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# Documenting and Explaining the Dramatic Rise of the New Society Journals in Economics

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# ABSTRACT

# Documenting and Explaining the Dramatic Rise of the New Society Journals in Economics<sup>\*</sup>

An important recent event in the economics field is the introduction of seven new society journals. Using standard iterative ranking methodologies from economics, as well as some new methodologies, we demonstrate the spectacular rise of these journals while updating journal rankings for all economics journals. We then use regression analysis based on how these journals and natural comparison journals are cited in top-5 economics journals to investigate the roles of editor reputation, editor experience, bias from parent journals, the number of articles published, as well as other factors in explaining the new journals' strong relative performance.

JEL Classification:	A11, C23, C81, J44
Keywords:	impact factors, academic associations, journal ranking

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### 1 Introduction

An important recent phenomenon in economics is the introduction of seven new society journals: four from the American Economic Association (AEA); two from the Econometric Society (ES); and one from the European Economic Association (EEA).<sup>1</sup> For researchers, department chairs, and granting agencies, it is important to determine how these journals are valued in the profession. We do that here using the standard iterative ranking methodology widely adopted in economics, as well as some new ranking measures that we propose. We then explore the factors behind the performance of these new journals.

In documenting and explaining the performance of the new society journals we make three main contributions. First, we use impact factors based on established methodologies for journal ranking in economics to judge the performance of the new society journals. We find that the new society journals rank among the best journals in economics outside of the top-5,<sup>2</sup> 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 difference in impact of the new society journals compared to appropriate control journals. We examined a large number of possible observable factors that we expected to affect journal impact factors, most of which were indeed significant in the expected directions, but controlling for them did not reduce the estimated difference in impact between the new and comparison journals. Third, we contribute to the more general journal ranking literature in economics in terms of ranking methodologies and their implementation.

In terms of investigating the performance of the new society journals, one approach would be to refer to the existing rankings of economics journals. These rankings have usually been based on quality-adjusted impact factors produced by the iterative method where citations

<sup>&</sup>lt;sup>1</sup>The *EEA* started publishing the Journal of the European Economic Association (JEEA) in 2003. Theoretical Economics (*TE*) was initially started by an independent group in 2006, but at the end of 2008, the *ES* reached an agreement with this group to take over *TE*. It actually took over *TE* at the beginning of 2010. In 2010, the *ES* further started Quantitative Economics (*QE*). 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.

<sup>&</sup>lt;sup>2</sup>The top-5 are: American Economic Review (AER), Econometrica (ECMA), Journal of Political Economy (JPE), Review of Economics Studies (RES) and Quarterly Journal of Economics (QJE).

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). But the new society journals (with the exception of *JEEA* in Kalaitzidakis et al., 2011) are not covered in existing rankings that are based on established methodologies, and hence we would argue these existing rankings are not suitable for our purposes, as well as those of many economists. Alternatively, we could have instead referred to various online rankings such as those produced by AJG, SJR and RePEc, which are continuously updated and readily available. But as we will document in Section 3.4, there is tremendous variation across these online rankings, and between these rankings and those that we obtain using standard methodology. Given this, and the ad-hoc nature of their approaches, we recommend that for the time being economists not use these rankings.

To address this gap in the journal rankings with respect to the new association journals, we employ a standard iterative eigenfactor methodology adjusted for reference intensity to rank economics journals. Using this approach (known as the *invariant method* following Palacio-Huerta and Volij, 2004),<sup>3</sup> we find the ranking of the 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 several alternative ranking methods that we employ, including a simple alternative which uses only citations from the top-5 economics journals instead.<sup>4</sup> In all cases, 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 some of the highest positions outside of the top-5.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup>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. For example, Kodrzycki and Yu (2006), Ritzberger (2008), Bao et al. (2010), and Lo and Bao (2016) all apply this approach in their ranking studies.

<sup>&</sup>lt;sup>4</sup>This alternative approach is motivated by Engemann and Wall (2009). They use articles published in 2008 to rank 69 journals based on citations from the top-5, but they also include the *Review of Economics and Statistics* and the *Economic Journal*. Our exclusive focus on the top-5 attempts to keep the quality of the citations more uniform.

<sup>&</sup>lt;sup>5</sup>Among the previously established journals, only the Journal of Labor Economics, the Review of Economics and Statistics, the Journal of Monetary Economics and the Journal of Human Resources remain in

Motivated by the exceptional performance of the new society journals, we use a regression analysis to explore possible factors that could explain their rapid rise. Given our purchased *JCR* dataset could not be used for this purpose, and after establishing that rankings based on the impact in top-5 economics journals give quite similar ranking results for the relevant set of journals for the period in which they overlap, we do the regression analysis using citations of articles in top-5 economics journals only, which we collected manually. Moreover, so as to track the performance of journals by year for our empirical analysis, we do so using a forward impact factor measure that counts citations of articles published in a particular year, rather than counting backwards from citing years as is normally done.

We compare each of the new journals to selected top field and general-interest comparison journals, and find that all the new society journals achieved statistically significantly higher impact factors compared to their respective comparison journals. Several factors are correlated with the performance of the new journals relative to their comparison journals: (i) on average, the new society journals published a smaller number of articles per year than their respective comparison journals; and (ii) 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. However, taken together, these factors do not explain the high rankings of the new journals. We also find AEA journals and ES journals appear to receive relatively more citations from their parent journals (AERand ECMA, respectively) than do their comparison journals. However, correcting for this has little effect on the estimated performance impacts of the new society journals. Finally, accounting for the fact that associations running journals hold conferences open only to their respective members did not significantly affect their impact factors.

Based on our empirical analysis, we are left with a large unexplained gap in the impact factors, so we investigate other potential explanations which we cannot formally test. We consider the possibility that the new journals succeeded because they offered fast turnaround times. We had to investigate this explanation informally as we only have data on turnaround times for a few of the journals, and the available data we do have is not consistently measured across the different journals and across different years. From the data we do have, it is the top-15 journals.

clear some AEA journals (especially AEJ-Applied) offered fast turnaround times, but this is not true for some other new journals like QE and JEEA. Thus, fast turnaround time does not seem likely to be the main driver of our results. We also informally investigate other possible drivers of our findings, including that the ES journals are open access, or that the AEA journals and the JEEA are bundled together with other journals, so readily available to libraries that are already purchasing the respective bundles of journals. This is not a compelling argument since the comparison journals are also all readily available from the same libraries. Most of these journals are sold within larger bundles of journals by publishers like Elsevier and Wiley-Blackwell, so there is unlikely to be any material difference in access across these journals for academic scholars. The one argument we could not easily reject is one in which the new society journals leveraged the reputations of their respective associations to credibly announce that these new journals would be of very high standard. Given the reputations and credibility of the associations, it is likely that authors believed that this was actually going to be true, as opposed to being cheap talk, and submitted some of their best works to these journals. We elaborate on this and the other mechanisms mentioned here in Section 5.4.

Finally, we also 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, which is a good proxy for the invariant rankings among the top-30 journals; and (iii) a new forward impact factor measure, which we use to measure a journal's performance in a particular publication year, thereby allowing us to correlate impact factors with journal characteristics in a particular year in our regression analysis. 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*. We are also the first paper to investigate how three prominent online rankings compare to those obtained using a standard methodology.

In the next section, we describe our data and ranking methodology, with the new ranking results and the differences between our rankings and a few other online rankings discussed in Section 3. In Section 4, we detail our regression approach. 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. We report and discuss our regression results in Section 5, and 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 rankings, and other alternative rankings, which we will use to conduct robustness checks.

#### 2.1 Data sources

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 the explanatory variables in our regressions, 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. For any particular year in 2015–2019, our citation data is obtained from citations by articles published in that year to 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).<sup>6</sup> This allows us to follow the now standard

<sup>&</sup>lt;sup>6</sup>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

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.<sup>7</sup>

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.<sup>8</sup> 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 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. Further, the choice of journals

which was not even available at the time we conducted our study.

<sup>&</sup>lt;sup>7</sup>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.

<sup>&</sup>lt;sup>8</sup>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

included ultimately influences the quality weighting applied to all 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.<sup>9</sup>

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 groups. 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 the economics and non-economics groups.<sup>10</sup>

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.

<sup>&</sup>lt;sup>9</sup>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.

<sup>&</sup>lt;sup>10</sup>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.

#### 2.2.2 Baseline economics journals

We begin with the group of economics journals classified according to the approach described immediately above, which we will refer to as "all economics journals". To ensure a fair comparison between new society journals and other economics journals, we then create a baseline set of journals by excluding journals that do not follow standard submission and refereeing processes. Specifically, after reviewing the submission pages and instructions to authors, we identify fifteen economics journals that do not have open submission policies (meaning 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).<sup>11</sup> The remaining economics journals will be referred to as our baseline journals in the rest of this paper. As a few economics journals not included in our baseline set (e.g., *Journal of Economic Literature* and *Journal of Economic Perspectives*) are highly recognized in the profession, we provide rankings with and without the inclusion of these fifteen journals to maximize the usefulness of our analysis. Our ranking results later reveal that it makes little difference for the relative rankings of the baseline journals which set of journals we use (i.e., baseline journals or all economics journals).

#### 2.3 Methodology

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

#### 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.<sup>12</sup> We then adjust for reference

<sup>&</sup>lt;sup>11</sup>They are: 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.

<sup>&</sup>lt;sup>12</sup>Following Kalaitzidakis et al. (2011), journal size is defined as the number of regular articles published in the journal in a year.

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 from a given journal by the average number of references in that journal.

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

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

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

$$I_{j,i,t}^{Inv} = \frac{1}{W_{j,t}} \sum_{k=1,k\neq j}^{N_t} \left( \frac{C_{j,k,t} I_{k,i-1,t}^{Inv}}{\frac{1}{w_{k,t}} \sum_{r=1}^{N_t} C_{r,k,t}} \right),$$
(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 jfrom year t - 4 to year t.

As is clear from (1), citations are simply added up rather than being adjusted by the impact factor of the respective journals they come from in the first step of the procedure (i.e. there is no quality adjustment in the first step). However, for subsequent steps, 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 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.

#### 2.3.2 Rankings based on the Top-5

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

$$I_{j,t}^{\text{Top-5}} = \frac{1}{W_{j,t}} \sum_{k \in J, k \neq j} C_{j,k,t},$$
(3)

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 for two sets of journals, the baseline journals and the set of all economics journals. We do so using: (i) our invariant method; (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.<sup>13</sup> In the interest of space,

<sup>&</sup>lt;sup>13</sup>The year-by-year rankings are given in Table B.2 in the Online Appendix.

### Table 1: Rankings of Baseline Journals across Alternative Methods

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

#### Table 1: Rankings of Baseline Journals across Alternative Methods

Journal	Invariant Method	Removal of Reference Intensity	Top-5 Method	Invariant Top-5 Method
JOURNAL OF ECONOMIC BEHAVIOR & ORGANIZATION	53	53	67	69
JOURNAL OF LAW ECONOMICS & ORGANIZATION	54	50	53	51
LABOUR ECONOMICS	55	51	58	58
JOURNAL OF POPULATION ECONOMICS	56	60	97	98
QME-QUANTITATIVE MARKETING AND ECONOMICS	57	57	33	32
ECONOMIC INQUIRY	58	58	73	71
JOURNAL OF ECONOMIC DYNAMICS & CONTROL	59	59	76	74
EDUCATION FINANCE AND POLICY	60	52	59	64
CANADIAN JOURNAL OF ECONOMICS-REVUE CANADIENNE D ECONOMIQUE	61	56	57	53
EXPLORATIONS IN ECONOMIC HISTORY	62	61	51	43
OXFORD BULLETIN OF ECONOMICS AND STATISTICS	63	70	99	99
JOURNAL OF ECONOMICS & MANAGEMENT STRATEGY	64	66	87	82
JOURNAL OF ECONOMIC SURVEYS	65	67	110	111
JOURNAL OF MATHEMATICAL ECONOMICS	66	68	72	73
AMERICAN LAW AND ECONOMICS REVIEW	67	54	31	41
INTERNATIONAL JOURNAL OF GAME THEORY	68	73	81	85
ECONOMICS OF EDUCATION REVIEW	69	63	82	87
NATIONAL TAX JOURNAL	70	62	46	54
SOCIAL CHOICE AND WELFARE	71	78	102	102
REGIONAL SCIENCE AND URBAN ECONOMICS	72	71	98	96
THEORY AND DECISION	73	74	75	75
JOURNAL OF HUMAN CAPITAL	74	69	74	61
MACROECONOMIC DYNAMICS	75	72	85	84
REVIEW OF ECONOMIC DESIGN	76	86	63	62
GENEVA RISK AND INSURANCE REVIEW	77	82	N.C.	N.C.
JOURNAL OF DEMOGRAPHIC ECONOMICS	78	83	N.C.	N.C.
INTERNATIONAL TAX AND PUBLIC FINANCE	79	75	84	86
OXFORD ECONOMIC PAPERS-NEW SERIES	80	80	108	105
JOURNAL OF ECONOMIC INEQUALITY	81	76	49	52
REVIEW OF INCOME AND WEALTH	82	81	96	94
AMERICAN JOURNAL OF HEALTH ECONOMICS	83	77	39	44
JOURNAL OF ECONOMIC PSYCHOLOGY	84	88	114	113
ECONOMIC HISTORY REVIEW	85	79	79	81
JOURNAL OF REGIONAL SCIENCE	86	85	55	56
ECONOMICS LETTERS	87	90	104	106
HEALTH ECONOMICS	88	84	100	104
JOURNAL OF PUBLIC ECONOMIC THEORY	89	95	89	95
EUROPEAN REVIEW OF ECONOMIC HISTORY	90	100	N.C.	N.C.
MATHEMATICAL SOCIAL SCIENCES	91	113	103	103
PUBLIC CHOICE	92	98	101	100
ECONOMICS AND PHILOSOPHY	93	97	66	76
JOURNAL OF COMPARATIVE ECONOMICS	94	89	91	92
SOUTHERN ECONOMIC JOURNAL	95	92	88	83
REVIEW OF WORLD ECONOMICS	96	87	80	76
B E JOURNAL OF ECONOMIC ANALYSIS & POLICY	97	93	105	101
REVIEW OF NETWORK ECONOMICS	98	91	N.C.	N.C.
ECONOMICS & POLITICS	99	99	70	78
FISCAL STUDIES	100	96	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). See Table B.3 in the Online Appendix for the full rankings. Here, N.C. means that the journal was not cited by any top-5 journal in any year of 2015–2019.

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 (3) of Table 1 presents the analogous results using the top-5 method of ranking journals.<sup>14</sup>

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 our invariant journal rankings: AEJ-Applied (6<sup>th</sup>); AEJ-Macro (7<sup>th</sup>); TE (8<sup>th</sup>); JEEA (9<sup>th</sup>); AEJ-Policy (10<sup>th</sup>); AEJ-Micro (12<sup>th</sup>); and QE (13<sup>th</sup>).

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-25 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* 

<sup>&</sup>lt;sup>14</sup>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).

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. 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. 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.

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. Hence, when evaluating faculty members in a department that regularly publishes outside the top 30 journals, it would be safer to use our invariant rankings, and thereby avoid accentuating the 'tyranny of the top-5' (Heckman and Moktan, 2020).

In Table 2, we add back the fifteen economics journals identified in Section 2.2.2 to our baseline journals and show the results based on the same set of methodologies used in Table 1. Several economics journals that are not in our baseline perform very well most notably, *NBER Macroeconomics Annual* ranked  $6^{th}$ , *Journal of Economic Literature* ranked  $7^{th}$ , *Brookings Papers on Economic Activity* ranked  $10^{th}$ , *Annual Review of Economics* ranked  $12^{th}$  and *Journal of Economic Perspectives* ranked  $15^{th}$ . However, as a comparison of Tables 1 and 2 shows, whether the fifteen economics journals are included or not does not make much difference to the relative ranking of other top economics journals.

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 baseline journals. <sup>15</sup> Indeed, in Section 4, we will use the top-5 method to construct

<sup>&</sup>lt;sup>15</sup>We will provide more evidence for this in the next section. If using all economics journals, researchers

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 in Section 4 are in the top-30 based on the journal ranking results for the baseline journals using invariant method (except for *Games and Economic Behavior* which is ranked  $33^{rd}$ ), focusing on the top-5 rankings only is not an issue.

#### **3.3** Robustness of the rankings

Next, we examine the robustness of our rankings based on the iterative method to two 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 Tables 1 and 2.

#### 2. 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 (4) of Table 1 adjusts for differences in impact factors and reference intensities of the top-5 journals. We repeat this in column (4) of Table 2 for all economics journals. Specifically, we first apply our invariant method to the top-5 journals. This involves using the same method as detailed in (1) and (2) to the top-5 journals alone to get the invariant top-5 impact factors. We then rank all journals outside the top-5 by adjusting citations from articles published in top-5 journals by their respective invariant top-5 impact factors. We generate one such

may rely on the top-40 or so journals.

Table 2:	Rankings of	All	Economics	Journals	across	Alternative	Methods
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Journal	Invariant Method	Removal of Reference Intensity	Top-5 Method	Invariant Top-5 Method
QUARTERLY JOURNAL OF ECONOMICS	1	1	1	1
AMERICAN ECONOMIC REVIEW	2	2	4	3
ECONOMETRICA	3	5	3	5
REVIEW OF ECONOMIC STUDIES	4	4	5	4
JOURNAL OF POLITICAL ECONOMY	5	3	2	2
NBER MACROECONOMICS ANNUAL	6	6	6	6
JOURNAL OF ECONOMIC LITERATURE	7	9	9	9
AMERICAN ECONOMIC JOURNAL-MACROECONOMICS	8	7	8	8
AMERICAN ECONOMIC JOURNAL-APPLIED ECONOMICS	9	8	7	7
BROOKINGS PAPERS ON ECONOMIC ACTIVITY	10	10	12	12
AMERICAN ECONOMIC JOURNAL-ECONOMIC POLICY	11	11	14	13
ANNUAL REVIEW OF ECONOMICS	12	13	10	10
JOURNAL OF LABOR ECONOMICS	13	12	15	15
JOURNAL OF THE EUROPEAN ECONOMIC ASSOCIATION	14	14	13	14
JOURNAL OF ECONOMIC PERSPECTIVES	15	15	16	17
THEORETICAL ECONOMICS	16	18	11	11
REVIEW OF ECONOMICS AND STATISTICS	17	16	20	19
IQUENAL OF MONETARY ECONOMICS	18	17	10	20
IOURNAL OF HUMAN RESOURCES	10	10	28	20
AMERICAN ECONOMIC JOURNAL MICROECONOMICS	20	19	17	16
OUANTITATIVE ECONOMICS	20	20	10	10
IOUDNAL OF ECONOMIC CROWTH	21	22	10	18
ECONOMIC JOURNAL	22	21	23	23
PAND JOURNAL OF ECONOMICS	23	24	20	21
RAND JOURNAL OF ECONOMICS	24	25	21	21
REVIEW OF ECONOMIC DYNAMICS	25	23	22	22
JOURNAL OF BUSINESS & ECONOMIC STATISTICS	26	31	38	35
JOURNAL OF INTERNATIONAL ECONOMICS	27	26	24	24
INTERNATIONAL ECONOMIC REVIEW	28	27	27	26
JOURNAL OF ECONOMIC THEORY	29	29	25	25
JOURNAL OF PUBLIC ECONOMICS	30	28	31	30
JOURNAL OF ECONOMETRICS	31	38	33	33
JOURNAL OF DEVELOPMENT ECONOMICS	32	32	32	32
AEA PAPERS AND PROCEEDINGS	33	33	30	29
EXPERIMENTAL ECONOMICS	34	37	49	47
IMF ECONOMIC REVIEW	35	30	34	37
ECONOMETRIC THEORY	36	50	45	43
ECONOMIC POLICY	37	34	37	40
JOURNAL OF APPLIED ECONOMETRICS	38	40	61	56
JOURNAL OF THE ASSOCIATION OF ENVIRONMENTAL AND RESOURCE ECONOMISTS	39	36	73	73
GAMES AND ECONOMIC BEHAVIOR	40	45	36	34
WORLD BANK RESEARCH OBSERVER	41	35	29	31
ECONOMETRICS JOURNAL	42	58	55	54
EUROPEAN ECONOMIC REVIEW	43	39	48	45
ECONOMIC THEORY	44	53	52	49
JOURNAL OF URBAN ECONOMICS	45	42	56	59
JOURNAL OF MONEY CREDIT AND BANKING	46	46	58	55
JOURNAL OF LAW & ECONOMICS	47	41	39	38
REVIEW OF ENVIRONMENTAL ECONOMICS AND POLICY	48	43	59	50
JOURNAL OF INDUSTRIAL ECONOMICS	49	48	43	39
JOURNAL OF HEALTH ECONOMICS	50	51	64	58
ECONOMIC DEVELOPMENT AND CULTURAL CHANGE	51	44	44	42
JOURNAL OF POLICY ANALYSIS AND MANAGEMENT	52	49	47	57

Journal	Invariant Method	Removal of Reference Intensity	Top-5 Method	Invariant Top-5 Method
JOURNAL OF RISK AND UNCERTAINTY	53	57	42	46
ECONOMICA	54	47	46	44
SCANDINAVIAN JOURNAL OF ECONOMICS	55	54	75	68
JOURNAL OF ECONOMIC HISTORY	56	52	40	36
JOURNAL OF ENVIRONMENTAL ECONOMICS AND MANAGEMENT	57	56	71	67
WORLD BANK ECONOMIC REVIEW	58	55	53	51
JOURNAL OF FINANCIAL ECONOMETRICS	59	76	82	76
ECONOMETRIC REVIEWS	60	75	96	90
INTERNATIONAL JOURNAL OF INDUSTRIAL ORGANIZATION	61	64	65	65
JOURNAL OF LAW ECONOMICS & ORGANIZATION	62	59	62	60
EXPLORATIONS IN ECONOMIC HISTORY	63	61	60	52
LABOUR ECONOMICS	64	60	66	70
JOURNAL OF ECONOMIC BEHAVIOR & ORGANIZATION	65	62	76	74
JOURNAL OF POPULATION ECONOMICS	66	65	107	108
ECONOMIC INQUIRY	67	63	81	79
QME-QUANTITATIVE MARKETING AND ECONOMICS	68	68	41	41
CANADIAN JOURNAL OF ECONOMICS-REVUE CANADIENNE D ECONOMIQUE	69	70	67	64
EDUCATION FINANCE AND POLICY	70	67	68	75
JOURNAL OF ECONOMIC DYNAMICS & CONTROL	71	66	86	84
JOURNAL OF ECONOMIC SURVEYS	72	73	120	122
JOURNAL OF ECONOMICS & MANAGEMENT STRATEGY	73	74	97	93
OXFORD BULLETIN OF ECONOMICS AND STATISTICS	74	79	109	109
ECONOMICS OF EDUCATION REVIEW	75	72	91	97
JOURNAL OF MATHEMATICAL ECONOMICS	76	78	80	83
AMERICAN LAW AND ECONOMICS REVIEW	77	69	35	48
INTERNATIONAL JOURNAL OF GAME THEORY	78	86	93	95
NATIONAL TAX JOURNAL	79	71	54	61
REGIONAL SCIENCE AND URBAN ECONOMICS	80	81	108	107
SOCIAL CHOICE AND WELFARE	81	91	113	112
JOURNAL OF HUMAN CAPITAL	82	77	83	71
MACROECONOMIC DYNAMICS	83	84	95	94
THEORY AND DECISION	84	90	84	82
REVIEW OF INCOME AND WEALTH	85	82	106	105
REVIEW OF ECONOMIC DESIGN	86	101	72	69
OXFORD ECONOMIC PAPERS-NEW SERIES	87	88	116	115
INTERNATIONAL TAX AND PUBLIC FINANCE	88	85	92	92
ECONOMIC HISTORY REVIEW	89	83	88	91
JOURNAL OF DEMOGRAPHIC ECONOMICS	90	94	N.C.	N.C.
GENEVA RISK AND INSURANCE REVIEW	91	95	N.C.	N.C.
JOURNAL OF ECONOMIC INEQUALITY	92	87	57	62
ECONOMICS AND PHILOSOPHY	93	80	73	80
AMERICAN JOURNAL OF HEALTH ECONOMICS	94	89	50	53
EUROPEAN REVIEW OF ECONOMIC HISTORY	95	112	N.C.	N.C.
JOURNAL OF REGIONAL SCIENCE	96	97	63	66
JOURNAL OF ECONOMIC PSYCHOLOGY	97	103	124	123
ECONOMICS LETTERS	98	105	114	116
HEALTH ECONOMICS	99	96	110	113
SOUTHERN ECONOMIC JOURNAL	100	99	103	96

### Table 2: Rankings of All Economics Journals across Alternative Methods

Notes: This table is based on the geometric-mean rankings of all economics journals. See the notes to Table 1.

invariant top-5 ranking for each year over 2015-2019, and then produce its geometricmean ranking. There is very little difference between columns (3) and (4) of Tables 1 and 2, which is why we stick to the simple top-5 ranking in what follows.

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

Next, we calculated the correlations between the invariant ranking and our top-5 ranking for the top 20, top 30, top 40, top 50, top 75, and top 100 baseline journals.<sup>16</sup> The respective correlations were 0.928, 0.953, 0.935, 0.914, 0.900, and 0.879. 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 baseline journals.

#### 3.4 Comparison with online rankings

One possible criticism of our research is that since there are several online rankings that are updated frequently, it is not clear why we need to provide our own updated rankings. An important reason we do so is that we want to follow best-practice methods in economics to construct our rankings, while the methodologies used by the online rankings are either not clearly defined or are ad-hoc. Given this, it is useful to consider how close the online rankings are to our rankings.

Of course, one still faces the question of what constitutes an important difference between the rankings for a given journal. We could treat a difference of five or more spots between our ranking and a respective online rankings as important for a given journal, but alternatively we could treat a difference of ten or more spots as important. An intermediate definition where we treat a difference in eight or more spots for a given journal as important is also a possibility. We leave this issue up to the reader by using each of these thresholds below.

<sup>&</sup>lt;sup>16</sup>We summarize the detailed results in Online Appendix Table B.5(b).

We have placed the relevant rankings over all the JCR journals in Table B.1 in the online appendix; we use all JCR journals because the SJR rankings are based on all the JCR journals.

We first discuss the SJR rankings, which are probably the most widely cited online rankings. These are shown in Table B.1, column (2). Note the SJR does not cover two of our top 50 journals, the *NBER Macroeconomics Annual*, which we rank at seven, and the *AEA Papers and Proceedings*, which we rank at  $38^{th}$ . Moreover, for the remaining 48 journals, we classify 26, 20 and 14 journals as having important differences when we use a difference of five, eight and ten spots as our cutoff, respectively. Examples of journals that we use in our empirical analysis which have important differences in rankings for a threshold of eight sports are: TE,  $21^{st}$  (ours) vs.  $29^{th}$  (SJR); QE,  $24^{th}$  vs.  $32^{nd}$ ; *Review of Economic* Dynamics,  $27^{th}$  vs.  $39^{th}$ ; *RAND Journal of Economics*,  $28^{th}$  vs.  $41^{st}$ ; and International Economic Review,  $31^{st}$  vs.  $48^{th}$ .

Next, we consider the AJG rankings in column (3). First, this ranking does not include: the three main finance journals; the NBER Macroeconomics Annual, Annual Review of Economics; the AEA Papers and Proceedings; and the Journal of Money, Credit and Banking. The AJG ranking breaks journals into three distinct groups: 1-5 (coded 1); 6-23 (coded 6); and 24-73 (coded 24). This coding suggests that the AJG rankings are quite limited in their usefulness because these cells are so wide. Of course, the coding also makes it difficult to compare the AJG rankings to our invariant rankings in a sensible way.

Finally, we consider the *RePEc* online rankings in column (4). Our invariant rankings were at least five, eight and ten spots from the *RePEc* ranking for 37, 29 and 23, respectively, of the 50 journals in Table B.1. Important differences (as measured by a difference of eight spots or more) occur for the following journals that we use in our empirical analysis: the *Journal of Labor Economics*,  $15^{th}$  (ours) vs.  $25^{th}$  (*RePEc*); *Review of Economics and Statistics*,  $18^{th}$  vs.  $8^{th}$ ; *TE*,  $21^{st}$  vs  $62^{nd}$ ; *AEJ-Micro*,  $23^{rd}$  vs.  $56^{th}$ ; *QE*,  $24^{th}$  vs.  $46^{th}$ .

### 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 highest-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);
- 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 the *Economic Journal (EJ)* and the *International Economic Review (IER)*;

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

#### 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<sup>17</sup>; 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) 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.<sup>18</sup> The *y*-year forward impact factor for journal *j* in year *t* is

$$F_{j,t}(y) = \frac{1}{w_{j,t}} \sum_{k \in J} \sum_{m=t}^{t+y-1} c_{j,k,t,m},$$
(4)

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.<sup>19</sup> For example, if we want

 $<sup>^{17}</sup>$ 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.

<sup>&</sup>lt;sup>18</sup>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. Note that articles published in *TE* in 2006 were not available in the *JCR* and *Web of Science*. Furthermore, although *TE* entered the *JCR* and *Web of Science* in 2007, we found that the entire December issue of *TE* 2007 volume was wrongly excluded. We rectified these issues by hiring RAs to manually collect the data. More details on this data collection are provided in Section A.2 of the Online Appendix.

<sup>&</sup>lt;sup>19</sup>Again, we do not include citations from AEA Papers and Proceedings in this impact factor.

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 an equivalent y-year backward impact factor for journal j in year t with a y-year window as

$$B_{j,t}(y) = \left[\sum_{m=t-y+1}^{t} w_{j,m}\right]^{-1} \sum_{k \in J} \sum_{m=t-y+1}^{t} c_{j,k,m,t},$$
(5)

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 the same as those obtained from this 5-year backward impact factor measure (the current year plus the previous four years), where note the previously defined  $C_{j,k,t}$  satisfies  $C_{j,k,t} = \sum_{m=t-4}^{t} c_{j,k,m,t}$ . In what follows, unless otherwise stated, when we refer to a backward impact factor, we will just mean the above measure based on citations from the top-5 journals. Note, following our approach for forward impact factors, and in contrast to our invariant method reported in Table 1, this measure is non-iterative.

To better understand the difference between using the backward impact factors defined in (5) and our new forward impact factors defined in (4), 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.<sup>20</sup> 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 3 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 3 illustrates that the rankings of this subset of journals are quite similar across ranking methods, 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 3. These correlation coefficients are very close to one, reinforcing the result that the within-group ranks are essentially independent of the 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).

When one compares either (4) or (5) with (2), it is clear that we have given the top-5 journals equal weight by setting the impact for each equal to one. But we could have maintained equal weights by setting the impact factor for each top-5 journal to some other constant. This would affect the impact factors and so the coefficients from the regression analysis which uses these impact factors as the dependent variable. To deal with this, in interpreting our empirical results, we will convert the regression coefficients into the effect on the percentage changes in the impact factors. Alternatively, we could have used a log specification to address this problem, but to do so would require us to deal with the fact

 $<sup>^{20}{\</sup>rm A}$  3-year window for the backward impact factor also reduces the autocorrelation problem relative to the 5-year window used in our invariant ranking.

that some comparison journals had zero top-5 citations in a given year by adding a small constant to all impact factors. Unfortunately the choice of the small constant is arbitrary, and we found that our results depended on what we chose for this constant. Hence, we decided to stick with the linear specification. The log results are available from the authors upon request.

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 (3) 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

#### Table 3: Rankings within the Set of New and Comparison Journals

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

$$\bar{F}_{j,t} = \frac{1}{n_j^{\text{Com}}} \sum_{s \in S_j^{\text{Com}}} F_{s,t},\tag{6}$$

where  $S_j^{\text{Com}}$  and  $n_j^{\text{Com}}$  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 ESjournals, Figure 2 indicates that both QE and TE are above the average of their respective comparison journals in all years.<sup>21</sup> 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, but several years to widen the gap.<sup>22</sup>

 $<sup>^{21}</sup>$ Note that we consider *TE* from its inception in 2006, not from when the *ES* started publishing it in 2010. One can modify Figure 2 to start *TE* later, but doing so does not change our conclusion in the text.

 $<sup>^{22}</sup>$ 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

$$F_{j,t} = \alpha_0 + \alpha_1 d_j^{New} + \alpha_2 d^{Year} + \epsilon_{j,t}, \tag{7}$$

$$F_{j,t} = \beta_0 + \beta_{11} d_j^{AEA} + \beta_{12} d_j^{ES} + \beta_{13} d_j^{EEA} + \beta_2 d^{Year} + e_{j,t},$$
(8)

where  $F_{j,t}$  is defined above. Here  $d_j^{New}$  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  $x_i$  to (7) and (8) to obtain:

$$F_{j,t} = a_0 + a_1 d_j^{New} + a_2 d^{Year} + a_3 x_j + \epsilon_{j,t},$$
(9)

$$F_{j,t} = b_0 + b_{11}d_j^{AEA} + b_{12}d_j^{ES} + b_{13}d_j^{EEA} + b_2d^{Year} + b_3x_j + e_{j,t}.$$
 (10)

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) some 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 (9)-(10).

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:<sup>23</sup>

- (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.<sup>24</sup>
- (b) Editing experience with top-5 journals in a secondary role: We measure the average

 $<sup>^{23}</sup>$ 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.

 $<sup>^{24}</sup>$ 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.<sup>25</sup>
- (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<sup>26</sup> in the ten years prior to launch of the new journal.<sup>27</sup> For editors with less than ten years of seniority, we average their publications in top-5 journals over the relevant years.<sup>28</sup>
- (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

 $<sup>^{25}</sup>$ None had any experience with a new journal as an editor/co-editor.

<sup>&</sup>lt;sup>26</sup>We excluded AEA Paper and Proceedings.

 $<sup>^{27} \</sup>rm We$  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.

 $<sup>^{28}</sup>$ 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.<sup>29</sup>

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  $x_i$  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. 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

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

 $<sup>^{29}</sup>$ 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 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 their standard errors.

For the new journals and their respective comparison journals, define

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

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

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

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

$$\Delta(F_{j,t}) = F_{j,t}^{ECMA} - \widehat{F}_{j,t} \tag{12}$$

if j corresponds to an ES journal and its respective comparison journals.<sup>30</sup> 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 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

$$\Delta(F_{j,t}) = \delta_0 + \delta_1 d_j^{New} + \delta_2 d^{Year} + \mu_{j,t}, \qquad (13)$$

$$\Delta(F_{j,t}) = \pi_0 + \pi_{11} d_j^{AEA} + \pi_{12} d_j^{ES} + \pi_2 d^{Year} + u_{j,t}, \qquad (14)$$

where  $d_j^{New} = 1$  for the AEA and ES journals and zero otherwise. Note that we have assumed

<sup>&</sup>lt;sup>30</sup>One complication with this approach arises from the fact that the *JET* is a comparison journal for both an *AEA* journal and an *ES* journal. To deal with this, we take the average of  $\Delta(F_{j,t})$  for *JET* from (11) and (C.2) as the value of  $\Delta(F_{j,t})$  for *JET* used in all subsequent regressions. We do the same thing for *GEB*, which is the only other journal that is a comparison journal for both an *AEA* journal and an *ES* journal.

that the vector  $x_j$  differences out of (13) and (14). Significantly positive estimates of  $\delta_1$ , and of  $\pi_{11}$  and  $\pi_{12}$ , would suggest that the *AEA* and *ES* journals are receiving "extra" citations from their respective parent journals.<sup>31</sup>

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:

$$\check{F}_{j,t} = \frac{1}{w_{j,t}} \sum_{k \in J} \sum_{m=t}^{t+2} c_{j,k,t,m},$$
(15)

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,<sup>32</sup> we create a normalizing factor  $\tau$  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

$$\tilde{F}_{j,t} = \phi_0 + \phi_1 d_j^{New} + \phi_2 d^{Year} + \phi_3 x_j + \mu_{j,t},$$
(16)

$$\tilde{F}_{j,t} = \lambda_0 + \lambda_{11}d_j^{AEA} + \lambda_{12}d_j^{ES} + \lambda_{13}d_j^{EEA} + \lambda_2 d^{Year} + \lambda_3 x_j + u_{j,t}.$$
(17)

We then compare the percentage changes implied by 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 those

 $<sup>^{31}</sup>$ 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 their comparison journals, and the impact of *AER* citations on the *ES* journals and their comparison journals. We formalize this *alternative* approach in Section C.3 of the Online Appendix. This approach has essentially no effect on our estimated coefficients and their standard errors.

<sup>&</sup>lt;sup>32</sup>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.

implied by 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  $\hat{b}_{13}$ .

### 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 4 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 error).<sup>33</sup> The first row of Panel A of Table 4 indicates that the new journals' mean of the forward impact factor is 40.962, which is more than twice the size of the comparison journals' mean of 16.070, resulting in a statistically significant difference of 24.892 in the forward impact factors in column (4).<sup>34</sup> To look at this difference in percentage terms, we need to divide by the impact factor, which raises the issue of whether we should use the mean for the new journals, the mean for the comparison journals, or some combination of both to do so. We chose to use the average of the mean impact factor for the new journals and the mean impact factor of the comparison journals, i.e., (40.962+16.070)/2 = 28.516. This results in the new journal mean impact factor being (24.892/28.516)\*100 = 87.29% larger than the comparison journal impact factor. (We will make a similar adjustment to the regression coefficients below.) To examine the robustness of this result, we present the means for the backward impact factors in Table C.3 in the Online Appendix. Using the average of the impact factors, the increase going from the comparison journals to the new journals is 85.85%, which is very close to the number for

<sup>&</sup>lt;sup>33</sup>We multiplied the impact factors by 100 for ease of reading. The percentage change effects we report below are not affected by this (or other) multiplicative normalizations.

<sup>&</sup>lt;sup>34</sup>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 4:	Mean	Values	of the	Regression	Variables
<b>T</b> (0)() <b>T</b> (	TITOOTT	, or crop	OT OTIC	TOCHTODOIOII	1 01 100 100

	Mean	New	Comparison	Difference
	(1)	(2)	(3)	(4)
Panel A: Impact Factors and Articles Published Per Year ( <i>observations</i> = 326)				
Forward impact factors (multiplied by 100)	21.491	40.962	16.070	24.892
	(2.476)	(3.702)	(1.674)	(3.882)
	[0.000]	[0.000]	[0.000]	[0.000]
Articles published per year	60.715	35.944	67.612	-31.668
	(7.054)	(5.659)	(8.385)	(9.895)
	[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)
	[0.064]	[0.144]	[0.157]	[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)
Panal D. Adjusted Impact Factors (absorbations - 206)	[0.000]	[0.011]	[0.000]	[0.335]
Adjusted forward impact factors based on citations from $JPE$ , $QJE$ and $RES$	21.491	38.319	16.806	21.514
	(2.546)	(3.723)	(2.192)	(4.145)
	[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.

the forward impact factors. Note that both of these percentage differences are invariant to any normalizations one uses.

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 35.944 articles, and the difference of 31.668 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 articles in the journal.

In Panel B of Table 4, 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 4 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 5 shows the regression results when we use the forward impact factor as the dependent variable. In what follows we will look at the effect of changing an explanatory variable on the percentage change in the impact factor. We use year dummies in all regressions. In column (1) we present the new journal coefficient when we control only for year fixed effects, implying that new journals have impact factors that are, on average, 85.05% larger than those for the comparison journals.<sup>35</sup> In column (2), we show the results of decomposing the

<sup>&</sup>lt;sup>35</sup>This number differs slightly from the percentage change reported in Table 4, since in estimation we control for year dummies.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11) A E I- Micro	(12) Excluded
New	$24.254 \\ (4.144) \\ [0.000]$		22.285 (4.262) [0.000]		$22.590 \\ (3.633) \\ [0.000]$		28.897 (5.542) [0.000]		28.861 (6.162) [0.000]		27.241 (5.963) [0.000]	Excluded
Association Effects (1) AEA		27.001 (5.725) [0.000]		25.169 (5.837) [0.000]		23.381 (5.197) [0.000]		31.121 (5.388) [0.000]		31.332 (5.761) [0.000]		30.024 (5.222) [0.000]
(2) EEA		16.977 (1.797) [0.000]		16.349 (1.873) [0.000]		21.273 (5.314) [0.001]		25.596 (10.803) [0.027]		$29.074 \\ (11.654) \\ [0.021]$		25.807 (16.127) [0.125]
(3) ES		25.392 (5.519) [0.000]		22.753 (5.974) [0.001]		21.908 (5.518) [0.001]		25.675 (6.163) [0.000]		25.845 (6.276) [0.000]		23.785 (7.162) [0.003]
<i>P</i> -value for the null hypothesis that AEA=EEA=ES:		[0.070]		[0.166]		[0.954]		[0.542]		[0.482]		[0.572]
Articles published per year			-0.060 (0.032) [0.076]	-0.055 (0.032) [0.100]	-0.068 (0.033) [0.051]	-0.066 (0.035) [0.074]	-0.061 (0.029) [0.047]	-0.064 (0.029) [0.040]	-0.048 (0.034) [0.181]	-0.048 (0.035) [0.192]	-0.054 (0.036) [0.147]	-0.053 (0.040) [0.201]
Characteristics												
Affiliation rank					-0.165 (0.072) [0.031]	-0.160 (0.074) [0.041]			-0.209 (0.076) [0.012]	-0.210 (0.075) [0.010]	-0.148 (0.070) [0.047]	-0.144 (0.063) [0.033]
Seniority					0.018 (0.280) [0.948]	0.010 (0.276) [0.972]			-0.243 (0.461) [0.604]	-0.274 (0.462) [0.559]	0.086 (0.347) [0.806]	0.072 (0.342) [0.836]
Publication performance					-11.358 (8.822) [0.211]	-10.215 (12.129) [0.409]			-7.948 (11.982) [0.514]	-7.933 (13.250) [0.555]	6.454 (8.985) [0.481]	6.679 (9.531) [0.492]
Average Editor's Years of									. ,	. ,	. ,	
Key role, Top-5 journals							-17.142 (12.924) [0.198]	-20.510 (18.374) [0.276]	-17.720 (13.152) [0.192]	-18.213 (19.425) [0.359]	-35.350 (47.790) [0.468]	-19.591 (47.609) [0.685]
Secondary role, Top-5 journals							-19.659 (15.798) [0.226]	-17.254 (23.928) [0.478]	-23.376 (14.629) [0.124]	-25.676 (21.941) [0.254]	-24.610 (15.499) [0.128]	-27.354 (22.919) [0.247]
Key role, new and comparison journals							2.217 (6.072) [0.718]	1.126 (6.118) [0.856]	0.758 (7.506) [0.920]	0.559 (7.019) [0.937]	-3.836 (5.923) [0.525]	-4.176 (5.537) [0.460]
Secondary role, new and comparison journals							-1.378 (4.439) [0.759]	-2.894 (6.283) [0.650]	-6.046 (6.479) [0.361]	-6.820 (8.150) [0.412]	-1.087 (5.503) [0.845]	-1.885 (7.847) [0.813]
<i>P</i> -value for the null hypothesis that the coefficients for editors' editing experiences jointly equal zero							[0.085]	[0.133]	[0.008]	[0.009]	[0.230]	[0.258]
Observations	326	326	326	326	326	326	326	326	326	326	302	302

Table 5: Results for the Forward Impact Factors

Notes: See the notes to Table 4. Results in columns (11)-(12) replicate columns (9)-(10) after excluding *AEJ-Micro* and its comparison journals.

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. These results suggest that the JEEA, the AEA journals and the ESjournals have impact factors that are 59.53%, 89.04%, and 94.69% higher than the comparison journals, respectively. However, a robust F-test for the equality of the effects across associations produces a p-value of 0.070. Hence, we can reject the null hypothesis that the effects are the same across the different associations only at 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 10 more articles in a year lowers its impact factor by only 0.21%. Accounting for this variable lowers the unexplained difference between the new and comparison journals by little. 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) respectively. 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 a average editor from a  $15^{th}$  ranked to a  $5^{th}$  ranked school increases a journal's impact factor by 5.79% (based on column (5)) and 5.61% (based on column (6)). The other editors' quality characteristics, seniority and publications, are neither individually nor jointly significant in columns (5) and (6). The inclusion of the mean editors' quality variables has little effect on the new journal coefficient and the association coefficients in columns (5) and (6) respectively.

Next, we investigate whether controlling for differences in editing experience can help explain the percentage 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 these editing variables are not individually significant in columns (7) or (8); they are jointly significant at the ten percent level in (7) but not in (8). The estimated new journal percentage effect jumps to 101.34%, and the association percentage effects are also higher at 89.76\%, 109.14%, and 90.04% for the *JEEA*, the *AEA* journals and the *ES* journals respectively.

In columns (9) and (10), we add the editor 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 (a) the JEEA coefficient implies its estimated impact factor is 101.96% higher than that of a comparison journal and (b) 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 5 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 feel it is important to make sure that the unexplained differences across specifications are robust to such changes.

We also consider a number of further robustness checks as follows. 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 6, we repeat the analysis in columns (9) and (10) of Table 5 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 6 show the results when we replicate Tables (9) and (10) for the case where the data on the comparison journals starts at the time of launch of the new journal. The results in columns (1)–(4) of Table 6 are quite similar to those in columns (9) and (10) in Table 5. As a robustness check, in Appendix Tables C.1 and C.2 we replicate Tables 4 and 5 respectively when we use editing characteristics measured over the 5-year period before the launch of the new journal (as opposed to the 10-year period), but this does not change our results.<sup>36</sup>

Further, 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) and (6) of Table 6, indicate that the coefficients on this new variable are nowhere close to being statistically significant. Thus, we conclude that the differences in the impact factors between the new and association journals are not being driven by this potential conference effect.

As we noted earlier, TE formally became an ES journal in 2010. So far, we have used 2006 as the starting year for TE. In columns (7) and (8) of Table 6 we replicate columns (9) and (10) of Table 5 when we let TE start in 2009 instead. We use 2009 rather than 2010 since the agreement between TE and ES was reached at the end of 2008, and may have been anticipated even earlier by insiders. The agreement was publicly announced on February 12, 2009. Changing the start date for TE has little effect on our results.

Similarly, in columns (1)-(8) of Table C.6 we replicated the analysis in columns (1)-(8) of Table 6 when we use the backward impact factor as the dependent variable. Again, the results are very similar to those in Table 6.

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.

<sup>&</sup>lt;sup>36</sup>In Appendix Table C.5, we reproduce Table C.2 by using the backward impact factor instead.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Adjusted for impact factor on citation JPE, QJE a (9)	forward ors based ns from and <i>RES</i> (10)
New	$28.190 \\ (6.323) \\ [0.000]$		27.538 (6.637) [0.000]		28.054 (6.160) [0.000]		27.233 (5.126) [0.000]		26.247 (9.046) [0.008]	
(1) AEA		30.817 (5.851) [0.000]		30.420 (6.017) [0.000]		30.476 (5.737) [0.000]		$27.764 \\ (4.941) \\ [0.000]$		33.660 (6.614) [0.000]
(2) EEA		$32.531 \\ (10.651) \\ [0.006]$		35.194 (10.832) [0.004]		$29.850 \\ (11.396) \\ [0.016]$		$26.730 \\ (10.573) \\ [0.019]$		$\begin{array}{c} 43.484 \\ (14.671) \\ [0.007] \end{array}$
(3) ES		25.249 (6.714) [0.001]		$24.484 \\ (7.111) \\ [0.002]$		25.167 (6.733) [0.001]		26.119 (9.828) [0.014]		17.321 (9.049) [0.069]
<i>P</i> -value for the null hypothesis that AEA=EEA=ES:		[0.518]		[0.437]		[0.567]		[0.965]		[0.057]
Conference					1.138 (3.254) [0.730]	1.047 (3.209) [0.747]				
Articles published per year	-0.041 (0.037) [0.277]	-0.044 (0.039) [0.277]	-0.052 (0.039) [0.203]	-0.058 (0.041) [0.173]	-0.045 (0.036) [0.227]	-0.046 (0.039) [0.244]	-0.056 (0.038) [0.156]	-0.056 (0.039) [0.166]	-0.052 (0.043) [0.233]	-0.065 (0.046) [0.171]
Average Editor's Research <u>Characteristics</u> Affiliation rank	-0.195 (0.085) [0.032]	-0.200 (0.082) [0.023]	-0.188 (0.086) [0.040]	-0.197 (0.083) [0.027]	-0.204 (0.082) [0.021]	-0.206 (0.082) [0.020]	-0.183 (0.075) [0.023]	-0.180 (0.075) [0.026]	-0.160 (0.105) [0.143]	-0.181 (0.096) [0.073]
Seniority	$\begin{array}{c} -0.142 \\ (0.455) \\ [0.758] \end{array}$	$\begin{array}{c} -0.168 \\ (0.478) \\ [0.728] \end{array}$	(0.510) (0.510) [0.802]	(0.521) (0.540) [0.785]	$\begin{array}{c} -0.162\\ (0.449)\\ [0.721] \end{array}$	$\begin{array}{c} -0.187 \\ (0.462) \\ [0.690] \end{array}$	(0.020) (0.368) [0.958]	$\begin{array}{c} 0.023 \\ (0.384) \\ [0.953] \end{array}$	$\begin{array}{c} -0.615 \\ (0.502) \\ [0.234] \end{array}$	-0.653 (0.518) [0.220]
Publication performance	$ \begin{array}{c} -5.684 \\ (11.828) \\ [0.636] \end{array} $	-8.413 (11.972) [0.490]	-4.469 (13.280) [0.740]	-9.501 (13.691) [0.495]	-3.502 (11.748) [0.768]	-4.516 (12.174) [0.714]	-3.178 (9.376) [0.738]	-2.476 (8.523) [0.774]	$\begin{array}{c} 3.382 \\ (12.652) \\ [0.792] \end{array}$	-6.901 (13.600) [0.617]
Average Editor's Years of										
Key role, Top-5 journals	-16.449 (14.059) [0.255]	-12.906 (12.830) [0.500]	-19.981 (14.243) [0.175]	-12.732 (19.276) [0.516]	-18.503 (13.684) [0.190]	-17.479 (19.061) [0.369]	-19.095 (13.846) [0.182]	$18.584 \\ (20.521) \\ [0.375]$	-9.704 (21.181) [0.651]	$\begin{array}{c} 4.325 \\ (24.071) \\ [0.859] \end{array}$
Secondary role, Top-5 journals	-25.576 (15.630) [0.116]	-32.428 (20.714) [0.132]	-24.313 (15.701) [0.136]	-35.329 (20.311) [0.096]	-25.459 (14.946) [0.103]	-29.254 (21.573) [0.189]	-19.212 (14.687) [0.204]	-19.502 (22.224) [0.390]	$\begin{array}{c} -22.312 \\ (22.068) \\ [0.323] \end{array}$	-46.117 (26.875) [0.100]
Key role, new and comparison journals	-1.259 (7.384) [0.866]	-0.901 (6.799) [0.896]	-1.583 (8.040) [0.846]	-0.770 (7.428) [0.918]	$\begin{array}{c} 0.867 \\ (6.989) \\ [0.902] \end{array}$	$\begin{array}{c} 0.797 \\ (6.429) \\ [0.902] \end{array}$	-1.170 (6.007) [0.847]	-1.213 (5.737) [0.834]	10.582 (9.721) $[0.288]$	$12.128 (7.853) \\ [0.137]$
Secondary role, new and comparison journals	-3.919 (6.597) [0.559]	-3.727 (8.585) [0.668]	-3.391 (7.204) [0.642]	-2.305 (9.180) [0.804]	-4.416 (6.563) [0.508]	-4.766 (8.579) [0.584]	-2.277 (4.877) [0.645]	-2.187 (8.584) [0.801]	-3.048 (9.259) [0.745]	-1.048 (11.408) [0.928]
r -value for the null hypothesis that the coefficients for editors' editing experiences jointly equal zero	[0.019]	[0.017]	[0.004]	[0.002]	[0.009]	[0.010]	[0.058]	[0.067]	[0.127]	[0.010]
Observations	278	278	230	230	326	326	317	317	326	326

#### Table 6: Further Results on the Forward Impact Factors

Notes: See the notes to Table 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 start *TE* in 2009 and its comparison journals in 2003. In columns (9)-(10), we use the adjusted forward impact factors based on citations from *JPE*, *QJE* and *RES* as the dependent variables.

#### 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.<sup>37</sup> 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 proceed, 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 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 that of the AER (ECMA) than their respective comparison journals.

Table 7: Mean Values for the Differences in the Adjusted Forward Impact Factors

	Mean (1)	New (2)	Comparison (3)	Difference (4)
Differences based on citations from the	6.551	14.571	4.443	10.128
parent journal minus average citations from	(0.986)	(1.740)	(0.504)	(1.707)
JPE, QJE  and  RES  (multiplied by 100)	[0.000]	[0.000]	[0.000]	[0.000]

Notes: See the notes to Table 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 7 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 6.551, which is highly statistically significant. This result is consistent with the *AEA* (*ES*) journals and their comparison journals being 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 14.571 and 4.443 for the new journals and the comparison journals respectively. Column (4) shows a mean difference of 10.128 between the new journals and the comparison journals, which is also highly statistically significant. We can calculate the percentage difference using 100 \* 10.128/((14.571 + 4.443)/2) = 106.53%.<sup>38</sup> These results are consistent with overciting

 $<sup>^{37}</sup>$ Note all the new journals except *JEEA* have a parent journal.

 $<sup>^{38}\</sup>mathrm{We}$  use the percentage change because normalizations in the forward impact factor will affect this difference.

by the parent journals. We noted above that we could also construct differences based on citations from four journals, e.g. citations from ECMA, QJE, JPE and RES for the AEA journals, and citations from AER, QJE, JPE and RES for the ES journals. In Table C.7 in the Online Appendix, we repeat the analysis for the alternative difference measures that make use of the these differences. We obtain very similar results to those in Table 7.

	Differences based on	Differences based on citations from the parent journal minus average citations from JPE, QJE and RES (multiplied by 100)		
	journal minus a			
	JPE, QJE and $R$			
	(1)	(2)		
New	9.945			
	(1.796)			
	[0.000]			
Association Effects				
AEA		10.717		
		(2.617)		
		[0.001]		
ES		8.617		
		(0.895)		
		[0.000]		
<i>P</i> -value for the null hypothesis that				
AEA=ES:		[0.440]		

Table 8: Results for the Differences in the Adjusted Forward Impact Factors

Notes: See the notes to Tables 4 and 7. The x variables are assumed to difference out. There are 269 observations.

In Table 8, we present our regression results where the dependent variable is the difference in the adjusted impact factors based on three journals; since we are looking at the differences 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 9.945 additional citations from their respective parent journal, i.e. a percentage change of 104.61% percent. When we use the Association dummies in (2), the *AEA* percentage overcitation rate is 112.73% while the *ES* overcitation rate is 90.64%, but we cannot reject the null hypothesis that the *AEA* and *ES* over-citation effects are equal. In Table C.8 in the Online Appendix, we show the regression results when we use the difference measures based on four journals. These results are very similar to those in Table 8. Next, we investigate how over-citing by parent journals affects the results in Tables 4 and 5. 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. The means are given in Panel D of Table 4.<sup>39</sup> Compared to the means in Panel A of Table 4, we see that means for the new journals are closer to their comparison journals. For comparison, in Appendix Table C.9 we replicated the calculations in Panel D of Table 4 when we used the alternative adjusted impact factors based on four journals. This did not change the results.

We then reestimated the regressions underlying columns (9) and (10) of Table 5 for the case where the adjusted forward impact factor is the dependent variable. The new results are presented in columns (9) and (10) in Table 6, and are only slightly different from those in columns (9) and (10) of Table 5. In Table C.10, we repeated columns (9) and (10) of Table 6 when we used the alternative adjusted impact factors based on four journals. Again the results are robust to this modification. As a final robustness check, we replicated the analysis discussed in the previous paragraph when we use the backward impact factors. The new results are in Appendix Tables C.11-C.17 and are very similar to those presented above.

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 conclusions.

In summary, we asked whether we could find explanatory variables that would help us understand (or reduce) the new journal effect and the association journal percentage effects implied by columns (1) and (2) respectively of Table 5. We then conditioned on a number of explanatory variables, several of which are statistically significant. But doing so actually increased the new journal and association journal percentage effects as implied by columns (9) and (10) of Table 5. Next we consider further explanations for the large gap between the comparison journals and the association journals in terms of their impact factors.

 $<sup>^{39}</sup>$ We included *JEEA* since the analysis here does not depend on a journal having a parent journal.

#### 5.4 Other potential factors

There are several other factors that could matter for the impact of new journals, but which we don't have sufficient data to control for in the regression analysis. One set of factors is around the pricing of journals and access to them. This includes whether the journal has an open-access policy or whether it is included in a bundle with other journals when it is sold to university libraries. If new journals are open access (as is the case for the ES journals QE and TE) or if new journals are bundled together with other journals already sold to libraries (as is the case for all AEA journals and also for JEEA which is bundled with other Oxford University Press journals), then it will be easier for scholars to access them, including immediately upon launch. This potentially increases the citations of their articles. However, we are doubtful this effect can be very significant in the period we consider. As Bergstrom et al. (2014) document, the practice of bundling is widespread across all the major for-profit publishers (e.g., Elsevier, Springer and Wiley), so the new journals do not have any special advantage.

A second type of factor that we considered is journals trying to make the submission of articles more attractive. One such approach is to allow authors to have their referee reports transferred. AEJ journals allow authors to transfer referee reports from the AER, and ES journals allow authors to transfer referee reports from ECMA. Thus, these new journals may be able to attract some of the articles that were rejected by the AER or ECMA, but which are nonetheless very strong since authors can get a faster decision from the editor on the basis of those reports. A few of our comparison journals also had a transfer policy. Starting in 2015, the JOLE 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 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. Furthermore, for TE, no authors requested the transfer of the editorial

 $<sup>^{40}{\</sup>rm We}$  as certained these journals' policies by writing to the journals, as we could not find any official policy announcement of their respective changes.

materials from ECMA until 2010 (when ES officially took over TE) so this cannot explain the initially strong performance of TE. And as documented in the 2009 AEJ-Applied Report of the Editor, the overall acceptance rate of papers where authors transferred reports was actually lower than regular submissions, further casting doubt on report transfers as a key mechanism to explain the strong performance of the new journals.

Another way to make submitting articles more attractive is offering faster turnaround times for the review and editorial process. AEJ-Applied, AEJ-Macro and AEJ-Micro all explicitly stated their commitments to timely handling of manuscripts in their reports from the editor(s). If this encourages more submissions, it could have two effects: (i) by giving the journal a greater supply of articles to select from, the journal can be more selective, increasing average quality; and (ii) by over-burdening editors with articles, it could lead some below-average quality articles to slip through. We considered using self-reported timeto-decision data to see if we could empirically measure the effect of this factor. However, only the AEJs provide regular time-to-decision data in their annual reports, with TE, QE, JEEA providing partial data. Most of the comparison journals had no available data at all. The gold standard in terms of time-to-decision among the new society journals is AEJ-Applied. In AEJ-Applied's 2008 report for 2007 it documented an average time to first decision of 38 days. This compares to a median time to first decision of AEJ-Macro at 49.3 days, AEJ-Policy at 58 days, TE at 60 days, AEJ-Micro which is stated as less than 2.5 months, QE at 104 days, and between 90 - 129 days for JEEA as documented in their first reports, although the exact definitions of these different statistics are not the same. How desk rejects are handled in these statistics could make a big difference. From the few comparison journals we could get statistics on, the time-to-first decisions can also be quite low (e.g., JHR at 30.55 days and JME at 39.2 days, from their latest available data). We doubt therefore that timeto-decision can by itself be a key factor, given that TE, QE and JEEA did not make an initial promise for fast turnaround times, and given the incomplete and inconsistent data on time-to-decision across most journals.

The key distinction of the set of journals we study compared to other new journals that have been introduced in the last couple of decades is the importance and prestige of the economic associations that introduced them. 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 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 ES and the EEA) do indeed have the necessary reputation to induce scholars to coordinate on the desired equilibrium.

### 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 below the top-5, and ranked above 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 impact factors are often correlated with observable journal characteristics in the direction that we would expect, controlling for them jointly only makes the puzzle of the performance of these new society journals even more striking. We also documented that the new journals benefit from "extra" citations from their parent journals, but controlling for this variable does not affect the relative performance of the new journals versus their comparison journals. We are left with large unexplained differences. We think the most plausible explanation is that the most prestigious and important associations in our profession (AEA, the ES and the EEA) were able to leverage their reputation to get authors, editors, and referees to act as if these new journals would be on par with, or better than, other top field 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 simply ask whether differences in these explanatory variables can explain the differences in the impact factors for the new journals and their respective comparison journals.

One could also 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 similar journals in their respective fields.

Finally, it will be interesting to consider how the two new journals that were launched in 2023 by the University of Chicago Press and are not backed by an association will perform. This speaks to an interesting question: the extent to which a new journal can leverage the reputation of its parent journal's name and the economics department it is associated with, as opposed to the reputation of a prestigious association.

## 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.

Heckman, James J. and Sidharth Moktan (2020). Publishing and promotion in economics: the tyranny of the top five. *Journal of Economic Literature* 58(2): 419-70.

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.