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ABSTRACT

Is Scholarly Refereeing Productive (at the Margin)?*

In economics many articles are subjected to multiple rounds of refereeing at the same journal, which generates time costs of referees alone of at least $50 million. This process leads to remarkably longer publication lags than in other social sciences. We examine whether repeated refereeing produces any benefits, using an experiment at one journal that allows authors to submit under an accept/reject (fast-track or not) or the usual regime. We evaluate the scholarly impacts of articles by their subsequent citation histories, holding constant their sub-fields, authors' demographics and prior citations, and other characteristics. There is no payoff to refereeing beyond the first round and no difference between accept/reject articles and others. This result holds accounting for authors' selectivity into the two regimes, which we model formally to generate an empirical selection equation. This latter is used to provide instrumental estimates of the effect of each regime on scholarly impact.

JEL Classification: A1, I2
Keywords: citations, refereeing, publishing

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I. Introduction and the Problem

The gold standard in scholarly publishing is "peer review"—having one's work vouched for by other scholars, both referees and journal editors. Promotions and salary decisions in many colleges, universities and other organizations depend upon the process. Journalists often inquire whether a scholarly work which they wish to mention has been peer-reviewed. And, while referees do not make decisions about the articles that they review, their comments are essential inputs to editors' decisions about publication.

Given the importance of referees in this process, it is very worthwhile examining the extent to which they add value to the scholarly product. The question is especially important in economics, where the publishing process, from submission of an article to its eventual acceptance and publication, is often very slow (Ellison, 2002). While most referees handle their tasks quite quickly (Hamermesh, 1994), the distribution of lags in refereeing in economics has a very long right tail. Worse still, scholarly articles in economics increasingly undergo several rounds of "revision/re-submission," processes in which dilatory behavior by referees can add substantially to already long publication lags.

The refereeing process generates additional social costs by slowing the dissemination of ideas. While we cannot readily evaluate the magnitude of those costs compared to the social benefits that the process may create, we can at least evaluate whether those benefits are even positive. This question has not been examined using objective data on the activities of both referees and authors, and certainly not in an accepted experimental context.[1] Here, we examine the results of an experiment in which a journal editor (of *Economic Inquiry*, *EI*) created a two-stream

[1]Laband (1990) considered subsequent citations to a small set of published articles in relation to the comments made by referees and editors.

mechanism for handling papers. One stream was the usual revise/resubmit process, the other being a fast-track "accept/reject" stream.

II. The Cost of Refereeing

The quantity of time spent on refereeing manuscripts for economics journals is difficult to determine. A very partial hint at the number of referee reports filed comes from our solicitation to the editors of the Top 4 journals in the field: The *American Economic Review*, *Econometrica*, the *Journal of Political Economy* and the *Quarterly Journal of Economics*. In 2018 they received referee reports averaging 2,424 per journal. The journal on which we base our analysis received 1077 reports in 2018. Given the huge number of journals that might be classified as in the field of economics, perhaps 360 others; and assuming other journals average only 800 reports per year, as many as 300,000 referee reports may be generated each year in economics.[2]

We cannot know how long it takes an economist to write a referee report. A conservative estimate, based on our own experiences, suggests the average report might take five hours, with the time obviously varying with the complexity of the article being refereed, the referee's familiarity with the specifics of the topic and her/his interest in the topic. Thus, the total time spent refereeing in economics might be conservatively estimated at 1.5 million hours each year.

Valuing this time is even more difficult since we do not know the identity, or the earnings, of the average referee. Referees are not randomly chosen by editors, but rather are taken from among more productive and presumably more highly paid economists. Again, being conservative, we use the average 9-month salary of assistant professors at U.S. BA-granting institutions, $87,000, reported by American Economic Association (2019). Assuming that the nine months

[2]As of July 2019, JSTOR classified 181 journals as being in its specialty "Economics." Journal Citation Reports listed 363. No doubt there are large numbers of other refereed journals, not included in JSTOR or JCR, that can reasonably be viewed as being in this field.

represent 1500 working hours, the hourly wage of this group is around $60. Numerous studies have tried to estimate the value of time (VOT) in non-market activities, which arguably includes the time spent refereeing manuscripts. Using the estimate that the average VOT is 60 percent of the hourly wage, based on the meta-analysis in Zamparini and Reggiani (2007) and the experiment in Mas and Pallais (2019), implies a $35 price of an hour of the average referee's time.

Coupling this with the estimate of hours spent suggests that refereeing in economics generates a time cost of over $50 million. This estimate ignores the direct and indirect costs associated with journals' clerical staff soliciting and obtaining reports, and editors reading and evaluating them; and it also ignores any possible benefits scholars might obtain for their own research from refereeing others'. Given that scholarly work submitted to economics journals represents only a small fraction of the entire scholarly enterprise worldwide, $1 billion spent annually on refereeing scholarly work may not be an overestimate of the total cost of this part of the scholarly enterprise.

That the refereeing process can lead to remarkably long lags between submission and publication in economics is demonstrated by the distribution in Figure 1a, showing the time (in months) from submission to publication in five major economics journals in 2018, and also showing the kernel density describing the underlying data.[3] While the median time was "only" 2-1/4 years, the 90th percentile of submit-to-publication times in these journals was over four years.

[3]The journals are the *Journal of Econometrics*, *Journal of Labor Economics*, *Journal of Public Economics*, *Review of Economic Studies* and *Review of Economics and Statistics*. Every experienced economist has horror stories about the "R&R" process. One author told us, "[*Journal X*] so far has taken 3 years since the initial submission. This included a full 10 months for the first set of reviews and another 7 months for the second round of reviews. We just resubmitted for a 2nd R&R in November and have not heard anything back yet [as of March]." Yet another author listed 5 years from initial submission to final acceptance, which included 3 re-submissions. Another author noted that several of his papers had been "refereed to death," accreting so many changes designed to please referees that they lost coherence and eventually did not merit publication. Horror stories such as these are legion. *EI* has been guilty of the same sin occasionally: One co-editor required six rounds of refereeing on an article that he handled.

Even with online publication available perhaps as much as one year before print, a substantial upper tail of published papers is not available in final form to other scholars for three years or more after submission. One reason for these lags is that on many submissions journal editors require multiple sequences of referee reports—authors receive "revise/re-submit" letters. In economics it is not uncommon that 3 to 5 revisions are required before acceptance (Ellison, 2002; McAfee, 2010). Given these lags, discovering whether the repeated rounds of refereeing to which many manuscripts are subjected add anything to their scholarly value seems a very valuable inquiry.[4]

The economics profession appears to be atypical among the social sciences in the length of time between a paper's initial submission and its publication. Figure 1b graphs the same statistic as in Figure 1a, but it is based on data from 2018 volumes of five journals from other social sciences (sociology, psychology and political science). A comparison of the two graphs is striking: The long right tail in Figure 1a is missing in the other social sciences. The median duration is only 17 months in these journals, a full year less than in the five very good, but not top-rank economics journals; and the 90th percentile is 27 months in the other social sciences, nearly two years less than in economics.

III. The *Economic Inquiry* Experiment

In response to the lengthening of the publication process and also to referees becoming in effect anonymous co-authors, in 2007 *Economic Inquiry* introduced a two-track process. Submitting authors could choose between a fast track, in which the article receives a simple yes or no; or a regular track, which might lead to acceptance with minor revisions, to a revise/re-submit response with subsequent additional refereeing, or to rejection (McAfee, 2010).[5]

[4]Rust (2018) noted some of the behavior that multiple rounds of refereeing has created.

[5]See https://weai.org/view/EI-No-Revisions.

As the journal's then Editor-in-Chief noted when he introduced the policy, "In this experiment, an author can submit under a 'no revisions' policy. This policy means exactly what it says: if you submit under no revisions, I (or the co-editor) will either accept or reject. What will not happen is a request for a revision. I will ask referees: 'is it better for *Economic Inquiry* to publish the paper as is, versus reject it, and why or why not?' This policy returns referees to their role of evaluator. There will still be anonymous reports. Authors who receive an acceptance would have the option of publishing without changes. If a referee noticed a minor problem and put it in the report, self-respecting authors would fix the problem."

This policy change is obviously not a randomized experiment, since authors themselves choose whether to be in the treatment (fast-track) or control (regular-track) group. Possible self-selection into one or the other track must be accounted for in evaluating the impact of this policy change, which should be viewed as an experiment, albeit not one generated by nature.

IV. The Sample and Data

Between 2009 and 2018 inclusive *Economic Inquiry* (*EI*) published 935 papers. Of these, we had no information on the submission track of 25; another 6 had no information on the identity of the co-editor who handled the article, another 3 were Presidential addresses, which we exclude, and another 24 were unavailable for miscellaneous reasons. An additional 48 articles, each shorter than 10 pages in print, were also excluded (following the exclusion restrictions in Hamermesh, 2018). For the usable sample of 829 articles the Editorial Office of *EI* provided information on the track chosen (fast-track or regular) length of time from submission to first decision, and from submission to final decision for those regular-track articles that went through more than one round of refereeing. Also available was the number of published pages in each article. In addition to all published articles we have information on the track used for submission of 5,178 rejected articles.

For each of the 1,718 authors of the 829 usable published articles, we obtained from various websites their gender (inferred from name or photograph) and the year they received their Ph.D., using the latter to calculate Ph.D.-age at the time of submission to the journal.[6] We use the Web of Science (WoS) to obtain each author's prior citations.[7] For each author in our data set, we find the total number of citations per year for the 5 years before submission of their paper to *EI* and for the year of submission. We do this for the first 4 authors of each paper in our data (since only 3 of the included articles had more than 4 authors).

Fast-track papers are statistically significantly, but absolutely only slightly more likely to be accepted for publication than those submitted through the regular track (0.159, s.e. = 0.004, compared to 0.149, s.e. = 0.002).[8] As Figures 2a and 2b show, there is little difference in the time between submission and first decision among accepted papers along the two tracks. Waiting for an encouraging response rarely lasts more than 6 months, with the median wait being 97 days on each track, and the 90th percentile being 210 days among fast-track papers, 230 days along the regular track. Figures 3a and 3b show that initial response (rejection) times are also similarly distributed across tracks.

The difference between the tracks arises from the lag between initial response and final acceptance on regular-track papers. Figure 4 shows the distribution of these response times (with the distribution for fast-track papers being that in Figure 2a). There is a very long tail of times to final decision among regular-track papers, with a 90th percentile of 512 days (17 months) and a

[6]If the author did not have a Ph.D., we coded his/her Ph.D. age as 0.

[7]We used a tool called Citation Report. Because the WoS provides citation data for all authors in our dataset, whereas the provision of author citation data in Google Scholar and RePEc depends on whether the author has created a profile on those platforms, it is the best source of data for our purposes.

[8]This calculation includes all published papers, as we do not have information on the length of unpublished papers and thus cannot exclude very short articles.

95th percentile of 640 days (21 months). Aside from the obvious risk of rejection, submission along the regular track carries a small risk of becoming involved in a very dragged-out process.

Submissions of accepted papers along the two tracks do have somewhat different characteristics. As the statistics in Table 1 demonstrate, papers on each track are of almost identical length. But the most senior author on articles submitted via the fast track is more senior than his/her counterpart on the regular track; and the most-cited author on the fast track is more heavily cited than the most-cited regular-track author. There is more likely to be at least one female author on fast-track articles; and those articles are less likely to be single-authored. Taken together, these differences underscore the need to account for other covariates and for possible selectivity in describing the impact of track on subsequent scholarly impact.

Slightly more than half of accepted submissions along the regular track (344 out of 669) went through more than one round of refereeing (were afforded the widely-used "revise and re-submit" possibility with no promise of acceptance). There were no significant differences between the two types of regular-track submissions in any of the variables summarized in Table 1.

Appendix Table A1 shows the means and some order statistics describing the distributions of authors' prior citations and citations to the published article in *EI*. Citations to each article are available for Year 0 (2009) up through Year 8 (2017). The median paper in the journal receives no WoS citations in one of its first 8 post-publication years. Seventeen percent of the articles on which we have 9 years of data received no citations during this period. The median for the group with 9 years of data is 4 citations, with the 90th and 95th percentiles being 20 and 28. As with distributions of citations generally (Hamermesh, 2018), these are highly skewed.

V. Estimating the Basic Model

We estimate the determinants of annual citations to each of the 829 articles in the usable sample. Each article is included as an observation in each year post-publication for which we

observe WoS citations (or in which there are zero citations to the article). We present successively more richly specified models, beginning with a specification that includes only an indicator for whether the article was submitted via the fast track and another for regular-track articles that were accepted without an additional round of referee reports (with multi-round regular-track papers being the excluded category). We then add vectors of indicators of years after publication and issue number (which purely mechanically alters subsequent annual citations); *JEL* category, aggregated into 10 groups; page length, number of authors, a vector of indicators of the co-editors' identity (to account for their possibly different interest in requiring multiple rounds of referee reports and its effects on citations); and, finally, each author's gender and citations prior to submission. Because most articles appear in more than one post-publication year, the standard errors are clustered on the articles.[9]

The least-squares estimates are shown in Table 2. While longer articles do receive more citations (remembering that we exclude articles with fewer than 10 printed pages), there are no significant differences in subsequent citations among papers in different sub-specialties (with different *JEL* codes). Not surprisingly, otherwise identical articles whose authors have been cited more heavily before submission receive significantly more subsequent citations to their articles, with the impacts being at least marginally significantly positive even for a fourth author. Also, articles on which one of the authors is female receive (insignificantly) fewer citations, a result that holds also for female-authored solo papers and for the share of female authors.

The central results are for the indicators "fast track" and "one-round regular." With no other covariates included, the fast-track papers are cited significantly more than articles submitted

[9]Re-estimating all the equations in Table 2 using Poisson estimation to account for the count nature of the dependent variable yields essentially the same conclusions as the estimates presented here. Going further, results that account for over-dispersion in the count measure by using negative binomial estimation also yield the same conclusions.

through the regular process. One-round regular papers also receive more citations than those published papers that were refereed multiple times at the journal. Even when we include all the covariates, we still see that fast-track articles are more heavily cited than others, and that one-round regular submissions receive insignificantly more citations than multiply refereed articles.

VI. Prior Refereeing

These estimates suggest that fast-track articles have greater scholarly impacts than others, and that a second or subsequent round of refereeing on regular-track articles is not productive. But there may be difficulties if fast-track articles or those that go through multiple rounds of refereeing at this journal have received more refereeing at other outlets before submission—have been refereed, rejected and because of that subsequently improved more than other articles. If that were true, we could not infer the apparent zero productivity of additional refereeing beyond the first round at the journal.

To examine this possibility, we conducted a survey of authors of articles published in the journal's 2015-18 volumes. We surveyed authors of all articles published through the fast track during this period and took two equal-sized samples of authors whose papers were published along the regular track, either with one or with multiple rounds of refereeing. For prior submissions to other journals each of 188 authors was asked to list: "1) The total number of such journals; 2) The equal or smaller number of submissions on which you received referee report(s); and 3) The total number of referee reports received from these journals."

We present the results of the survey in Table 3. The response rate was 62 percent (two respondents stated that they could not recall the answers to these questions). At least based on authors' recall, there is some weak evidence that fast-track articles had received more refereeing before submission. Fast-track articles had previously been submitted to fewer journals, and there

was little difference between fast- and regular-track articles in having received no prior referee reports. They had, however, received more reports from more journals, a nearly significant difference that is generated by a few extremely extensively refereed articles. While not conclusive, the survey evidence suggests that fast-track articles had received only slightly more refereeing input before submission.

As shown in the bottom part of Table 3, those regular-track papers that went through multiple rounds of refereeing at the journal received insignificantly more prior referee reports but were no more likely to have received at least one report than regular-track papers that went through only one round. In none of the comparisons in this table are any of the differences in the averages of these statistics by type of paper large along any of the criteria surveyed. What is especially noteworthy is that, while fast-track articles had received slightly more reports than all regular-track articles, they were treated essentially identically before submission to regular-track papers that received multiple rounds of reports at this journal.

VII. Endogeneity Concerns: Modeling Scholars' Submission Decisions

The results above may be compromised by the potential selection of authors into the fast track or the regular track. The choice of submission track by authors may not be exogenous—people will choose tracks based on their personal situations, their assessments of the paper's prospects, and other reasons. For author-specific reasons it may make more sense to submit under the fast track (F) or the regular track (R). The gain to track F is quicker publication if the article is accepted. The gain to track R is the possibility of improving the eventual scholarly impact of the paper through additional referees' comments. Denote by C the citations we use to measure the impact of the paper; by p_i, i = F, R, the perceived probability of acceptance, and by $L > 0$, the difference in expected time to acceptance between tracks F and R. The gain to citations to the article is measured as $W_A(C)$, $W'_A > 0$, $W''_A < 0$, where A is the author's Ph.D. age. The concavity

of W in C is consistent with a large literature showing diminishing marginal effects of additional citations on salaries (e.g., Hilmer *et al.*, 2015). The functional form we use for W is:

(1) $W_A(C) = I_A C^{\alpha}$, $\alpha < 1$, with $I_A = 1$ and $I_A >> 1$ for a few values of A.

The author/submitter then compares returns under the two tracks, choosing track F if:

(2) $p_F L W_A(C^F) > p_R \int_L^T [W_A(C^R) - W_A(C^F)]\, dt$,

where T is date of retirement. Track R is more likely to be chosen if: 1) Perceived $p_F < p_R$; 2) If $[W_A(C^R) - W_A(C^F)]$ is more positive, i.e., the greater productivity (in terms of article quality) that authors perceive will be conferred by additional refereeing; 3) L is smaller—the difference between the times of expected publication under the two tracks is less; and 4) The author is submitting at a time when $I_A = 1$. Ignoring spikes in I_A, in general as A increases, the probability of choosing Track R decreases because the author has a shorter horizon, and because the gains to additional citations are lower later in one's career (when one's work has already been more heavily cited).

These considerations guide the inclusion of the objective correlates of the choice of track. 1) Older authors will be more likely to choose track F, since the present value of additional scholarly recognition is lower, both because the horizon is shorter and because of the concavity of the returns to scholarly impact. For that reason, we include in the first-stage probit predicting F the Ph.D.-age of the most senior author of the paper. 2) An author who is more heavily cited will, other things equal, be more likely to choose F, again because of the pattern of the impact of the economic returns to publishing. We thus include in the probit the prior citations of the most-cited author of the paper.

Those authors who need a quick publication for career purposes will also be more likely to choose F. Objectively, people nearing a decision about academic or other tenure/job security have

an incentive to choose F—for them I_A greatly exceeds 1. In creating an instrument for F, the probit thus includes an indicator of whether one or more authors' Ph.D -age creates a reason to seek a quick up-or-down decision, an indicator $I^*= 1$ if A is on the closed interval $[A_o, A_1]$, 0 otherwise. We do not know the values of A_o or A_1, so we search over these parameters to find the combination $[A_o, A_1]$ that maximizes the likelihood function in this probit.

Column (1) of Table 4 presents estimates of the probit derivatives describing the decision to submit fast- or regular-track. As expected, increases in the maximum Ph.D.-age and in the maximum prior citations both increase the likelihood of choosing F, and both effects are at or nearly at standard levels of statistical significance.[10] The likelihood function is maximized for $A_0 = 5$ and $A_1=10$. If an author is in the Ph.D.-range [5-10], the paper is significantly more likely to be submitted through the fast track. Moreover, the impact is behaviorally important. With 19 percent of papers submitted through F, this coefficient implies that when one author is in this Ph.D.-age range the probability of submitting through F is 0.25 compared to only 0.15 when no author's Ph.D.-age is in this range.[11]

Using the prediction from this probit as an instrument for F, we estimate the second-stage of the model describing subsequent citations to the published articles. The IV estimates are shown in Columns (2)-(5) of Table 4, with the sequential addition of the same covariates that were included moving across the columns in Table 2. The estimates of the impact of fast-track submission on subsequent citations change in the same pattern here as in Table 2, but they are positive and statistically significant only when no covariates are included. Once we include any of

[10]Accounting for dispersion in citations among the authors of multi-authored articles, the estimated impact of the coefficients on the age-range indicators changed by 3 digits in the third significant decimal places.

[11]Inferring the shape of the likelihood function defined over A_0 and A_1, we can be 90-percent certain that $3<A_0<7$ and that $8<A_1<12$.

the covariates, they lose their statistical significance. Indeed, in the final two columns, when we add controls to describe the *JEL* category, number of authors and others, we infer that the fast-track articles are less heavily-cited than regular-track articles, with the difference approaching statistical significance when we add indicators of the authors' citations and gender.

Within the regular submission track, no matter what vectors of covariates are included in this second stage, those regular-track articles that go through multiple rounds of refereeing have no greater scholarly impact than those that obtain only one set of referee reports.[12] Compared to regular-track articles that go through only one round of refereeing, multiple rounds of refereeing never enhance an article's subsequent scholarly impact in any of the econometric formulations that we have constructed.[13] The absence of any difference in eventual citations among regular submissions by whether they undergo more than one round of refereeing or not is remarkably robust to the IV estimation and to the inclusion of all the sets of covariates that we use. Not only is the difference not statistically significant, it is tiny compared to mean citations.

This result does not arise because some co-editors are significantly more likely than others to request multiple rounds of reports on the articles that they handle. The adjusted R^2 in an equation describing the probability of 2+ rounds of reports by the identities of the co-editors is less than 0.01. Also, referees providing reports on the papers going through 2+ rounds do not differ significantly in their prior citation histories from those on papers going through only 1 round (or those handled fast-track), nor do they differ at the 10^{th}, median or 90^{th} percentiles of the distribution of their prior citations.

[12]As with the estimates in Table 2, applying Poisson estimation here in the second stage yields results that are qualitatively the same as those shown in the Table.

[13]The results discussed in this paragraph do not change qualitatively if we re-specify the probit to include indicators of having a female author (positive effect) and being multiple-authored (positive effect) and use an instrument based on that equation in the second stage. Moreover, impulse-response estimates yield the same conclusions; the patterns of differences in citations by track and number of refereeing rounds are similar moving across post-publication years.

VIII. Conclusion

Using data collected from a journal that uniquely instituted a two-track submission process, we examine whether papers incurring multiple rounds of refereeing have a greater subsequent scholarly impact, as measured by citations by other scholars, than articles that receive only one set of referee reports. Adjusting for various characteristics of the papers and for the gender and prior scholarly impact of the authors, and accounting for selectivity into the two tracks, we find no evidence that additional refereeing raises the scholarly impact of an article.

One potential difficulty with this conclusion is the possibility that the multiply-refereed regular-track articles were inherently weaker *ab initio*, and that the additional refereeing raised them up to an acceptable level equal to that of articles that went through only one round of refereeing or that were fast-track. We cannot completely rule out this possibility; but our survey findings that, if anything, regular-track articles that went through multiple rounds of refereeing had received more prior referee reports than single-round regular track papers provides some evidence against this possibility. Additional assurance is also provided by our accounting for the identities of the co-editors whose decisions determined whether the article incurred multiple rounds of refereeing before acceptance, and by the absence of differences in referees' academic visibility by how the article was treated at the journal

Our analysis does not imply that refereeing is unproductive, but rather that multiple rounds of refereeing are unproductive. Moreover, our example is just that: It is entirely possible that at other economics journals, whether higher- or lower-ranked, repeated rounds of refereeing might raise the quality of a scholarly article. Our evidence is, however, the first to examine the marginal product of refereeing in the appropriate experimental context. Its results suggest that an up-or-down approach to publication may not reduce the quality of published work, nor may limiting

refereeing to just one round. Taken together with the reduction in the costs of the editorial process, both to referees and to scholars who are dependent on a reasonably rapid turnaround for their research, the results indicate at the very least that the scholarly process in economics (and other fields to the extent that they too rely on revise/re-submit) would be improved by limiting refereeing to one round.

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Table 1. Means and Standard Deviations, Article Characteristics by Submission Track of Accepted Article

	Fast Track N = 160	Regular Track N = 669	t-test of Difference
Oldest author (years post-Ph.D.)	16.50 (11.30)	14.70 (11.32)	1.80
Multiple-authored	0.81 (0.39)	0.70 (0.46)	2.77
Any female author	0.39 (0.49)	0.32 (0.47)	1.67
Page length	17.94 (4.42)	17.98 (4.93)	-0.09
Citations to most-cited author in past 6 years	508.15 (829.30)	337.11 (764.45)	2.50

Table 2. OLS Estimates of Subsequent Citations (Years 0-8 Post-Publication)*
(N articles = 829; N observations = 3,837)

Ind. Var.:				
Fast track	0.637	0.533	0.515	0.398
	(0.189)	(0.182)	(0.179)	(0.169)
One-round	0.187	0.174	0.162	0.089
Regular	(0.146)	(0.131)	(0.126)	(0.124)
>=1 female				-0.321
author				(0.150)
Citations (/100):				
Author 1				0.0672
				(0.0247)
Author 2				0.0193
				(0.0120)
Author 3				0.0299
				(0.0271)
Author 4				0.0142
				(0.0338)
Year post-publication (9)		X	X	X
Issue number (4)		X	X	X
Co-editors (37)			X	X
JEL category (10)			X	X
N authors (3)			X	X
N pages			X	X
R^2	0.012	0.122	0.136	0.156
Mean of dep. var. = 1.25				

*Standard errors in parentheses, clustered on articles.

Table 3. Prior Submissions of *EI* Articles Published 2015-18: Survey Results*

	N =	Prior submissions	Prior submissions with reports	N reports	Fraction with reports
Fast track	37	2.14 (1.52)	1.67 (1.24)	3.64 (2.73)	0.784
Regular track	78	2.38 (1.70)	1.47 (1.21)	2.95 (2.69)	0.744
t-statistic		-1.15	1.18	1.91	0.60
Regular track:					
1 round	37	2.49 (1.95)	1.32 (1.11)	2.70 (2.63)	0.757
2+ rounds	41	2.29 (1.45)	1.61 (1.30)	3.17 (2.75)	0.732
t-statistic		0.69	-1.46	-1.07	0.35

*Standard deviations in parentheses.

Table 4. Selection Equation, and IV Second-Stage Estimates of Subsequent Citations

Ind. Var.:	**Dep. Var.: Fast track***	**Citations****			
Any author [5-10] years post-Ph.D.	0.1035				
	(0.0287)				
Years post-Ph.D. of most senior author	0.0021				
	(0.0013)				
Fast track (IV)		2.610	1.017	-0.166	-1.964
		(0.908)	(0.872)	(1.037)	(1.142)
One-round regular		-0.050	-0.038	-0.020	-0.054
		(0.146)	(0.145)	(0.126)	(0.123)
Any female author					-0.306
					(0.149)
Citations (/100):					
Maximum (or Author 1)	0.0038				0.0799
	(0.0017)				(0.0254)
Author 2					0.0295
					(0.0132)
Author 3					0.0338
					(0.0271)
Author 4					0.0236
					(0.0364)
Year post-publication (9)			X	X	X
Issue number (4)			X	X	X
Co-editors (37)				X	X
JEL category (10)				X	X
N authors (3)				X	X
N pages				X	X
Pseudo-R^2 or R^2	0.037	0.008	0.084	0.129	0.154
N =	829	3837	3837	3837	3837

*Also includes year of initial submission.

**Standard errors in parentheses, clustered on articles.

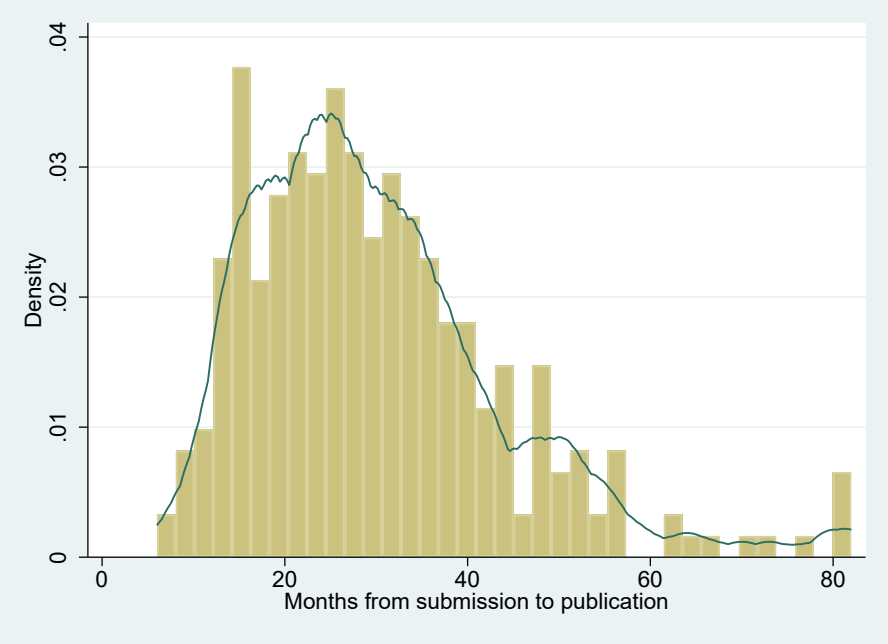

Figure 1a. Distribution of Times from Submission to Publication, Five Economics Journals, 2018: *Journal of Econometrics*, *Journal of Labor Economics*, *Journal of Public Economics*, *Review of Economic Studies* and *Review of Economics and Statistics* (N=297)

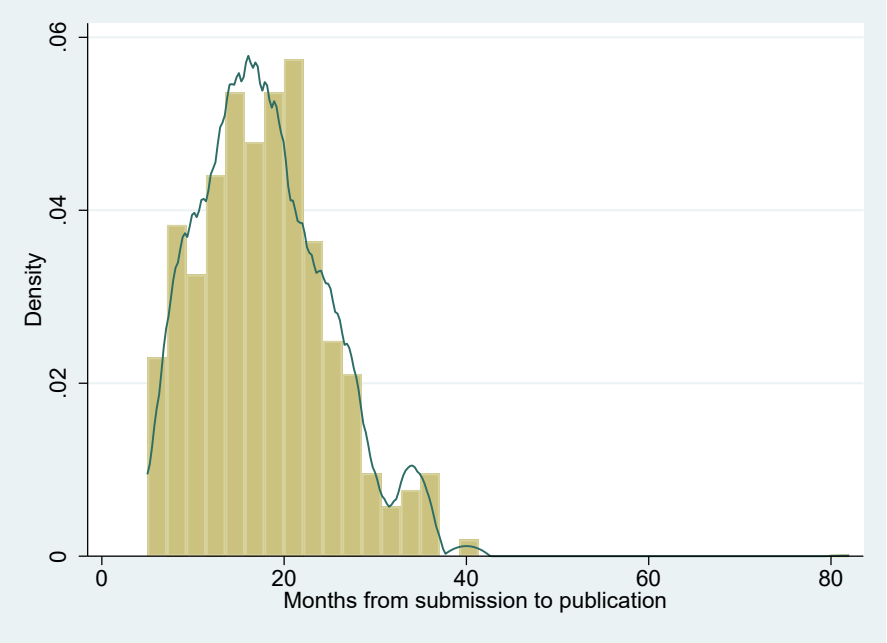

Figure 1b. Distribution of Times from Submission to Publication, Five Social Science Journals, 2018: *Social Science and Medicine*, *European Sociological Review*, *Journal of Personality and Social Psychology*, *Journal of Applied Psychology* and *American Political Science Review* (N=244)

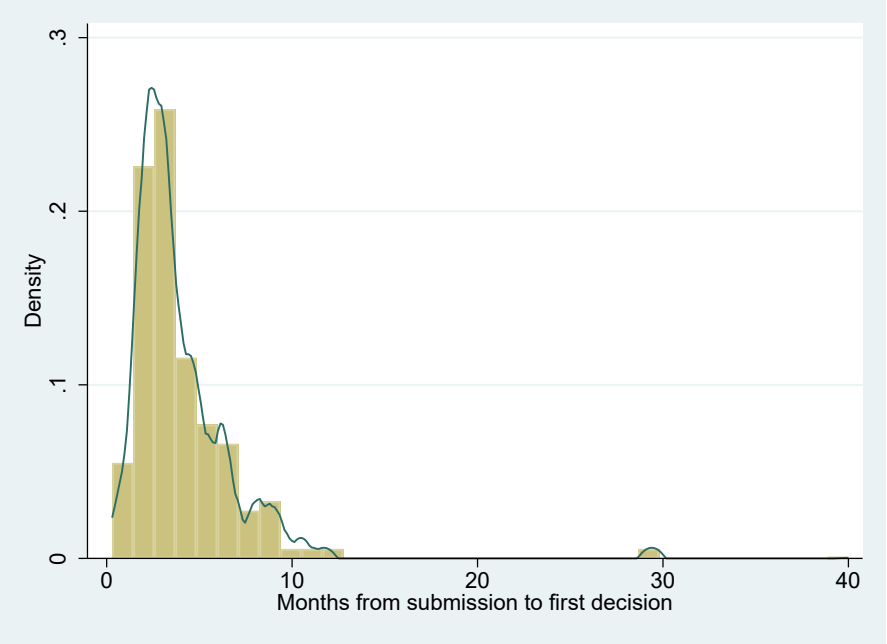

Figure 2a. Distribution of Times from Submission to First Decision Acceptance, Fast Track (N=160)

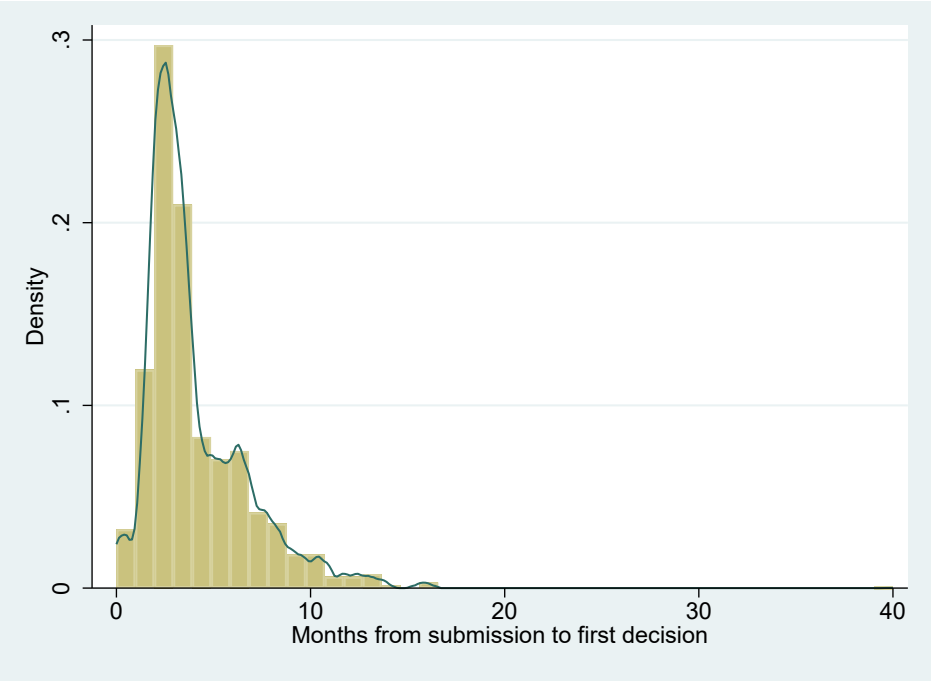

Figure 2b. Distribution of Times from Submission to First Decision, Regular Track (N=669)

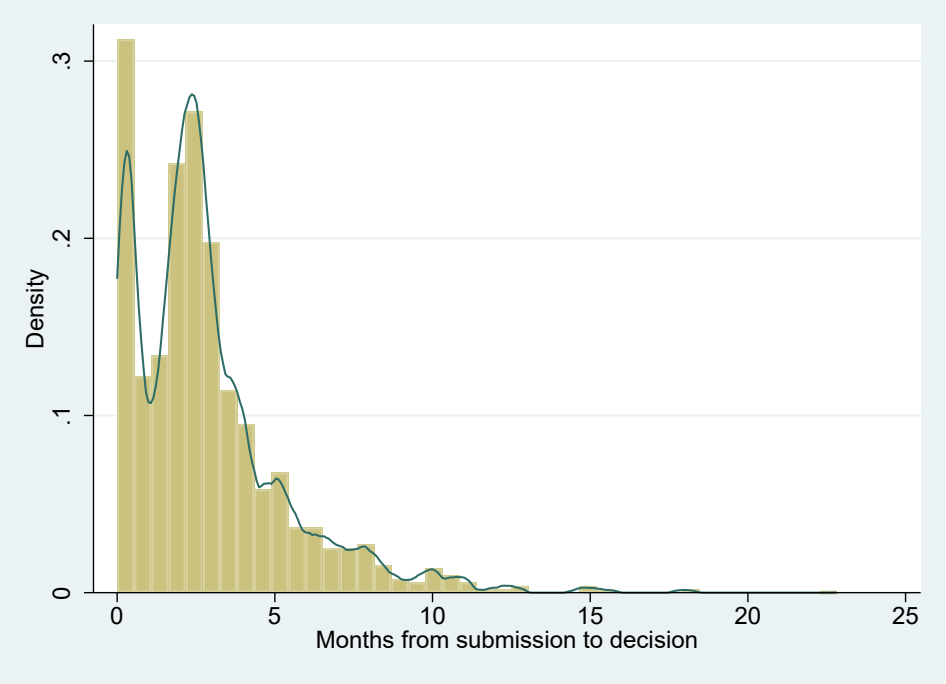

Figure 3a. Distribution of Times from Submission to Rejection, Fast Track (N=949)

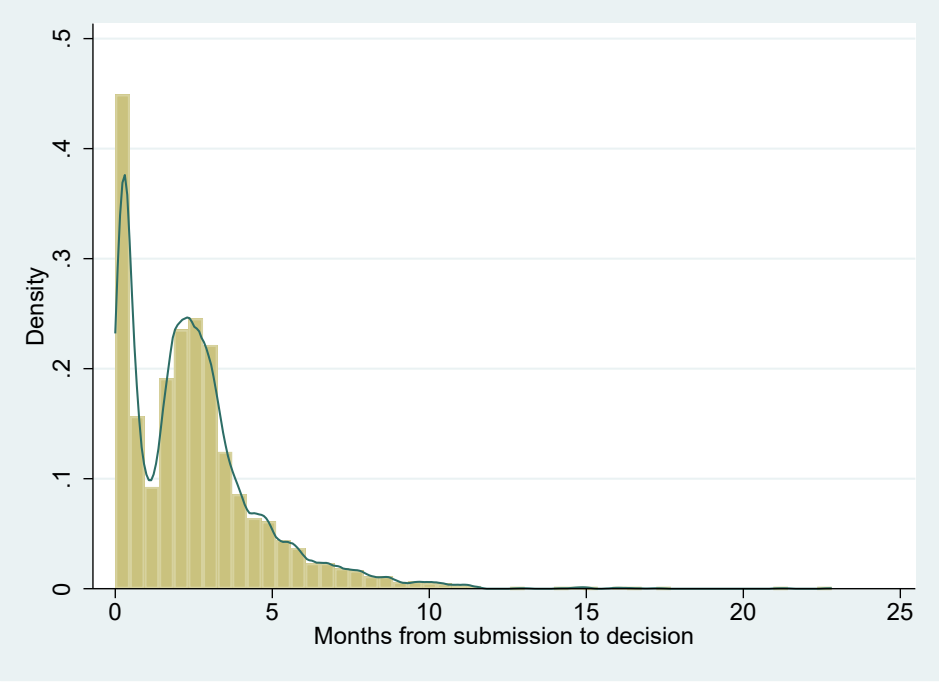

Figure 3b. Distribution of Times from Submission to Rejection, Regular Track (N=4178)

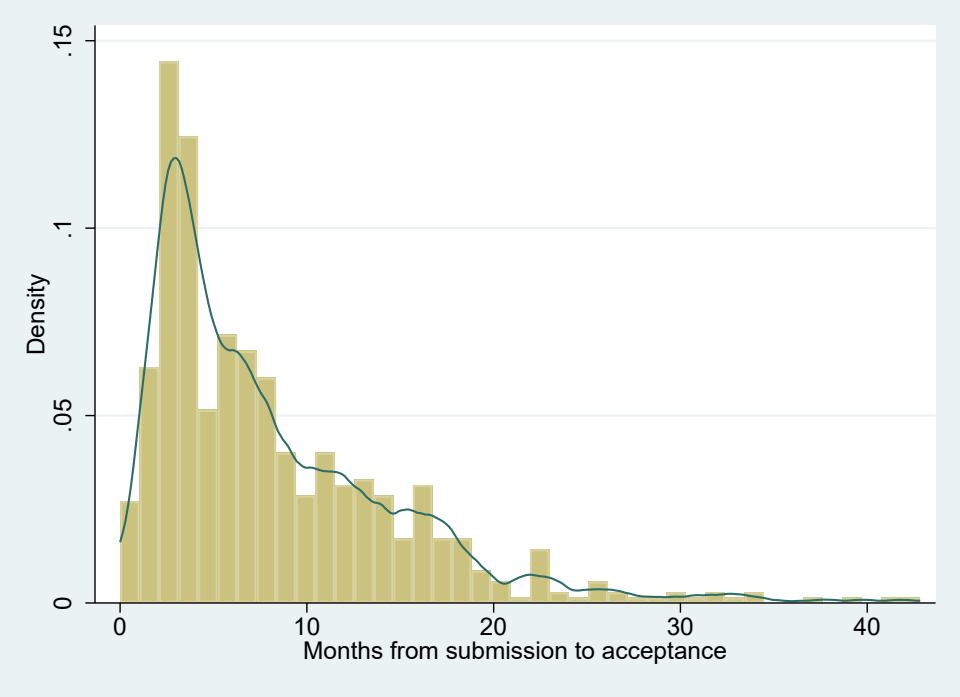

Figure 4. Distribution of Times from Submission to Acceptance, Regular Track (N=669)

TableA1. Means and Order Statistics of Authors' and Publications' Citations

Six-year citations pre-submission:	
First author (N = 829):	
Mean	181
Median	30
90th Percentile	414
Second author (N = 601):	
Mean	238
Median	51
90th Percentile	584
Third author (N = 243):	
Mean	278
Median	42
90th Percentile	619
Fourth author (N = 43):	
Mean	389
Median	78
90th Percentile	1114

Citations to publication in Year:	
Year 0 (N = 829):	
Median	0
90th Percentile	1
95th Percentile	2
Year 2 (N = 618):	
Median	1
90th Percentile	4
95th Percentile	5
Year 4(N = 408):	
Median	1
90th Percentile	5
95th Percentile	7
Year 6 (N = 203):	
Median	1
90th Percentile	5
95th Percentile	7
Year 8 (N = 82):	
Median	1
90th Percentile	6
95th Percentile	8