics journals. Again, we repeat the iterations in stage 2(b) until no more journals shift between

[10]This leaves us with 188, 187, 189, 195 and 198 economics journals from the 2015, 2016, 2017, 2018 and 2019 *JCR* data respectively. The variation over time is due to the changes in the number of journals included in the *JCR* data across years.

the economics and non-economics group.[11]

Finally, we take the intersection of the final sets of journals in stage 2(a) and 2(b) as our set of economics journals. This results in 193, 197, 200, 190 and 197 economics journals from the 2015, 2016, 2017, 2018 and 2019 *JCR* data respectively. The journals classified as non-economics are identified with dark shading in Table B.1 in the Online Appendix.

2.2.2 Non-standard journals

To create a baseline set of journals, we begin with the group of economics journals classified according to the approach described immediately above. We then exclude journals that do not follow standard submission and refereeing processes. Specifically, after reviewing the submission pages and instructions to authors, we identify fifteen journals as non-standard in that they do not have open submission policies (anyone can submit an article) and/or they do not have a standard policy of sending articles (which are not desk rejected) to independent referee(s).[12] The remaining (standard) economics journals will also be referred to as our baseline journals in the rest of this paper. The journals classified as non-standard are identified with light shading in Table B.1 in the Online Appendix. To summarize, other than our baseline journals (i.e., standard economics journals), we also have non-standard (economic) journals and non-economics journals.

2.3 Methodology

Having defined a baseline set of economics journals, we apply two different approaches to calculate impact factors and hence journal rankings.

[11] The stage 2 outcome is unique given our classification in stage 1. Regardless of which stage 2 method we used, or which year we considered, the set of economics v.s. non-economics journals converges within eight iterations in the second stage.

[12] The following journals are identified as non-standard: *AEA Papers and Proceedings, Annals of Economics and Finance, Annual Review of Economics, Annual Review of Resource Economics, Asian Economic Papers, Brookings Papers on Economic Activity, Econ Journal Watch, Economic Policy, Economics-The Open Access Open-Assessment E-Journal, Federal Reserve Bank of St Louis Review, Journal of Economic Literature, Journal of Economic Perspectives, NBER Macroeconomics Annual, Review of Environmental Economics and Policy*, and *World Bank Research Observer*.

2.3.1 Invariant ranking methodology

Consistent with the existing literature, we first remove self-citations (defined as citations from the same journal to itself) and adjust for journal size.[13] We then adjust for reference intensity, i.e., a measure of the degree to which a given journal cites other articles on average, following Palacios-Huerta and Volij (2004), by normalizing the citation counts by the number of citations from a given journal over the summation of citations over all journals.

Formally, for each year t, we denote the impact factor for journal j obtained in the i^{th} iteration from this methodology by a superscript Inv (for invariance). Before the first iteration starts, i.e., $i = 0$, we have

$$I^{Inv}_{j,0,t} = \frac{1}{W_{j,t}} \sum_{k=1,k\neq j}^{N_t} \left(\frac{C_{j,k,t}}{\frac{1}{w_{k,t}} \sum_{r=1}^{N_t} C_{r,k,t}} \right) \tag{1}$$

and from the first iteration onward, i.e., $i \geq 1$, we have

$$I^{Inv}_{j,i,t} = \frac{1}{W_{j,t}} \sum_{k=1,k\neq j}^{N_t} \left(\frac{C_{j,k,t} I^{Inv}_{k,i-1,t}}{\frac{1}{w_{k,t}} \sum_{r=1}^{N_t} C_{r,k,t}} \right), \tag{2}$$

where $C_{j,k,t}$ represents the total number of citations of articles published in journal j over the 5-year window, i.e., year $t-4$ to year t, by articles published in journal k in year t; N_t denotes the total number of journals in year t; $w_{k,t}$ denotes the number of articles published in journal k in year t; and $W_{j,t}$ denotes the total number of articles published in journal j from year $t-4$ to year t.

As is clear from (1), all journals are given identical impact factors in the first step of the procedure, and therefore the citations received by each journal are used without any quality adjustment to update the impact factors in the first iteration. However, from the first iteration onward, the updated impact factors from the previous step are used to adjust the citations received by each journal in the updating process, as can be seen in (2). The summation expression over r in the denominator of (1) and (2) captures the adjustment for reference intensity of the citing journal. With this normalization, the resulting impact

[13] Following Kalaitzidakis et al. (2011), journal size is defined as the number of regular articles published in the journal in a year.

factors are invariant to the reference intensity in an average article in any citing journal. This iterative updating process continues until convergence is reached for a particular year in the sense that there are no further changes in the relative rankings of journals in that year based on their impact factors. The result will be a unique set of impact factors. Henceforth, we will refer to the invariant method of ranking journals defined by (1) and (2), and the resulting ranking of impact factors as our invariant ranking methodology.

2.3.2 Rankings based on the Top-5

As an alternative to the invariant method, we propose the top-5 impact factor as

$$I_{j,t}^{\text{Top-5}} = \frac{1}{W_{j,t}} \sum_{k \in J, k \neq j} C_{j,k,t},$$

where $C_{j,k,t}$ is the total number of citations of articles published in journal j over the years $t-4$ to year t by articles published in journal k in year t, and $W_{j,t}$ is the total number of articles in journal j over years $t-4$ to year t, and moreover, J is a set comprising the top-5 journals, namely, *AER, ECMA, JPE, QJE,* and *RES*. Similar to the practice for our invariant rankings, we remove self-citations as well as the *AEA Papers and Proceedings* from the articles and citations from the *AER*. We then rank journals according to the resulting impact factor for a particular year.

One of the advantages of this top-5 method is the comparative ease of constructing rankings relative to the invariant method. At the same time, it is important to note that the top-5 journals cover the major fields of economics and have broadly similar perceived quality levels (after removing *AEA Papers and Proceedings* from *AER*).

3 Journal Ranking Results

In this section we present our overall journal ranking results using: (i) our invariant method on the baseline set of journals; (ii) our top-5 alternative approach; and (iii) various alternatives to test the robustness of our results, and our ranking of the new journals in particular.

3.1 Invariant journal rankings

Column (1) of Table 1 presents the geometric mean across the annual rankings from 2015–2019 of the baseline journals based on the invariant method.[14] In the interest of space, we present only the top 100 journals, with the ranking for the remaining journals given in Table B.3 in the Online Appendix. It is reassuring that the usual top-5 journals, constitute the top-5 journals in Table 1, with the order being *QJE, AER, ECMA, RES* and *JPE*.

The new journals we consider are ranked: *AEJ-Macro* (6^{th}); *AEJ-Applied* (7^{th}); *JEEA* (8^{th}); *AEJ-Policy* (9^{th}); *TE* (11^{th}); *AEJ-Micro* (14^{th}); and *QE* (16^{th}). In Section 4, we will explore possible explanations for why these relatively new journals have performed so well in terms of quality-adjusted citations.

Well-established top field and general journals outside of the top-5 are also highly ranked, although most of them have been pushed down in their ranking by the entry of the new journals. For example, the *Journal of Labour Economics* is ranked 10^{th}, the *Review of Economics and Statistics* is ranked 12^{th}, and the *Journal of Monetary Economics* is ranked 13^{th}. Some well-established top field journals that were highly ranked in earlier ranking studies appear to have slipped in the rankings, including the *Journal of Economic Theory* at 24^{th}, the *Journal of Public Economics* at 25^{th}, the *Journal of Econometrics* at 26^{th}, and *Games and Economic Behavior* at 33^{rd}.

3.2 Top-5 ranking results

Column (5) of Table 1 presents the analogous results using the top-5 method of ranking journals.[15]

The usual top-5 journals once again rank in the first five spots of this ranking, but the order is now *QJE*, *JPE*, *ECMA*, *AER*, and *RES*. Further, the new journals perform even better than in on our invariant journal rankings: *AEJ-Applied* (6^{th}); *AEJ-Macro* (7^{th}); *TE* (8^{th}); *JEEA* (9^{th}); *AEJ-Policy* (10^{th}); *AEJ-Micro* (12^{th}); and *QE* (13^{th}).

[14] The year-by-year rankings are given in Table B.2 in the Online Appendix.

[15] The year-by-year rankings for the top-5 method are in Table B.4 in the Online Appendix. About one half of the baseline journals used for our invariant rankings attract no citations from the top-5 journals over the years we study. As a result, their top-5 impact factors are equal to zero and all of them are assigned with the same ranks (and are omitted from Table B.4).

Table 1: Journal Rankings across Alternative Methods

Journal	Invariant Method	Removal of Reference Intensity	Inclusion of Non-Standard Journal	Full Set of JCR Journals	Top-5 Method	Invariant Top-5 Method
QUARTERLY JOURNAL OF ECONOMICS	1	1	1	1	1	1
AMERICAN ECONOMIC REVIEW	2	2	2	2	4	3
ECONOMETRICA	3	5	3	3	3	4
REVIEW OF ECONOMIC STUDIES	4	4	4	5	5	4
JOURNAL OF POLITICAL ECONOMY	5	3	5	4	2	2
AMERICAN ECONOMIC JOURNAL–MACROECONOMICS	6	6	7	6	7	7
AMERICAN ECONOMIC JOURNAL–APPLIED ECONOMICS	7	7	6	7	6	6
JOURNAL OF THE EUROPEAN ECONOMIC ASSOCIATION	8	8	9	9	9	10
AMERICAN ECONOMIC JOURNAL–ECONOMIC POLICY	9	9	8	8	10	9
JOURNAL OF LABOR ECONOMICS	10	10	10	10	11	11
THEORETICAL ECONOMICS	11	12	11	12	8	8
REVIEW OF ECONOMICS AND STATISTICS	12	13	12	11	15	15
JOURNAL OF MONETARY ECONOMICS	13	11	13	13	14	14
AMERICAN ECONOMIC JOURNAL–MICROECONOMICS	14	14	14	15	12	12
JOURNAL OF HUMAN RESOURCES	15	15	15	14	22	22
QUANTITATIVE ECONOMICS	16	16	16	16	13	13
JOURNAL OF ECONOMIC GROWTH	17	17	17	17	18	18
ECONOMIC JOURNAL	18	19	18	19	21	23
RAND JOURNAL OF ECONOMICS	19	20	19	18	16	16
REVIEW OF ECONOMIC DYNAMICS	20	18	20	21	17	17
JOURNAL OF BUSINESS & ECONOMIC STATISTICS	21	25	21	20	30	30
JOURNAL OF INTERNATIONAL ECONOMICS	22	21	22	22	19	19
INTERNATIONAL ECONOMIC REVIEW	23	22	23	23	23	21
JOURNAL OF ECONOMIC THEORY	24	23	24	24	20	20
JOURNAL OF PUBLIC ECONOMICS	25	24	25	25	24	24
JOURNAL OF ECONOMETRICS	26	29	26	26	27	26
EXPERIMENTAL ECONOMICS	27	28	28	29	42	39
ECONOMETRIC THEORY	28	39	29	32	37	35
JOURNAL OF DEVELOPMENT ECONOMICS	29	26	27	28	25	25
JOURNAL OF APPLIED ECONOMETRICS	30	33	32	30	52	48
IMF ECONOMIC REVIEW	31	27	30	27	26	28
JOURNAL OF THE ASSOCIATION OF ENVIRONMENTAL AND RESOURCE ECONOMISTS	32	31	31	31	62	65
GAMES AND ECONOMIC BEHAVIOR	33	32	33	35	28	27
EUROPEAN ECONOMIC REVIEW	34	30	35	38	40	37
ECONOMETRICS JOURNAL	35	49	34	37	47	46
ECONOMIC THEORY	36	43	36	39	43	40
JOURNAL OF MONEY CREDIT AND BANKING	37	35	38	33	50	45
JOURNAL OF INDUSTRIAL ECONOMICS	38	38	40	41	34	33
JOURNAL OF URBAN ECONOMICS	39	37	37	36	48	50
JOURNAL OF LAW & ECONOMICS	40	34	39	34	29	31
JOURNAL OF RISK AND UNCERTAINTY	41	45	44	43	35	38
JOURNAL OF HEALTH ECONOMICS	42	40	41	42	54	49
ECONOMIC DEVELOPMENT AND CULTURAL CHANGE	43	36	42	40	36	34
SCANDINAVIAN JOURNAL OF ECONOMICS	44	42	46	47	65	60
ECONOMICA	45	41	45	46	38	36
JOURNAL OF FINANCIAL ECONOMETRICS	46	64	50	45	70	65
JOURNAL OF POLICY ANALYSIS AND MANAGEMENT	47	44	43	44	41	47
JOURNAL OF ECONOMIC HISTORY	48	47	47	48	32	29
JOURNAL OF ENVIRONMENTAL ECONOMICS AND MANAGEMENT	49	48	48	49	64	59
ECONOMETRIC REVIEWS	50	65	51	52	86	80
WORLD BANK ECONOMIC REVIEW	51	46	49	50	44	42
INTERNATIONAL JOURNAL OF INDUSTRIAL ORGANIZATION	52	55	52	53	56	55

Table 1: Journal Rankings across Alternative Methods

Journal	Invariant Method	Removal of Reference Intensity	Inclusion of Non-Standard Journal	Full Set of JCR Journals	Top-5 Method	Invariant Top-5 Method
JOURNAL OF ECONOMIC BEHAVIOR & ORGANIZATION	53	53	54	54	67	69
JOURNAL OF LAW ECONOMICS & ORGANIZATION	54	50	53	51	53	51
LABOUR ECONOMICS	55	51	56	57	58	58
JOURNAL OF POPULATION ECONOMICS	56	60	57	55	97	98
QME-QUANTITATIVE MARKETING AND ECONOMICS	57	57	59	62	33	32
ECONOMIC INQUIRY	58	58	58	58	73	71
JOURNAL OF ECONOMIC DYNAMICS & CONTROL	59	59	62	61	76	74
EDUCATION FINANCE AND POLICY	60	52	61	63	59	64
CANADIAN JOURNAL OF ECONOMICS-REVUE CANADIENNE D ECONOMIQUE	61	56	60	59	57	53
EXPLORATIONS IN ECONOMIC HISTORY	62	61	55	56	51	43
OXFORD BULLETIN OF ECONOMICS AND STATISTICS	63	70	65	65	99	99
JOURNAL OF ECONOMICS & MANAGEMENT STRATEGY	64	66	64	64	87	82
JOURNAL OF ECONOMIC SURVEYS	65	67	63	60	110	111
JOURNAL OF MATHEMATICAL ECONOMICS	66	68	67	68	72	73
AMERICAN LAW AND ECONOMICS REVIEW	67	54	68	67	31	41
INTERNATIONAL JOURNAL OF GAME THEORY	68	73	69	71	81	85
ECONOMICS OF EDUCATION REVIEW	69	63	66	66	82	87
NATIONAL TAX JOURNAL	70	62	70	69	46	54
SOCIAL CHOICE AND WELFARE	71	78	73	73	102	102
REGIONAL SCIENCE AND URBAN ECONOMICS	72	71	71	70	98	96
THEORY AND DECISION	73	74	75	75	75	75
JOURNAL OF HUMAN CAPITAL	74	69	72	72	74	61
MACROECONOMIC DYNAMICS	75	72	74	77	85	84
REVIEW OF ECONOMIC DESIGN	76	86	77	84	63	62
GENEVA RISK AND INSURANCE REVIEW	77	82	82	79	N.C.	N.C.
JOURNAL OF DEMOGRAPHIC ECONOMICS	78	83	80	80	N.C.	N.C.
INTERNATIONAL TAX AND PUBLIC FINANCE	79	75	79	78	84	86
OXFORD ECONOMIC PAPERS-NEW SERIES	80	80	78	76	108	105
JOURNAL OF ECONOMIC INEQUALITY	81	76	83	83	49	52
REVIEW OF INCOME AND WEALTH	82	81	76	74	96	94
AMERICAN JOURNAL OF HEALTH ECONOMICS	83	77	84	86	39	44
JOURNAL OF ECONOMIC PSYCHOLOGY	84	88	88	89	114	113
ECONOMIC HISTORY REVIEW	85	79	81	82	79	81
JOURNAL OF REGIONAL SCIENCE	86	85	87	81	55	56
ECONOMICS LETTERS	87	90	91	91	104	106
HEALTH ECONOMICS	88	84	89	90	100	104
JOURNAL OF PUBLIC ECONOMIC THEORY	89	95	93	97	89	95
EUROPEAN REVIEW OF ECONOMIC HISTORY	90	100	86	87	N.C.	N.C.
MATHEMATICAL SOCIAL SCIENCES	91	113	96	103	103	103
PUBLIC CHOICE	92	98	94	98	101	100
ECONOMICS AND PHILOSOPHY	93	97	85	85	66	76
JOURNAL OF COMPARATIVE ECONOMICS	94	89	95	94	91	92
SOUTHERN ECONOMIC JOURNAL	95	92	90	93	88	83
REVIEW OF WORLD ECONOMICS	96	87	99	100	80	76
B E JOURNAL OF ECONOMIC ANALYSIS & POLICY	97	93	98	101	105	101
REVIEW OF NETWORK ECONOMICS	98	91	100	108	N.C.	N.C.
ECONOMICS & POLITICS	99	99	101	107	70	78
FISCAL STUDIES	100	96	104	109	90	89

Notes: Journals are ranked based on the geometric means of their annual rankings from 2015–2019. The order of the journals is based on the invariant method (the first column). Here, N.C. means that the journal was not cited by any top-5 journal in any year of 2015–2019.

The rankings of other well-established journals using the top-5 method are largely similar to the corresponding rankings using the invariant method. Specifically, we find that the largest discrepancies among the top-30 journals from switching from our invariant method to our top-5 method are the *Journal of Human Resources* (falls from 15^{th} to 22^{nd}), *Journal of Business & Economics Statistics* (falls from 21^{st} to 30^{th}), *Experimental Economics* (falls from 27^{th} to 42^{nd}), *Econometric Theory* (falls from 28^{th} to 37^{th}), and the *Journal of Applied Econometrics* (falls from 30^{th} to 52^{nd}). On the other hand, several journals rise in the rankings: the *Journal of Development Economics* (rises from 29^{th} to 25^{th}), *IMF Economic Review* (rises from 31^{st} to 26^{th}), *Games and Economic Behavior* (rises from 33^{rd} to 28^{th}), and the *Journal of Law and Economics* (rises from 40^{th} to 29^{th}).

We observe that none of the journals with impact factors of zero using the top-5 method enter the top-75 of journals in the invariant ranking. This implies that being able to attract citations from top-5 journals is clearly correlated with being ranked within the top 75 of all economics journals. Moreover, the ranking of journals that receive only a few citations from the top-5 journals over any 5-year window is extremely noisy in the sense that these citations may be driven by only one or two articles. Therefore, the top-5 journal ranking is useful if we are looking at rankings of the leading group of journals, but is less useful for lower-ranked journals. For example, the top 20 journals using our invariant method remain in the top 20 using the top-5 method, with the exception of, the *Economic Journal* and the *Journal of Human Resources*, which are ranked by the top-5 method as 21^{st} and 22^{nd}, respectively.

Our results suggest that given that the top-5 method is much less data intensive than the invariant method, researchers may be able to rely on the top-5 method for the set of top-30 or so economics journals.[16] Indeed, in Section 4, we will use the top-5 method to construct dynamic impact factors over a longer time period than that afforded by our *JCR* data, in order to study the rise of the new journals. Since all of the journals we consider are in the top-30 of the invariant method, focusing on the top-5 rankings only is not an issue here.

[16] We will provide more evidence for this in the next section.

3.3 Robustness of the rankings

To supplement and cross-validate our invariant rankings, we examine the robustness of our rankings based on the iterative method to three variations in our methodology.

1. **Removal of reference intensity adjustment**

   Most of the earlier ranking studies followed the standard iterative eigenfactor approach, but did not control for the reference intensity in the citing journals. Without adjusting for reference intensity, the formula for the impact factor of journal j in the i^{th} iteration for year t simplifies to

$$I_{j,0,t}^{NoRI} = \frac{1}{W_{j,t}} \sum_{k=1,k\neq j}^{N_t} C_{j,k,t} \quad \text{and} \quad I_{j,i,t}^{NoRI} = \frac{1}{W_{j,t}} \sum_{k=1,k\neq j}^{N_t} C_{j,k,t} I_{k,i-1,t}^{NoRI},$$

   where $C_{j,k,t}$, N_t and $W_{j,t}$ follow the earlier definitions. We present ranking results without controlling for reference intensity in column (2) of Table 1.

2. **Inclusion of non-standard economics journals**

   We add back non-standard economics journals to our baseline journals and replicate our invariant ranking. For ease of comparison with our existing results, after generating the annual impact factors of the invariant method with the inclusion of non-standard journals, we remove the non-standard journals from the results we present in column (3) of Table 1.

3. **Full set of *JCR* journals**

   In column (4) of Table 1, we consider the impact of adding back non-standard economics journals and the journals from *JCR* that we classified as non-economics when we use the invariant approach. Thus, we are using the full set of *JCR* journals under their economics classification. As above, here we show only the rankings of our baseline journals; the rankings of the non-standard economics journals (light shading) and the non-economics journals (dark shading) are given in Table B.1 of the Online Appendix.

4. **Invariant top-5 method**

   In our top-5 method we used the unweighted sum of citations from top-5 journals,

thus treating each of the top-5 journals as equal. Column (6) of Table 1 adjusts for differences in impact factors and reference intensities of the top-5 journals. Specifically, we apply our invariant method to the top-5 journals. We then rank journals outside the top-5 by adjusting citations by articles published in top-5 journals by their respective invariant top-5 impact factors. There is very little difference between columns (5) and (6) of Table 1, which is why we stick to the simple top-5 ranking in what follows.[17]

To see how much our invariant and top-5 rankings moved over time, we calculated the correlations across the yearly rankings. As shown in Online Appendix Table B.5(a), these were never below 0.94 for invariant rankings and were never below 0.86 for top-5 rankings, suggesting both sets of rankings are quite stable over time.

Next, we calculated the correlations between the invariant method and our top-5 method for the top 20 journals, the top 30 journals, the top 40 journals, the top 50 journals, and the top 75 journals.[18] The respective correlations were 0.928, 0.953, 0.935, 0.914, and 0.900. The maximum correlation when we consider any number of top journals is obtained for the top 32 journals. These results suggest that the top-5 method is a good proxy for the invariant method for the top 30 or so journals.

4 Mechanisms

We propose regression approaches to investigate the extent to which the high rankings of the new journals persist once we control for various factors.

4.1 Comparison journals

We first pair each new journal with suitable comparison journals, i.e., the top-ranked journals closest in theme or subject matter to each of the new journals. Specifically, we use:

- For *AEJ-Applied*: *Review of Economics and Statistics (REStat)*, *Journal of Labour Economics (JOLE)*, *Journal of Development Economics (JDE)*;

[17] We provide more details on this invariant top-5 method in Section B.1 of the Online Appendix.
[18] We summarize the detailed results in Online Appendix Table B.5(b).

- For *AEJ-Macro*: *Journal of Monetary Economics (JME)*, *Journal of Economic Growth (JEG)*, *Review of Economic Dynamics (RED);*
- For *AEJ-Micro*: *Journal of Economic Theory (JET)*, *RAND Journal of Economics (RAND)*, *Games and Economic Behavior (GEB);*
- For *AEJ-Policy*: *REStat*, *Journal of Public Economics (JPubE)*, *Journal of Human Resources (JHR);*
- For *QE*: *Journal of Econometrics (JOE)*, *Journal of Applied Econometrics (JAE)*, *Journal of Business & Economic Statistics (JBES);*
- For *TE*: *JET*, *GEB.*
- For *JEEA*: We use as comparisons the top general purpose journals outside the top-5, which we take as *Economic Journal (EJ)* and *International Economic Review (IER);*

All the new and comparison journals are in the top 35 when we use the invariant method and when we use the top-5 method, with the exception of the *JAE*.

4.2 Construction of the dependent variable

A natural candidate for the dependent variable is a journal's annual impact factor. However, the citation data from the *JCR* is only given in 5-year windows, such that we have citations in 2015 of articles published in 2011–2015, citations in 2016 of articles published in 2012–2016, and likewise through to citations in 2019 of articles published in 2015–2019. This data limitation poses several problems for our regression analysis: (i) the data does not fully cover the periods in which the new journals first launched; (ii) the error terms of the regressions will have strong autocorrelation since there is so much overlap in the years covered by each dependent variable[19]; and (iii) the data does not allow us to measure the effect of (and so control for) the yearly characteristics of journals on the impact factor since there is no way to attribute citations to publications in a particular year of the 5-year window.

We use variants of the top-5 rankings to address these problems. This will allow us to: (i) collect earlier top-5 citation data for the new journals and the comparison journals; (ii)

[19]For example, consider the impact factors for 2015 and 2016. Publications in 2012, 2013, 2014 and 2015 will contribute to both the 2015 and 2016 impact factors.

use shorter windows to reduce the autocorrelation problem and create more observations for the regressions; and (iii) switch to a forward impact factor measure, detailed next, which calculates the number of times articles published in a particular journal in a particular year are cited in top-5 journals in the current and subsequent years.

To calculate the respective forward impact factors, we proceed as follows. First, we collect the citations contained in the *Web of Science* in the top-5 journals of each of the new and comparison journals in a given year.[20] The y-year forward impact factor for journal j in year t is

$$F_{j,t}(y) = \frac{1}{w_{j,t}} \sum_{k \in J} \sum_{m=t}^{t+y-1} c_{j,k,t,m}, \tag{3}$$

where $c_{j,k,t,m}$ is the number of citations of articles published in journal j in year t by articles published in journal k in year m, while $w_{j,t}$ is the number of articles published in journal j in year t. In our application, the set J consists of the top-5 journals.[21] For example, if we want to construct the forward impact factor for the 2009 volume of *AEJ-Macro* over the period 2009–2011 (i.e. $y = 3$), we count the number of citations of articles in the 2009 volume of *AEJ-Macro* by the top-5 journals published in 2009–2011. We then divide this number by the number of articles that were published in the 2009 volume of *AEJ-Macro*.

We can similarly define the y-year backward impact factor for journal j in year t with a y-year window as

$$B_{j,t}(y) = \left[\sum_{m=t-y+1}^{t} w_{j,m} \right]^{-1} \sum_{k \in J} \sum_{m=t-y+1}^{t} c_{j,k,m,t}, \tag{4}$$

where $c_{j,k,t,m}$, $w_{j,x}$ and J are defined as above. Based on this definition, our top-5 rankings in column (5) of Table 1 are equivalent to 5-year backward impact factors (the current year plus the previous four years), where note the previously defined $C_{j,k,t}$ satisfies $C_{j,k,t} = \sum_{m=t-4}^{t} c_{j,k,m,t}$.

[20] We collect data for each of the new journals starting in the specific year the journal was first published, and collect data for the relevant comparison journals six years prior to this. Specifically, we collected the annual number of citations by each of the top-5 journals of the articles published in each year during 2003–2019 for the *JEEA* and 1997–2019 for the *JEEA* comparisons; 2006–2019 for the *TE* and 2000–2019 for the *TE* comparisons; 2009–2019 for the *AEJ*s and 2003–2019 for the *AEJ* comparisons; and 2010–2019 for the *QE* and 2004–2019 for the *QE* comparisons. The details for this data collection are given in Section A.2 of the Online Appendix.

[21] Again, we do not include citations from *AEA Papers and Proceedings* in this impact factor.

To better understand the difference between using the backward impact factors defined in (4) and our new forward impact factors defined in (3), consider the following example. Suppose we are interested in citations by articles published in top-5 journals to articles published in the *JEEA*. Our y-year backward impact factor focuses on top-5 publications in a given year and looks at how many times they cited *JEEA* articles published in the current year and the $y-1$ previous years. In contrast, the y-year forward impact factor focuses instead on *JEEA* publications in a given year and looks at how many times they are cited by articles published in the top-5 journals published in the current year and the $y-1$ subsequent years. Thus, the forward impact factor focuses on the publication year of the journal being cited, allowing us to explore, for example, the impact of the *JEEA* (or any other journal) immediately following its launch.

As we are primarily interested in exploring how the new journals and their comparison journals did in each year as well as overall, the forward impact factors are our preferred measure of journal performance in the regression analysis. We set $y = 3$ given that the choice of a 3-year window balances our need for more observations, which requires a low value of y, while allowing us to aggregate over a sufficient number of years (three in this case) to make the impact factors more precise.[22] Since the 3-year forward impact factors require data on the current year and two future years, and our data ends in 2019, the last year in which we can measure the 3-year impact factor is 2017.

In Table 2 below we show the ranks of the new and comparison journals based on the 3-year backward and 3-year forward impact factors using the top-5 method, as well as the 5-year (backward) impact factors using the invariant and top-5 methods; these journals are now ranked within the set of new and comparison journals. Table 2 illustrates that the rankings of this subset of journals is essentially independent of the ranking method, and in particular, the new journals are always ranked higher than any of their comparison journals.

Online Appendix Table B.6 shows the Spearman's rank correlation coefficients across the four different ranking outcomes in Table 2. These correlation coefficients are very close to one, reinforcing the result that the within-group ranks are independent of the ranking

[22] A 3-year window for the backward impact factor also reduces the autocorrelation problem relative to the 5-year window used in our invariant ranking.

method used. Hence, we will focus on the regression analysis based on the 3-year forward impact factors (as noted above, we will use the 3-year backward impact factors for robustness checks). Given our focus on 3-year impact factors, throughout the rest of the paper, for expositional ease we replace $F_{j,t}(3)$ by $F_{j,t}$ and $B_{j,t}(3)$ by $B_{j,t}$ in what follows; we also refer to 3-year impact factors simply as impact factors from now on (whenever doing so does not create confusion).

Table 2: Rankings within the Set of New and Comparison Journals

Journal	Ranking Based on 3-Year Forward Impact Factors	Ranking Based on 3-Year Backward Impact Factors	Based on Invariant Method (from Column (1) in Table 1)	Based on Top-5 Method (from Column (5) in Table 1)
	(1)	(2)	(3)	(4)
AMERICAN ECONOMIC JOURNAL–MACROECONOMICS	1	1	1	2
Journal of Monetary Economics	9	11	8	9
Journal of Economic Growth	12	12	12	13
Review of Economic Dynamics	13	14	15	12
AMERICAN ECONOMIC JOURNAL–APPLIED ECONOMICS	3	3	2	1
Review of Economics and Statistics	10	10	7	10
Journal of Labor Economics	6	5	5	6
Journal of Development Economics	21	20	21	19
AMERICAN ECONOMIC JOURNAL–ECONOMIC POLICY	5	6	4	5
Review of Economics and Statistics	10	10	7	10
Journal of Public Economics	19	18	19	18
Journal of Human Resources	17	15	10	16
AMERICAN ECONOMIC JOURNAL-MICROECONOMICS	8	7	9	7
Journal of Economic Theory	14	13	18	14
RAND Journal of Economics	11	9	14	11
Games and Economic Behavior	20	21	23	21
THEORETICAL ECONOMICS	2	2	6	3
Journal of Economic Theory	14	13	18	14
Games and Economic Behavior	20	21	23	21
QUANTITATIVE ECONOMICS	7	8	11	8
Journal of Econometrics	18	19	20	20
Journal of Applied Econometrics	23	23	22	23
Journal of Business & Economic Statistics	22	22	16	22
JOURNAL OF THE EUROPEAN ECONOMIC ASSOCIATION	4	4	3	4
Economic Journal	16	16	13	15
International Economic Review	15	17	17	17

Notes: Here we show the relative rankings for journals in the set of new and comparison journals.

4.3 Performance of the new society journals over time

Here we investigate how the new journals performed, since their inception, relative to their comparison journals. Figure 1 shows the time series of the forward impact factor for each of the new *AEA* journals and the average value of their respective comparison journals. We define the forward impact factors of the *average* of the comparison journals for a given new journal j

$$\bar{F}_{j,t} = \frac{1}{n_j^{\text{Com}}} \sum_{s \in S_j^{\text{Com}}} F_{s,t}, \tag{5}$$

where S_j^{Com} and n_j^{Com} denote the set of comparison journals and the number of these comparison journals, respectively, for a given new journal j. Note that the x-axis in these figures represents the calendar year of the journal publications (i.e., year t).

Figure 1: Forward Impact Factors: *AEA* Journals and Comparison Journals

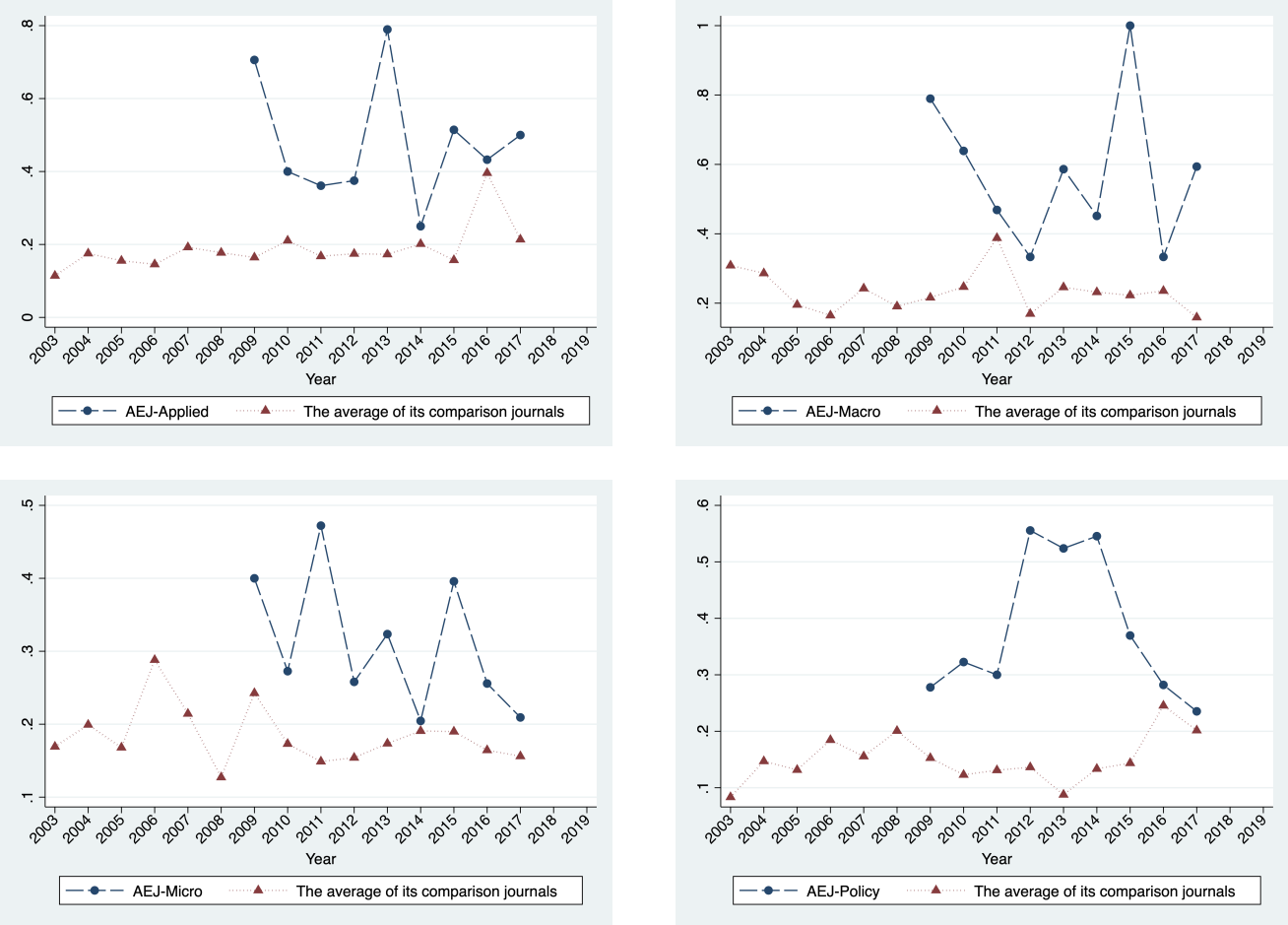


Figure 2: Forward Impact Factors: *ES* Journals and Comparison Journals

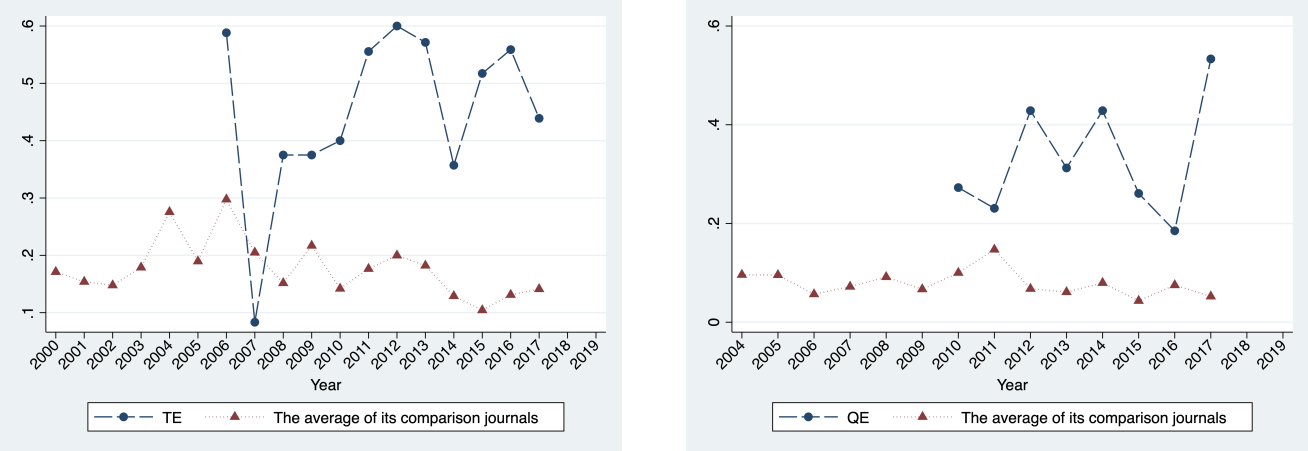
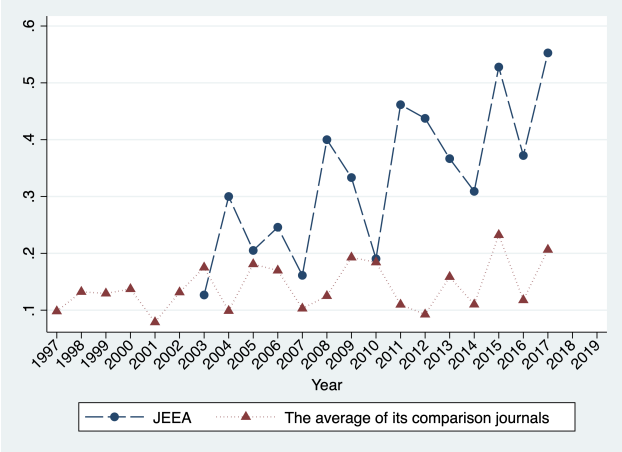


Figure 3: Forward Impact Factors for *JEEA* and its Comparison Journals



From Figure 1, we see that all the *AEJ* journals achieved higher forward impact factors than the average of their respective comparison journals over the sample period. For the *ES* journals, Figure 2 indicates that both *QE* and *TE* are above the average of their respective comparison journals in all years, except *TE* in 2007. In Figure 3, we present the analogous results for the *JEEA* versus the average of its comparison journals. Note that the *JEEA* took one year to surpass its comparison journals, and it widened the gap in subsequent years.[23]

[23]To examine the robustness of the results depicted in these figures, we replicate them using the backward impact factors. These results are in Section C.2.1 of the Online Appendix, and have the same implications as those in Figures 1–3.

4.4 Regression approaches to analyzing the impact factors

First, we ask whether we can explain at least some of the differences in impact factors between the new journals and the control journals by conditioning on observable factors that vary across journals. Specifically, we control for the following for each journal: (i) the number of articles published per year; (ii) the editors' average professional qualifications at the launch of the respective new journal; (iii) the editors' average editing experience at the launch of the respective new journal; and (iv) whether a journal is published by a society that holds a major conference.

We then ask if the *AEA* journals received preferential treatments in terms of citations from the *AER*, and if the *ES* journals received preferential treatment from *ECMA*. Answering these questions requires a second regression approach described below to explore: (i) whether such favorable treatment occurs; and (ii) how the new society coefficients change when we attempt to eliminate the effects of this favorable treatment on impact factors.

4.4.1 Controlling for observable factors

The raw new journal effects are first captured in the following simple regressions

$$F_{j,t} = \alpha_0 + \alpha_1 d_j^{New} + \alpha_2 d^{Year} + \epsilon_{j,t}, \quad (6)$$

$$F_{j,t} = \beta_0 + \beta_{11} d_j^{AEA} + \beta_{12} d_j^{ES} + \beta_{13} d_j^{EEA} + \beta_2 d^{Year} + e_{j,t}, \quad (7)$$

where $F_{j,t}$ is defined above. Further, d_j^{New} equals one if journal j is a new journal (*AEJ-Macro/Micro/Applied/Policy*, *JEEA*, *TE* and *QE*) but zero if journal j is a comparison journal, d_j^{AEA} equals one if journal j is affiliated with the *AEA* and is zero otherwise, d_j^{ES} equals one if journal j is affiliated with the *ES* and is zero otherwise, and d_j^{EEA} equals one if the journal is the *JEEA* and is zero otherwise. Further, d^{Year} is a vector of year dummies that will capture, among other things, long-term trends.

We then add a vector of observable characteristics x_j to (6) and (7) to obtain:

$$F_{j,t} = a_0 + a_1 d_j^{New} + a_2 d^{Year} + a_3 x_j + \mu_{j,t}, \quad (8)$$

$$F_{j,t} = b_0 + b_{11} d_j^{AEA} + b_{12} d_j^{ES} + b_{13} d_j^{EEA} + b_2 d^{Year} + b_3 x_j + u_{j,t}. \quad (9)$$

We will not describe the estimated coefficients $\hat{a}_3$ and $\hat{b}_3$ as necessarily representing causal effects because components of x_j may be correlated with $u_{j,t}$ and $\mu_{j,t}$. For example, a journal may institute changes because it has an editor who is more proactive and creative in coming up with policies to improve the journal, and hence this component of x_j may simply be acting as a signal of this editor's unobserved characteristics. In spite of this, $\hat{a}_3$ and $\hat{b}_3$ may still be of interest since: (i) they show which journal characteristics are correlated with impact factors; and (ii) readers may want to treat some elements of $\hat{a}_3$ and $\hat{b}_3$ as representing causal effects.

The crucial issue is which variables to include in the vector x_j. First, we include the number of articles published by the journal in year t, since a journal may restrict the number of articles published as a way of maintaining a higher average quality of its articles. We also include in x_j, for the new journals, the average observable characteristics of their initial editors, and for each set of comparison journals, their average observable editor characteristics at the time that the respective new journal started. We focus on the initial editors' characteristics since the future editors' characteristics may be affected by the journal's early success, in which case these future editors' characteristics would be correlated with the error terms in (8)–(9).

Our first component of the editor characteristics is based on average measures of the editors' previous editing experience. Editors with previous editing experience may have a better idea of which articles are best for the journal, and may also have a substantial network of high-quality referees. Specifically, we construct four measures of editing experience:[24]

(a) *Editing experience with top-5 journals in a key role*: We measure the average number of years as an editor/co-editor of a top-5 journal in the ten years prior to the launch of the new journal.[25]

(b) *Editing experience with top-5 journals in a secondary role*: We measure the average

[24]We also prepared a parallel set of four measures but using a 5-year window for the editors' average characteristics. This did not change the results. See Table C.1 in the Online Appendix for their mean values.

[25]If someone is an editor of multiple (top-5) journals, we add together their total years of editing these multiple journals to work out their average measure. We apply this same principle for the other three editing experience variables below.

number of years as an associate editor/editorial board member of a top-5 journal in the ten years prior to the launch of the new journal.

(c) *Editing experience with the new or comparison journals in a key role*: We measure the average number of years as an editor/co-editor of the new journals or their comparison journals in the ten years prior to the launch of the new journal.

(d) *Editing experience with the new or comparison journals in a secondary roles*: We measure the average number of years as an associate editor/editorial board member of the new journals or their comparison journals in the ten years prior to the launch of the new journal.

Our second set of editor characteristics consists of mean values of measures for each editor's standing, which we postulate depends on (at the launch of the new journal) the editor's seniority; their publication record over the previous ten years; and the ranking of the department they are affiliated with. We specifically construct the average values of these three variables at the launch of the new journal across its editors:

(e) *Seniority*: We compute the editor's seniority as the difference between the calendar year when the editor obtained their Ph.D. and the year in which the new journal launched.

(f) *Publication performance over the previous 10 years*: We measure each editor's publication performance by averaging their publications in top-5 journals[26] in the ten years prior to launch of the new journal.[27] For editors with less than ten years of seniority, we average their publications in top-5 journals over the relevant years.[28]

(g) *Affiliation rank*: We use the editor's department ranks based on the total number of publications the editor's department had in top-5 journals in the ten years prior to the

[26]We excluded *AEA Paper and Proceedings.*

[27]We also used Google Scholar and the *Web of Science* Author Search to collect the editors' publication records to guard against researchers not updating their CVs or websites.

[28]As editorial appointment decisions could be made with more emphasis on recent publications in the top-5 journals, we constructed an alternative publication performance measure by focusing on publications in the five years prior to the editor's editorial appointment.

launch of the new journal.[29] For a robustness check, we also used department ranks based on publications in the top-5 journals in the five years prior to the launch of the new journal. This approach has essentially no effect on our coefficients and standard errors.

Finally, an advantage that the new society journals have is that membership in the *AEA*, *ES*, and *EEA* is a prerequisite of attending their (important) respective association meetings. To the extent that individuals join an association to be able to attend their meetings, membership potentially increases the exposure of the new society journals, and hence could increase the journal's impact factors. Fortunately, several comparison journals also hold important meetings: *EJ*; *GEB*; *JAE*; *JBES*; *JOLE*; and *RED*. Hence, we define a dummy variable coded one for *AEA* journals, the *ES* journals, *JEEA*, *EJ*, *GEB*, *JAE*, *JBES*, *JOLE*, and *RED*, and coded zero otherwise. We then include this dummy variable as a component of x_j in some specifications.

4.4.2 Investigating "extra citations" from the parent journals

We next consider the possibility that the new *AEA* journals received favorable treatment in terms of citations from the *AER*, and that the new *ES* journals received favorable treatment in terms of citations from the (*ECMA*). One way that this could occur is if authors believe that the respective associations want their new journals to succeed, and may consciously or subconsciously include extra citations of articles from the new *AEA* or *ES* journals because they believe that these citations will appeal to the respective *AER* or *ECMA* editors. We first investigate whether we can ascertain any evidence of this phenomenon in the data by proceeding. If we find evidence of preferential treatment, we will correct for it in our impact factor regressions.

Define the forward impact factor of journal j in year t as measured by citations from a particular journal k as

$$F_{j,t}^{k} = \frac{1}{w_{j,t}} \sum_{m=t}^{t+2} c_{j,k,t,m}.$$

[29] We use the Tilburg University Economics Ranking (https://econtop.uvt.nl/rankingsandbox.php) to get department ranks. This allows flexibility over the choice of journals and publication years. Note that the Tilburg ranking counts *AEA Papers and Proceedings* as part of the *AER*.

For the new journals and their respective comparison journals, define

$$\widehat{F}_{j,t} = \frac{1}{3}\sum_{k\in J} F^k_{j,t},$$

where the set $J = \{JPE, QJE, RES\}$. In other words, we redefine the impact factors for the *AEA* and *ES* journals, as well as their control journals, as coming only from *JPE*, *QJE* and *RES* since this measure will be unaffected by citations from *AER* or *ECMA*.

Then we define

$$\Delta(F_{j,t}) = F^{AER}_{j,t} - \widehat{F}_{j,t}, \tag{10}$$

if j corresponds to an *AEA* journal and its respective comparison journals and

$$\Delta(F_{j,t}) = F^{ECMA}_{j,t} - \widehat{F}_{j,t}, \tag{11}$$

if j corresponds to an *ES* journal and its respective comparison journals. Note that these measures look at the difference in (i) the average citations of the new journals and their comparison journals by the parent journals and (ii) the average citations of the new journals and their comparison journals by *JPE*, *QJE*, and *RES*. One might argue that we would expect $\Delta(F_{j,t})$ to be positive for both the new society journals and their comparison journals, if the subject matter of the *AER* (*ECMA*) is somewhat closer to the new *AEA* (*ES*) journals and their comparison journals compared to the other top-5 journals; this is why we will compare $\Delta(F_{j,t})$ for the new journals with $\Delta(F_{j,t})$ for their comparison journals. Since *JEEA* does not have a parent journal, we cannot include it here.

We then run regressions of the form

$$\Delta(F_{j,t}) = \delta_0 + \delta_1 d^{New}_j + \delta_2 d^{Year} + \upsilon_{j,t}, \tag{12}$$

$$\Delta(F_{j,t}) = \pi_0 + \pi_{11} d^{AEA}_j + \pi_{12} d^{ES}_j + \pi_2 d^{Year} + \upsilon_{j,t}, \tag{13}$$

where $d^{New}_j = 1$ for the *AEA* and *ES* journals and zero otherwise. Note that we have assumed that the vector x_j differences out of (12) and (13). Significantly positive estimates of δ_1, and of π_{11} and π_{12}, would suggest that the *AEA* and *ES* journals are receiving "extra" citations

from their respective parent journals.[30]

If there is evidence of preferential treatment by the parent journals, we can investigate how this preferential treatment affects our new journals' coefficients by defining an adjusted forward impact factor for journal j in year t:

$$\check{F}_{j,t} = \frac{1}{w_{j,t}} \sum_{k \in J} \sum_{m=t}^{t+2} c_{j,k,t,m}, \tag{14}$$

where $c_{j,k,t,m}$ and $w_{j,t}$ are defined above. However, we now use the set $J = \{JPE, QJE, RES\}$. Since by construction, the $\check{F}_{j,t}$ variables will be smaller than the $F_{j,t}$ variables,[31] we create a normalizing factor τ by which we multiply the $\check{F}_{j,t}$ variables to obtain dependent variables whose regression coefficients will have the same interpretation as in our standard case. The corresponding normalizing factor is

$$\tau = \left[\sum_{l \in L} \sum_{t} \check{F}_{l,t} \right]^{-1} \left[\sum_{l \in L} \sum_{t} F_{l,t} \right],$$

where L denotes the set of new and comparison journals. We then construct our new dependent variables as $\tilde{F}_{j,t} = \tau \check{F}_{j,t}$.

With these adjusted impact factors, we estimate the following regressions[32]

$$\tilde{F}_{j,t} = \phi_0 + \phi_1 d_j^{New} + \phi_2 d^{Year} + \phi_3 x_j + \upsilon_{j,t}, \tag{15}$$

$$\tilde{F}_{j,t} = \lambda_0 + \lambda_{11} d_j^{AEA} + \lambda_{12} d_j^{ES} + \lambda_{13} d_j^{EEA} + \lambda_2 d^{Year} + \lambda_3 x_j + \upsilon_{j,t}. \tag{16}$$

We then compare the estimated coefficients on the new journals dummy and the *AEA*, *ES* and *EEA* dummies, $\hat{\phi}_1$, $\hat{\lambda}_{11}$, $\hat{\lambda}_{12}$ and $\hat{\lambda}_{13}$, to the estimates we obtain when we do not adjust for possible preferential treatment by the parent journals, $\hat{a}_1$, $\hat{b}_{11}$, $\hat{b}_{12}$, and $\hat{b}_{13}$.

[30] As a robustness check, we consider an *alternative* version of this approach where we include the impact of *ECMA* citations on the *AEJ* journals and the impact of *AER* citations on the *ES* journals. We formalize this *alternative* approach in Section C.3 of the Online Appendix.

[31] The $\check{F}_{j,t}$ variables are based on total citations from three journals while the $F_{j,t}$ variables are based on total citations from five journals.

[32] We also employ the *alternative* approach where we include the impact of *ECMA* citations on the *AEJ* journals and the impact of *AER* citations on the *ES* journals. See Section C.3 of the Online Appendix.

5 Empirical Results

In this section, we discuss our empirical results. In each case, we first look at the difference in the means for the new and comparison journals. We then apply the regression methods described above.

5.1 Mean differences in the variables

Columns (1)–(3) of Table 3 present the mean forward impact factors (and their standard errors) of the relevant variables for all journals, the new journals, and the comparison journals, respectively. Column (4) shows the difference in the means between the new and comparison journals (and the corresponding standard errors). The first row of Panel A of Table 3 indicates that the new journals' mean of the forward impact factor is 40.551, which is more than twice the size of the comparison journals' mean of 16.070, resulting in a statistically significant difference of 24.481 in the forward impact factors in column (4).[33] To examine the robustness of this result, we present the means for the backward impact factors in Table C.3 in the Online Appendix; here and below, we multiply the backward impact factors by 300 to make them comparable to the forward impact factors. The two sets of means tell the same story.

In the second row of Panel A, we show the respective mean values for the number of articles published per year. Note that the mean value of 67.612 articles for the comparison journals is approximately twice as large as the mean value for the new journals of 35.887 articles, and the difference of 31.724 is statistically significant. This difference in mean values is one possible explanation for the difference in the mean impact factors between the new and comparison journals, as publishing more articles in a year could be interpreted as diluting the average quality of a journal.

[33] Here and below we cluster the standard errors by journal when possible. We cannot do this in Panels B and C because we have only one mean observation by journal.

Table 3: Mean Values of the Regression Variables

	Mean (1)	New (2)	Comparison (3)	Difference (4)
Panel A: Impact Factors and Articles Published Per Year (*observations* = 326)				
Forward impact factors (multiplied by 100)	21.402	40.551	16.070	24.481
	(2.438)	(3.565)	(1.674)	(3.766)
	[0.000]	[0.000]	[0.000]	[0.000]
Articles published per year	60.702	35.887	67.612	−31.724
	(7.057)	(5.689)	(8.385)	(9.910)
	[0.000]	[0.001]	[0.000]	[0.004]
Panel B: Average Editor's Research Characteristics (*observations* = 23)				
Seniority	22.609	21.167	23.240	−2.073
	(1.319)	(1.880)	(1.722)	(2.522)
	[0.000]	[0.000]	[0.000]	[0.420]
Affiliation rank	23.789	16.417	27.014	−10.598
	(3.818)	(3.538)	(5.125)	(6.222)
	[0.000]	[0.004]	[0.000]	[0.103]
Publication performance	0.352	0.452	0.308	0.144
	(0.034)	(0.075)	(0.032)	(0.079)
	[0.000]	[0.001]	[0.000]	[0.083]
Panel C: Average Editor's Years of Editing Experience (*observations* = 23)				
Key role, Top 5 journals	0.043	0.110	0.013	0.096
	(0.022)	(0.065)	(0.009)	(0.064)
	[0.065]	[0.144]	[0.156]	[0.147]
Secondary role, Top 5 journals	0.116	0.241	0.061	0.179
	(0.029)	(0.067)	(0.017)	(0.067)
	[0.001]	[0.011]	[0.003]	[0.014]
Key role, new and comparison journals	0.430	0.147	0.554	−0.407
	(0.067)	(0.080)	(0.070)	(0.105)
	[0.000]	[0.115]	[0.000]	[0.001]
Secondary role, new and comparison journals	0.432	0.541	0.384	0.158
	(0.065)	(0.149)	(0.068)	(0.160)
	[0.000]	[0.011]	[0.000]	[0.335]
Panel D: Adjusted Impact Factors (*observations* = 326)				
Adjusted forward impact factors based on citations from *JPE, QJE* and *RES*	21.403	37.777	16.844	20.934
	(2.522)	(3.868)	(2.197)	(4.266)
	[0.000]	[0.000]	[0.000]	[0.000]

Notes: Observations are clustered at the journal level in Panels A and D. However, for Panels B and C, we cannot cluster by journal as there is only one observation for each journal. Means are based on observations for: 2003–2017 for *JEEA*; 1997–2017 for *JEEA* comparisons; 2006–2017 for *TE*; 2000–2017 for *TE* comparisons; 2009–2017 for *AEJ*s; 2003–2017 for *AEJ* comparisons; 2010–2017 for *QE*; and 2004–2017 for *QE* comparisons. The forward impact factor is multiplied by 100 for ease of exposition. We discuss Panel D later in the paper. Here, and in what follows, ( ) denotes a standard error, and [ ] denotes a p-value.

In Panel B of Table 3, we show analogous statistics for the means of the editors' research characteristics across the journals. The mean difference in affiliation ranks is significantly negative at the ten percent level. Since higher-ranked departments have lower values of the this variable, the editors at the new journals are, on average, affiliated with higher-ranked departments. Further, editors at the new journals have significantly better publication records. Finally, the difference in editors' seniority is a statistically insignificant 2.073 years.

Panel C of Table 3 focuses on the mean values of the editors' experience variables. In terms of statistically significant differences, initial editors at the new journals had considerably more experience in secondary roles at top-5 journals (i.e., as associate editors and/or editorial board members) and considerably less experience in key roles at other new and comparison journals (i.e., as managing editor or co-editor).

5.2 Regression results

Table 4 shows the regression results when we use the forward impact factor as the dependent variable; we continue to cluster the standard errors at the journal level. We use year dummies in all regressions. In column (1) we present the new journal coefficient when we control only for year fixed effects. These estimates suggests that the new society journals, taken together, have impact factors (multiplied by 100) that are 23.750 higher than the comparison journals (which had a mean of 16.070). In column (2), we show the results of decomposing the new journal dummy variable into separate dummy variables for: (i) the four *AEA* journals; (ii) the two *ES* journals; and (iii) the *JEEA*. All of these dummy variables have significant (positive) coefficients, with the estimated *AEA* and *ES* effects being fairly similar and larger than the estimated *JEEA* effect. However, a robust F-test for the equality of the effects across associations produces a p-value of 0.074. Hence, we reject the hypothesis that the effects are the same across the different associations at only the ten percent level.

In columns (3) and (4), we add the number of articles per year in our regression to the specifications in columns (1) and (2) respectively. The results for the new journal dummy and the association dummies are very similar to those in columns (1) and (2). We find that a journal that publishes more articles in a year is associated with a lower impact factor, other things equal. However, this effect is relatively small, in that publishing ten more articles a

year is estimated to lower a journal's impact factor (after multiplying by 100) by just 0.58 (column (3)) and 0.54 (column (4)).

Table 4: Results for the Forward Impact Factor

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
											AEJ-Micro	Excluded
New	23.750		21.860		21.703		28.816		27.743		26.731	
	(3.984)		(4.141)		(3.507)		(5.620)		(6.117)		(5.967)	
	[0.000]		[0.000]		[0.000]		[0.000]		[0.000]		[0.000]	
Association Effects												
(1) AEA		26.849		25.059		23.129		31.595		30.783		30.345
		(5.727)		(5.839)		(5.210)		(5.332)		(5.602)		(5.052)
		[0.000]		[0.000]		[0.000]		[0.000]		[0.000]		[0.000]
(2) EEA		16.977		16.364		19.424		30.888		30.965		25.761
		(1.797)		(1.872)		(5.085)		(10.630)		(11.074)		(15.704)
		[0.000]		[0.000]		[0.001]		[0.008]		[0.011]		[0.117]
(3) ES		23.870		21.282		20.396		24.797		24.078		22.249
		(4.728)		(5.272)		(4.991)		(6.424)		(6.239)		(6.879)
		[0.000]		[0.001]		[0.000]		[0.001]		[0.001]		[0.004]
P-value for the null hypothesis that AEA=EEA=ES:		[0.074]		[0.190]		[0.866]		[0.491]		[0.328]		[0.365]
Articles published per year			−0.058	−0.054	−0.063	−0.060	−0.056	−0.059	−0.044	−0.046	−0.050	−0.050
			(0.032)	(0.032)	(0.033)	(0.035)	(0.029)	(0.030)	(0.037)	(0.039)	(0.036)	(0.040)
			[0.087]	[0.111]	[0.069]	[0.098]	[0.071]	[0.060]	[0.242]	[0.249]	[0.180]	[0.227]
Average Editor's Research Characteristics												
Affiliation rank					−0.160	−0.151			−0.190	−0.194	−0.147	−0.142
					(0.071)	(0.072)			(0.082)	(0.080)	(0.070)	(0.062)
					[0.034]	[0.047]			[0.031]	[0.023]	[0.048]	[0.033]
Seniority					0.034	0.021			−0.143	−0.174	0.068	0.051
					(0.275)	(0.269)			(0.449)	(0.467)	(0.343)	(0.335)
					[0.903]	[0.939]			[0.753]	[0.713]	[0.844]	[0.880]
Publication performance					−8.016	−5.981			−2.857	−4.745	6.711	6.536
					(8.214)	(11.626)			(11.987)	(12.294)	(8.902)	(9.464)
					[0.340]	[0.612]			[0.814]	[0.703]	[0.460]	[0.498]
Average Editor's Years of Editing Experience												
Key role, Top-5 journals							−12.914	−12.344	−16.930	−14.762	−31.951	−11.719
							(13.250)	(17.428)	(13.277)	(18.057)	(47.449)	(45.086)
							[0.340]	[0.486]	[0.216]	[0.422]	[0.508]	[0.798]
Secondary role, Top-5 journals							−21.875	−26.730	−24.713	−30.542	−24.474	−28.849
							(16.169)	(23.108)	(14.834)	(20.967)	(15.522)	(22.461)
							[0.190]	[0.260]	[0.110]	[0.159]	[0.131]	[0.214]
Key role, New and comparison journals							3.043	2.700	0.245	0.390	−3.344	−3.687
							(5.941)	(6.117)	(7.073)	(6.440)	(5.990)	(5.330)
							[0.614]	[0.663]	[0.973]	[0.952]	[0.583]	[0.497]
Secondary role, New and comparison journals							0.693	0.488	−3.851	−4.068	−0.870	−1.689
							(4.069)	(5.773)	(6.817)	(8.728)	(5.531)	(7.800)
							[0.866]	[0.933]	[0.578]	[0.646]	[0.877]	[0.831]
P-value for the null hypothesis that the coefficients for editors' editing experiences jointly equal zero							[0.101]	[0.163]	[0.016]	[0.013]	[0.280]	[0.254]
Observations	326	326	326	326	326	326	326	326	326	326	302	302

Notes: See the notes to Table 3. Results in columns (11)–(12) replicate columns (9)–(10) after excluding *AEJ-Micro* and its comparison journals.

Columns (5) and (6) contain the results when we enter the average editor quality variables (seniority, publication performance, and affiliation rank) — but not the editors' average experience variables — to the specifications in columns (3) and (4). The mean editor affiliation has a significantly negative coefficient (at the five percent level) in both columns; since higher ranked departments have smaller affiliation values, the coefficient has the expected sign in both columns. To interpret this coefficient, note that moving the average editor from a 15^{th} ranked to a 5^{th} ranked school increases the journal's impact factor by 1.60 (column (5)) and 1.51 (column (6)). The other editors' quality characteristics, seniority and publications, are neither individually nor jointly significant in columns (5) and (6). Further, the inclusion of the mean editors' quality variables has little effect on the new journal coefficient and the association variables coefficients in columns (5) and (6).

Next, we investigate whether controlling for differences in editing experience can help explain the difference in the impact factors between the new journals and the comparison journals. For the specifications in columns (7) and (8), we do not include the average editor quality variables but instead add the following variables to columns (3) and (4): (a) the mean number of years that each editor held a key role at one or more top-5 journals; (b) the mean number of years that each editor held a secondary role at one or more top-5 journals; (c) the mean number of years that each editor held a key role at any new or comparison journals; and (d) the mean number of years that each editor held a secondary role at any new or comparison journals. The coefficients on the editing variables are not individually significant in columns (7) or (8). They are on the margin of being jointly significant at the ten percent level in (7) but not in (8). Further, the estimated coefficients for new and association journals change little. The estimated new journal and association coefficients jump by quite a bit, but it is not obvious how to interpret this change given the coefficients will be correlated. We would note there is considerable overlap in the confidence intervals for the estimated coefficients in (3) and (7), and in (4) and (8).

In columns (9) and (10), we add the editing' quality variables to columns (7) and (8), so we are now including both the average editor quality and editing experience variables. The major change in columns (9) and (10) from columns (7) and (8) respectively is that the editing experience variables are now jointly significant (at approximately the one percent

level). Further, the top-5 editing experience variables, although not individually statistically significant, have surprisingly large negative coefficients. We found these results puzzling and went back to the data. It turns out that the initial editors of *AEJ-Micro* had much more editing experience at top-5 journals than the editors of any of the other new journals; at the same time, *AEJ-Micro* had the lowest impact factor among the new journals. We therefore dropped *AEJ-Micro* and its comparison journals; the results are shown in columns (11) and (12). The four editing experience variables are no longer jointly significant at any reasonable confidence level, so we do not pursue this issue further. However, the new journal and association journal coefficients are still quite significant, and of the same order of magnitude, when we move from columns (7) to (11), and from columns (8) to (12).

As a robustness check, we replicated all of Table 4 for the case where we use the backward impact factors as the dependent variables; the results are in Table C.4 in the Online Appendix. Again, we find our results to be very robust to this change.

We also consider a number of further robustness checks as follows. First, we use editing characteristics measured over the 5-year period before the launch of the new journal (as opposed to the 10-year period) for the case where all explanatory variables are included.[34] The qualitative results here are quite similar to those in our main Table 4, columns (9) and (10). Up to this point, we have used data for the comparison journals six years before the launch of each new journal. In columns (1) and (2) of Table 5, we repeat the analysis in columns (9) and (10) of Table 4 when we start the data on the comparison journals three years prior to the launch of the new journal. Meanwhile, columns (3) and (4) of Table 5 show the results for the data on the comparison journals starting at the launch of the new journal. Again, the results in columns (1)–(4) of Table 5 are quite similar to those in columns (9) and (10) in Table 4.

Finally, one advantage that the new association journals have is that membership in the *AEA*, *ES*, and *EEA* is a prerequisite of attending the respective association meetings. As discussed earlier, to investigate this issue, we define a dummy variable coded one for all journals with such a requirement, and zero otherwise. The results, shown in columns (5)

[34]Tables C.1 and C.2 in the Online Appendix repeat the calculations in Tables 3 and 4 for the editor characteristics over a 5-year period.

and (6) of Table 5, indicate that the coefficients on this new variable are nowhere close to being statistically significant.

Table 5: Further Results on the Forward Impact Factors

	(1)	(2)	(3)	(4)	(5)	(6)	Adjusted forward impact factors based on citations from *JPE*, *QJE* and *RES* (7)	(8)
New	27.744		27.416		27.586		25.601	
	(6.296)		(6.635)		(6.120)		(9.122)	
	[0.000]		[0.000]		[0.000]		[0.000]	
Association Effects								
(1) AEA		31.004		30.879		30.615		33.958
		(5.728)		(5.953)		(5.632)		(6.490)
		[0.000]		[0.000]		[0.000]		[0.000]
(2) EEA		33.555		36.533		30.742		45.036
		(10.358)		(10.487)		(11.179)		(14.311)
		[0.004]		[0.002]		[0.012]		[0.005]
(3) ES		24.084		23.736		23.967		15.515
		(6.316)		(6.910)		(6.327)		(8.415)
		[0.001]		[0.002]		[0.001]		[0.079]
P-value for the null hypothesis that AEA=EEA=ES:		[0.296]		[0.271]		[0.343]		[0.014]
Conference					1.279	1.158		
					(3.273)	(3.201)		
					[0.700]	[0.721]		
Articles published per year	−0.036	−0.040	−0.043	−0.050	−0.040	−0.042	−0.046	−0.061
	(0.037)	(0.039)	(0.041)	(0.042)	(0.036)	(0.038)	(0.043)	(0.045)
	[0.336]	[0.314]	[0.310]	[0.250]	[0.284]	[0.281]	[0.302]	[0.194]
Average Editor's Research Characteristics								
Affiliation rank	−0.194	−0.201	−0.192	−0.202	−0.205	−0.208	−0.159	−0.183
	(0.085)	(0.081)	(0.088)	(0.084)	(0.082)	(0.082)	(0.106)	(0.096)
	[0.032]	[0.021]	[0.040]	[0.025]	[0.021]	[0.019]	[0.148]	[0.070]
Seniority	−0.166	−0.195	−0.180	−0.204	−0.189	−0.215	−0.648	−0.690
	(0.448)	(0.474)	(0.514)	(0.549)	(0.443)	(0.458)	(0.497)	(0.512)
	[0.715]	[0.684]	[0.730]	[0.714]	[0.674]	[0.643]	[0.206]	[0.191]
Publication performance	−5.226	−8.883	−4.661	−10.645	−3.107	−4.923	4.092	−7.496
	(11.740)	(11.932)	(13.403)	(13.816)	(11.639)	(12.160)	(12.681)	(13.629)
	[0.661]	[0.464]	[0.731]	[0.449]	[0.792]	[0.690]	[0.750]	[0.588]
Average Editor's Years of Editing Experiences								
Key role, Top-5 journals	−14.982	−10.200	−18.587	−9.976	−17.102	−14.986	−7.586	8.200
	(13.769)	(17.826)	(13.951)	(18.257)	(13.429)	(18.236)	(21.126)	(22.659)
	[0.288]	[0.573]	[0.196]	[0.590]	[0.216]	[0.420]	[0.723]	[0.721]
Secondary role, Top-5 journals	−25.513	−34.434	−24.095	−37.240	−25.419	−31.078	−22.210	−49.024
	(15.545)	(20.074)	(15.650)	(19.742)	(14.909)	(21.046)	(22.258)	(26.081)
	[0.115]	[0.100]	[0.138]	[0.073]	[0.102]	[0.154]	[0.329]	[0.073]
Key role, new and comparison journals	−0.803	−0.306	−1.007	−0.041	1.455	1.477	11.279	13.024
	(7.382)	(6.601)	(8.084)	(7.296)	(6.982)	(6.194)	(9.867)	(7.611)
	[0.914]	[0.963]	[0.902]	[0.996]	[0.837]	[0.814]	[0.265]	[0.101]
Secondary role, new and comparison journals	−3.748	−3.385	−3.547	−2.264	−4.301	−4.488	−2.801	−0.540
	(6.593)	(8.500)	(7.291)	(9.250)	(6.551)	(8.514)	(9.350)	(11.289)
	[0.575]	[0.694]	[0.631]	[0.809]	[0.518]	[0.603]	[0.767]	[0.962]
P-value for the null hypothesis that the coefficients for editors' editing experiences jointly equal zero	[0.031]	[0.020]	[0.008]	[0.003]	[0.014]	[0.012]	[0.185]	[0.011]
Observations	278	278	230	230	326	326	326	326

Notes: See the notes to Tables 3 and 4. In columns (1)–(2), we use the data for the comparison journals starting three years prior to the first year of the respective new journals. In columns (3)–(4), we start the comparison journals at the same time as their respective new journals. In columns (5)–(6), we include a dummy variable equalling one if a journal is part of a society/association that puts on a major conference and zero otherwise. In columns (7)–(8), we use the adjusted forward impact factors based on citations from *JPE*, *QJE* and *RES* as the dependent variables.

Similarly, we replicate the above by using the backward impact factor as the dependent variable and summarize the results in Table C.6 (for results using editors' characteristics measured over 5-year durations) and columns (1)-(6) of Table C.5 in the Online Appendix. Again, the results are very consistent with those using the forward impact factors in Table C.2 (for results using editors' characteristics measured over 5-year durations) in the Online Appendix and Table 5.

We then investigate whether these estimated correlations will fall when we control for (i) the number of articles published per year; (ii) the editors' mean research characteristics; (iii) the editors' mean previous editing experience; and (iv) whether an association holds an important conference. However, none of these conditioning variables, either jointly or individually, reduces these estimated effects. Hence, we cannot use these conditioning variables to "explain" the relationship between being a new society journal and impact factors. Our results are quite robust to: (i) replacing the forward impact factor with the backward impact factor as the dependent variable; (ii) moving from a 10-year window to a 5-year window for measuring the editors' variables; and (iii) adjusting when we start tracking the comparison journals.

Next, we consider a possible explanation of the new journal estimated effect that cannot be explored by simply adding conditioning variables to our regression equation.

5.3 Empirical investigation of overciting by the parent journals

We investigate the issue of "over-citations" of the new journals by the parent journals. We first ask if there is any evidence of excess citations by the parent journal. If we do indeed find evidence of this phenomenon, we ask whether it has an important effect on our estimated new journal impacts.

To investigate whether the parent journals over-cite the new journals, for our new journals (except *JEEA*)[35] and comparison journals, we look at the *difference* in the impact factors from *AER* (*ECMA*) and the average impact factors from *JPE*, *QJE*, and *RES*; in what follows we refer to this measure as the *differences in the adjusted impact factors*. If a new journal has significantly higher values of this variable than its comparison journals, we infer

[35]We cannot include *JEEA* here since it does not have a parent journal.

that it is being overcited by the parent journal. We should note that in doing so, we are assuming that the subject matter of the *AEA* (*ES*) journals is not closer to the *AER* (*ECMA*) than of their respective comparison journals.

Table 6: Mean Values for the Differences in the Adjusted Forward Impact Factors

	Mean	New	Comparison	Difference
	(1)	(2)	(3)	(4)
Differences based on citations from the	6.569	14.608	4.455	10.153
parent journal minus average citations from	(0.986)	(1.735)	(0.497)	(1.701)
JPE, *QJE* and *RES* (multiplied by 100)	[0.000]	[0.000]	[0.000]	[0.000]

Notes: See notes to Tables 3 and 4. There is no parent journal for *JEEA*, and hence we cannot use it or its comparison journals here; we have 20 journals and 269 observations.

In row (1) of Table 6 we first present the mean values of the differences in the adjusted impact factors. Column (1) shows that the average of this variable across all journals is 6.569 (after multiplying by 100), which is highly statistically significant.[36] This makes sense if the *AEA* (*ES*) journals and their comparison journals are closer in subject matter to the *AER* (*ECMA*) than to the *JPE*, *QJE* and *RES*. Columns (2) and (3) show that the mean values are 14.608 and 4.455 for the new journals and the comparison journals respectively. Column (4) shows a mean difference of 10.153 between the new journals and the comparison journals, which is also highly statistically significant. We note that these means are consistent with overciting by parent journals.[37]

In Table 7, we present our regression results where the dependent variable is the difference in the adjusted impact factors; since we are looking at the difference in citations, we do not control for any of the x_j variables described earlier. The results in column (1) are for the case where the new journals are aggregated, while column (2) shows the case where the new journals are categorized by their association. The results in column (1) suggest that on average, the new journals receive 10.000 additional citations from their respective parent journal, while the column (2) results suggest that the *AEA* over-citation effect is larger than the one for *ECMA*. However, the null hypothesis that the difference in the association effects

[36] As in Table 3, the impact factors are multiplied by 100 for ease of exposition.

[37] In Table C.7 in the Online Appendix, we repeat the analysis for the alternative difference measures that make use of the four non-parent top-5 journals for each journal. We obtain very similar results to those in Table 6.

is zero cannot be rejected in column (2).[38] Thus, we conclude that the *AEA* journals appear to have an advantage in receiving citations from *AER*, and the *ES* journals appear to have an advantage in receiving citations from *ECMA*.[39]

Table 7: Results for the Differences in the Adjusted Forward Impact Factors

	Differences based on citations from the parent journal minus average citations from *JPE*, *QJE* and *RES* (multiplied by 100)	
	(1)	(2)
New	10.000	
	(1.789)	
	[0.000]	
Association Effects		
AEA		10.741
		(2.616)
		[0.001]
ES		8.724
		(0.922)
		[0.000]
P-value for the null hypothesis that AEA=ES:		[0.460]

Notes: See the notes to Tables 3, 4 and 6. The x variables are assumed to difference out. There are 269 observations.

Next, we want to investigate how over-citing by parent journals affects the results in Tables 3 and 4. To address this issue, we calculate, for every journal, its impact factor based only on citations from *JPE*, *QJE* and *RES*; these adjusted forward impact factors are then used as our dependent variables.[40] The means are given in Panel D of Table 3.[41] Compared to the means in Panel A of Table 3, we see that means for the new journals are closer to their comparison journals. We then estimated the regressions underlying columns (9) and (10) of Table 4 for the case where the adjusted forward impact factor is the dependent variable. The

[38] In Table C.8 in the Online Appendix, we show the regression results when we use the alternative difference measures. The results are very similar to those in Table 7.

[39] We use the differences in the adjusted backward impact factors and the differences in the alternative adjusted backward impact factors to replicate the above analysis. We have placed the results in Tables C.11, C.12, C.14 and C.15 in the Online Appendix. We find that our previous conclusions continue to hold.

[40] We adjusted these impact factors to account for the fact that the impact factors here are based on three journals.

[41] We included *JEEA* since this analysis here does not depend on a journal having a parent journal.

new results are presented in columns (7) and (8) in Table 5, and are only slightly different from those in columns (11) and (12) of Table 4.[42]

As a robustness check, we also conducted the above analysis using adjusted backward impact factors and alternative adjusted backward impact factors, and find that the results are essentially unchanged.[43]

Thus, while we find that the *AEA* journals appear to have an advantage in receiving citations from the *AER* relative to their respective comparison journals, and the *ES* journals appear to have an advantage in receiving citations from *ECMA* relative to their respective comparison journals, correcting for this potential advantage does not substantially affect our regression results.

5.4 Other issues

There are several factors that proved difficult to properly control for. One factor is whether a journal has an open-access policy. This may improve a journal's impact factor if it makes it easier for readers to access the journal, especially researchers in institutions with limited journal subscriptions. Unfortunately, for our purposes being open access is perfectly collinear with being an *ES* journal, given that *QE* and *TE* are the only two open access journals in our set of new and comparison journals. Thus, we cannot identify an open access effect separately from the *ES* effect.

A second factor that we cannot effectively control for is whether the journal allows the transfer of referee reports from other journals. The impact factors for the new *AEA* and *ES* journals could be affected by the fact that the *AEJ* journals allow authors to transfer referee reports from the *AER*, and that the *ES* journals allow authors to transfer referee reports from *ECMA*. Thus, these new journals have an advantage in attracting articles that were rejected by the *AER* or *ECMA*, but which may be close to the standard of those journals. A few of our comparison journals also had a transfer policy. Starting in 2015, the *JOLE*

[42]We repeat this analysis using the alternative construction of the dependent variable based on the four non-parent top-5 journals as described earlier; the results on their means and regressions are very similar to those in Tables 3 and 4. These results are in Tables C.9 and C.10 in the Online Appendix.

[43]In the Online Appendix, Table C.13 and columns (7) and (8) of Table C.5 summarize the relevant details related to the adjusted backward impact factors, while Tables C.16 and C.17 show results related to alternative adjusted backward impact factors.

allowed authors to transfer referee reports from any top-5 journal. Sometime between 2010 and 2012, the *EJ* started allowing the transfer of referee reports from any other journal. Finally, the *JHR* started a similar approach to the *EJ* sometime after 2015.[44] Given the uncertainty of the exact dates of implementation for the *EJ* and the *JHR*, and that the reports transferred at these journals were not restricted to come from top-5 journals, we are left with only the data from the *JOLE* that we can combine with the new journals. We did not think it appropriate to try to evaluate how allowing for report transfers affects the new journal and association coefficients when only one comparison journal had such a policy.

The effect of bundled pricing is a third factor that we considered. Bundled pricing arises because institutions (such as university libraries) get discounted prices for buying a group of journals together from the same publisher. As Bergstrom et al. (2014) document, the practice is widespread across all the major for-profit publishers (e.g., Elsevier, Springer and Wiley), but involves privately negotiated discounts. To the extent new journals are more likely to be purchased by libraries because they are bundled together with established journals, their readership and impacts are likely to be enhanced. As it happens, the *AEA* offers bundled pricing, as does Oxford University Press (which publishes the *JEEA*). *ES* publishes *QE* and *TE* via an arrangement with Wiley, but since *QE* and *TE* are open access (free) journals anyway, bundled pricing is not a relevant factor for *QE* and *TE*. One could try to proxy for bundled pricing by introducing a publisher dummy, but the problem with this is the only overlap between publishers of new journals and comparison journals is Oxford University Press which publishes both *JEEA* and the *EJ*.

A final and arguably the most important missing factor that we cannot control for is the association effect that arises when large and prestigious associations publish new journals. Not only can the associations promote these new journals to their large pool of existing members, more importantly, they can leverage the reputation of the association to help ensure the success of the journal. This reputation effect reflects the inherent multiplicity of equilibria in journal quality. If everyone believes journal X is the journal that will be the most cited journal in a particular field, and hence submits their best papers there, it will

[44]We ascertained these journals' policies by writing to the journals, as we could not find any official policy announcement of their respective changes.

be much easier for journal X to indeed become the most cited journal in that field. The scholars' beliefs become self-fulfilling. Of course, if some little-known publisher launches a new journal and proclaims that it will be the number one journal in its field, this is unlikely to work on its own. We suspect that the most prestigious scholarly associations in economics (the *AEA*, the *EEA* and the *ES*) do indeed have the necessary reputation to induce scholars to coordinate on the desired equilibrium.[45]

6 Conclusions

Journal rankings play an important part in various decisions made by scholars, universities and funding agencies. As a result, in economics, there has been a substantial literature documenting such rankings based on quality-adjusted impact factors. However, there is an obvious gap in currently available rankings of economics journals, reflecting the introduction of several high-quality society journals in the last couple of decades; these new journals have not yet been properly incorporated in journal rankings.

In this paper, we provide updated journal rankings to include these new society journals. We calculate the rankings based on impact factors using a standard iterative approach which is invariant to reference intensity. One novel feature of our approach is that we also applied an iterative approach to the selection of the set of economics journals included. We find that the new society journals perform consistently well, lying just outside the top-5, and ranked ahead of obvious comparison journals. Furthermore, we show that these findings are robust to: (i) different approaches in the selection of journals; (ii) the adjustment for reference intensity; and (iii) an alternative approach we introduce, which is to only include the citations coming from the usual top-5 economics journals.

After establishing the remarkable performance of the new society journals, we investigated how their performance was affected by controlling for observable journal characteristics. We find that while the performance measures are often correlated with observable journal characteristics, controlling for them jointly has little effect on the performance measures. We also documented that the new journals benefit from "extra" citations from their parent

[45] Note that we attempted to partially control for this effect by controlling for the editors' characteristics.

journals, but controlling for this variable does not affect the relative performance of new journals versus their comparison journals.

In terms of future work, an important line of research would be to determine whether one can estimate causal relationships between the performance measures and the observable variables; in this paper we use these factors as control variables and only aim to estimate correlations between the observable variables and the forward impact factors.

Second, one could apply our approach outside of economics. The publishers of *Science*, *Nature* and the *Journal of the American Medical Association* have introduced specialized journals. One could do a similar study on how such journals compare to other similar journals in their respective fields. An interesting difference with economics is that the new journals associated with *Nature* are published by a for-profit publisher, while professional associations are behind the other two sets of new journals. Similarly, using journals from a wider range of disciplines, it would be interesting to try to determine the extent to which a new journal can leverage the reputation of its parent journal as opposed to the reputation of its publisher (society or otherwise).

References

Bao, Yao, Melody Lo and Franklin G., Mixon JR (2010). General-interest versus specialty journals: using intellectual influence of econometrics research to rank ranking economics journals and articles. *Journal of Applied Econometrics* 25(2): 345-353.

Bergstrom, Theodore C., Paul N. Courant, R. Preston McAfee, and Michael A. Williams (2014). Evaluating big deal journal bundles. *PNAS* 111(26): 9425-9430.

Demange, Gabrielle. (2014). A ranking method based on handicaps. *Theoretical Economics* 9(3): 915-942.

Engemann, Kristie M. and Howard J. Wall (2009). A Journal Ranking for the Ambitious Economist. *Federal Reserve Bank of St. Louis Review* 91(3): 127-39.

Gonzalez-Pereira, B., Vicente P. Guerrero-Bote, and Felix Moya-Anegon (2010). A new approach to the metric of journals' scientific prestige: The SJR indicator. *Journal of Informetrics* 4(3): 379-391.

Kalaitzidakis, Pantelis, Theofanis P. Mamuneas, and Thanasis Stengos. (2003). Rankings of academic journals and institutions in Economics. *Journal of the European Economic Association* 1(6): 1346-1366.

Kalaitzidakis, Pantelis, Theofanis P. Mamuneas, and Thanasis Stengos. (2011). An updated ranking of academic journals in economics. *Canadian Journal of Economics* 44(4): 1525-1538.

Koczy, Laszlo A. and Alexandru Nichifor. (2013). The intellectual influence of economic journals: quality versus quantity. *Economic Theory* 52(3): 863-884.

Kodrzycki, Yolanda K. and Pingkang Yu. (2006). New approaches to rankings economics journals. *The BE Journal of Economic Analysis & Policy* 5(1): 1-44.

Laband, David N. and Micheal J. Piette (1994). The relative impacts of economic journals: 1970-1990. *Journal of Economic Literature* 32(2): 640-660.

Liebowitz, S. J., and J. P. Palmer (1984). Assessing the relative impacts of economic journals. *Journal of Economic Literature* 22(1): 77-88.

Lo Melody and Yong Bao. (2016). Are overall journal rankings a good mapping for article quality in specialty fields? *Journal of Business & Economic Statistics* 34(1): 62-67.

Palacios-Huerta, Ignacio and Oscar Volij. (2004). The measurement of intellectual influence. *Econometrica* 72(3): 963-977.

Palacios-Huerta, Ignacio and Oscar Volij. (2014). Axiomatic measures of intellectual influence. *International Journal of Industrial Organization* 34: 85-90.

Pieters, R. and H. Baumgartner. (2002). Who talks to whom? Intra- and interdisciplinary communication of economics journals. *Journal of Economic Literature* 40(2): 483-509.

Ritzberger, Klaus. (2008). A ranking of journals in economics and related fields. *German Economic Review* 9(4): 402-430.