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Publishing Economics:

How Slow? Why Slow? Is Slow Productive? How to Fix Slow?

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ABSTRACT

Economics publishing proceeds much more slowly than in the natural sciences, and more slowly than other social sciences and finance. It is relatively even slower at the extremes. Much of the lag, especially at the extremes, arises from authors' dilatory behavior in revisions. Additional rounds of re-submissions at top economics journals are related to additional citations; but conditional on re-submission, the delays are unrelated to greater scholarly attention. We offer several proposals for speeding publication, including no-revision policies, such as Economic Inquiry's*; use of "cascading referee reports;" limits on authors' time revising; and limits on editors waiting for dilatory referees. (JEL* A11, B31*)*

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1. *Introduction*

The slowness of publishing in economics was pointed out by Ellison (2002), although scholars who had been active in the profession for at least a quarter century were by then very aware of the changes that had occurred in the publishing process in economics. Today the difficulties are well known and have been discussed by many editors (e.g., in Szenberg and Ramrattan, 2014). In this study we first provide evidence on how the publishing process—in terms of the lags involved—compares to that in the "hard sciences" (very much slower) and in other social sciences (substantially slower).

There are many components that might explain the slowness of economics journals. Culprits might be dilatory editors/referees, authors who delay responding to initially encouraging editorial responses, or lags between a study's acceptance and its publication. We cannot elucidate the underlying causes of each of these possible contributing factors. There is no way to infer why editors or referees might "sit on" a paper, why authors might hesitate to revise their work quickly, or why economics differs from other disciplines. All we can do is document the magnitude of each factor's relationship to slow publication by providing the first evidence on this issue, one novel contribution of this study.

The central part of our empirical work examines the relationship of slowness to subsequent scholarly attention. We measure this relationship by a study's post-publication (both online and in-print) citations. If a longer publication process is related to greater notice by other scholars, perhaps we should view these benefits as justifying its cost—although the evidence suggests that a slow process reduces the quantity of publications, as measured by pages written (Conley *et al.*, 2013). We cannot discover whether slowness in economics leads to more attention from other scholars than does research in other disciplines, nor can we even analyze whether increasing slowness in economics has made economic research generally more influential.[1] We can, however, analyze whether at a point in time published research with a longer gestation period is related to greater subsequent scholarly attention, providing the first objective evidence

[1]There is evidence that the influence of economics journal articles on scholarship in other disciplines has increased (Angrist *et al.*, 2020).

on this crucial outcome of the publication process (although Laband, 1990, provided subjective evidence on one aspect, authors' views of the referees' contributions to their articles).

Answers to these questions require positive analysis. Making normative suggestions about how the publication process in economics might be speeded up with no loss of quality constitutes the second major section of this study. Although basically suggestive, it too has some positive bases, as we examine data describing publications in journals that have experimented with alternatives to standard practices in economics publishing.

2. *Characteristics of Slowness in Economics Publishing*

Much of the analysis in this section is based on a set of data collected from leading economics journals. We asked the editors of each of the "Top 5" journals in the field for details on each article, excluding Nobel/presidential addresses, comments, replies, etc., that were published in 2012 and 2013. The details for each paper include: Its initial submission date; the date of the initial editorial response; the date of first re-submission, etc., through the date of acceptance.[2] We use articles published in those two years to allow time for the importance of each article to be reflected in subsequent research. Three of the five editors provided the data, showing these outcomes for each of 241 published articles in these two years, and thus allowing charting how each article flowed through the editorial process.

2.1 *Slowness in Economics—and Other Fields*

Along with other, publicly available information, we use these data to examine the speed of publishing in economics, political science, psychology, and the natural sciences, both in 2012-13 and recently (2020). The *Review of Economics and Statistics* (arguably the most-cited general journal outside the "Top 5"), along with one of the two "Top 5" journals that did not provide complete information, do publish submission, acceptance (and obviously) publication dates with each article. Adding this information

[2]We view the "Top 5" as the *American Economic Review*, *Econometrica*, the *Journal of Political Economy*, the *Quarterly Journal of Economics*, and the *Review of Economic Studies*. We are very aware of differences in these journals' average impacts, of the tremendous heterogeneity of impacts of articles within each journal (Hamermesh, 2018), and of the possibly deleterious effects of over-reliance on publication in these outlets (Heckman and Moktan, 2020). Nonetheless, we follow convention in bibliometric analyses and restrict this part of the study to these journals.

to that of the three journals in our main data set, we compare the process among them to that in three other social science journals: The *American Political Science Review* (*APSR*), leading in its discipline; and the *Journal of Applied Psychology* and *Journal of Personality and Social Psychology*, two of a probable "Top 5" in psychology, which also publish this information with each article. The same information is included with each article in *Nature*, one of the two most widely cited scholarly journals, and in the *Proceedings of the National Academy of Sciences* (*PNAS*), which has a five-year impact factor higher than all but one of the economics "Top 5."[3]

The upper panel in Table 1 presents statistics describing the distribution of times from initial submission to acceptance and then to publication among articles published in 2012-13.[4] Time to acceptance is crucial for young scholars seeking tenured positions and for more senior ones seeking new positions, since with an acceptance they can include the publication on their CVs. One might argue that a first-round revise/resubmit is sufficient indication of scholarly success, but many such responses do not lead to publication in top journals. No risk-averse institution is likely to make job offers or grant continuing tenure based on this indication, and in our experiences R&Rs are heavily discounted in these contexts. As Yogi Berra noted, "It ain't over till it's over," which is as valid in economics publishing as in baseball seasons.

Acceptances are also important for economists in obtaining public recognition of their work, as journalists often ask whether a study has been peer-reviewed. They are also crucial to establishing *bona fides* in expert testimony or in providing policy advice generally. Time to publication used to be an important indicator of how long it took from the time when authors viewed their research as complete to when others could see and use the finished product. Today, however, this measure seems less important,

[3]Care is required comparing impact factors across disciplines, since scholars in different fields differ in their propensity to cite other studies. The average article in the "Top 5" economics journals referenced 56 items in 2019, almost the same as in the *APSR*. Articles in the two natural science journals averaged 42 references to other studies. At the other extreme, articles in the two psychology journals averaged 106 references per article; and the two leading sociology journals, the *American Journal of Sociology* (*AJS*) and the *American Sociological Review* (*ASR)*, with impact factors of 5.9 and 8.2, averaged 110 references in each article (Clarivate Analytics, 2020).

[4]The means are simple averages of the average times in each journal in each group. Regrettably, several attempts to elicit this information from the leading sociology journals, the *AJS* and the *ASR*, in a discipline arguably most comparable to economics, failed.

since many journals include and publicize widely available online final versions of articles shortly after acceptance.

By any measure, the record in economics is discouraging, perhaps epitomized by Figure 1. The mean time from submission to acceptance of articles published in these journals (the *REStat* and four of the "Top 5") in 2012-13 was more than two years.[5] This outcome compares to slightly more than one year in the three other social science journals, and only six months in the two natural science journals.[6] If the average time suggests problems, the extreme times can only be characterized as awful.[7] Even at the 75th percentile, the time from submission to acceptance is twice as long in economics as in the other social sciences, and four times as long as in the natural science journals. Moreover, the uncertainty faced by economic researchers is greater: The 90-50 ratios of time to acceptance are 2.0 in economics, 1.8 in the social science journals, and 1.8 in the natural science journals. The 90/10 ratios are 4.2, 3.7, and 3.0 in the three areas respectively.

While we do not inquire why economics differs so greatly from other disciplines, it is worth noting that the acceptance rate in the "Top 5" journals currently averages six percent, compared to ten percent in the three social science journals, and to eight and fifteen percent at *Nature* and the *PNAS* respectively. At least in the natural science journals, the papers are shorter, and the supply of journal space is greater (with nearly weekly publication), making the data describing their publication processes less comparable to economics than those describing the other social science journals.[8] Differences in acceptance rates may be

[5]Björk and Solomon (2013) compare a large number of business and economics journals along these measures to journals in other broadly-defined disciplines and demonstrate, even across broad ranges of journals by quality, that business and economics is much slower.

[6]Upon seeing this Table, one distinguished economist remarked, "If Watson and Crick had to deal with economics publishing, their article would have been 70 pages long and taken three years to get into print." Watson and Crick's (1953) one-page article was published eight weeks after the discovery was announced.

[7]The 90th percentile statistics are bad enough. The maximum durations in the sample were 7 years 5 months from submission to acceptance, and 9 years 5 months from submission to publication.

[8]Very few economics-related papers are published in *Nature*, but the *PNAS* publishes many: In 2013-14, 49 articles appearing there had at least one co-author affiliated with an economics department or similar institution. While the average article in the *PNAS* is better-cited than most in the "Top 5," articles by economists published in that outlet were cited at a slightly lower rate, cumulating an average of 59 citations over the eight years post-publication.

important; but why the very low acceptance rates in the "Top 5" generate much longer publishing lags is unclear.[9]

One might argue that these figures reflect ancient history, and that the situation has improved greatly over the past decade.[10] That argument is wrong, as shown in the bottom panel of Table 1. Despite now-universal online submission procedures at these journals, the change over the decade was very small, with the mean time to acceptance rising slightly and, worse still, with an increase in the mass in the upper tail of the distribution.[11] Of the five economics journals, the median time from submission to acceptance increased in two, fell in two and was unchanged in one. The duration at the 90th percentile increased in four and fell in one. Similar increases in the mass in the upper tails of the distributions of acceptance times in the other social science journals and in the natural science journals also occurred; but their average speed and the speed of the slowest publications remained far more rapid than in economics. To summarize today's situation succinctly, an economics article that is at the 50th percentile of time to acceptance would be at the 85th percentile of times to acceptance in the other social science journals, and at the 97th percentile in the two natural science journals.[12]

The possible harm from slow publishing is not greatly mitigated by the ever-growing, at both the extensive and intensive margins, series of discussion/working papers. These are not peer-reviewed, and

[9]One is reminded of George Stigler's perhaps apocryphal response to the then-Editor of the *AER*, who complained of having so many good papers to choose among, "Why not publish one occasionally?"

[10]One of the editors who kindly supplied the data underlying most of the work in this Section questioned our request for 2012-13 data, stating that the journal's process may have been slow in the past but was no longer slow. We explained that we needed data from those earlier years to examine the articles' impacts. We have not had the heart to note that, while the mean submit-to-accept time at that journal has speeded up slightly, the mass in the right tail has increased.

[11]The failure of submit-to-accept times to fall in the economic journals could not have been due to Covid-19 induced delays. Only 13 percent of the papers tabulated were accepted after April 1, 2020. Given the rapid turn-around in the natural science journals, however, Covid might explain their (small) increase in submit-to-acceptance times.

[12]Without one of the "Top 5" journals, the statistics in Table 1 are incomplete. We cannot solve this problem for 2012-13 for this journal, but we can piece together a good estimate for articles in 2020 using some in-publication information and an email survey of authors. The data suggest that its mean submit-to-publication time was 30 months, with a mean submit-to-accept time of 23 months. If these estimates were included in the statistics shown in the bottom part of Table 1, they would reduce the mean times by one month each.

thus lack the *bona fides* of journal articles in the eyes of other scholars, university administrators, and the media. Moreover, the plethora of such papers creates congestion externalities, even in the most visible such series (Lusher *et al*., 2021), making it difficult to keep up with what trusted experts view as important.

Our analysis has concentrated on "Top 5" journals, the pinnacle of scholarly publishing in economics. While lower-level economics journals do have shorter submit-to-accept times, large numbers of the articles that they publish have gone through an eventually failed submission process at one or more of the "Top 5" or other economics journals. The process described for these top journals may be even longer at lower-level journals when one includes the time from the initial submission at any journal.

2.2 *Contributors to Slow Publishing*

There are many plausible explanations for the slowness in getting an economics paper accepted. These include the number of times a paper is resubmitted, the amount of time that it spends with editors and referees (denoted here by time in journal's hands), and the length of time that it spends in author(s)' revisions (time in author(s)' hands). Here we examine the relative contributions of each of these to the lags in publication and consider the characteristics of the papers and their authors in relation to these outcomes.

Using the descriptions of each stage of the submission/review process for each of the 241 articles published in the three "Top 5" journals in 2012-13, we calculated the number of rounds of submission/re-submission/re-re-submission/re-re-re-submission that each went through. We denote this number by 2 if the second editorial response—the response after the first re-submission—was an acceptance, 3 or 4 if the third or fourth was an acceptance.[13] We can decompose the total time from submission to publication into three parts: Time spent in the journal's hands, time in the author(s)' hands, and time between acceptance and in-print publication.

In addition to these descriptors of the editorial process itself, we gathered other information for each article about: Its Web of Science citations in each year from the year of publication through 2020 (nine

[13]Two of the articles went through a fifth round, although in one case the elapsed time in that round was less than one month. We treat those two as having endured four rounds.

years of citations to articles published in 2012, eight years to those published in 2013); the cumulative number of Google Scholar citations that the article had received as of March 2021; its length in pages;[14] the number of references included; the number of authors; and the sub-field in which the article might be classified (theory; empirical with administrative data; other empirical, including calibration; experimental; econometric theory). Characterizing the articles' authors, we obtained the Web of Science citations of each author in the year the article was submitted, used to construct the citations of the most-cited author; the post-Ph.D. experience of the most-cited author, and the number of female authors.

Table 2 presents descriptive statistics of all these variables except times in the journal's and author(s)' hands, which we examine in detail below. The average or median published paper goes through three rounds: It is submitted, re-submitted, and re-submitted again, when it is then accepted; but nearly one-fourth of all articles went through a fourth round. (For the empirical articles, we consider acceptance as the date when an acceptance email was sent, i.e., thus earlier than the final submission that at many journals today must include a documented dataset.)

Fifty-three percent of articles are empirical (11 percent using administrative data, 42 percent using other data), with pure theory accounting for 35 percent of the publications, and experiments and econometric theory accounting for the remaining 12 percent. The average article has slightly above two authors, but nearly 10 percent have four or more authors, reflecting the stretching of the right tail of the distribution of authors/article noted by Hudson (1996), Ellison (2002), Card and DellaVigna (2013), Hamermesh (2013), and Jones (2021). The average article contains nearly 29 printed pages, not including the ubiquitous and often voluminous on-line appendices. There is substantial variation in the number of references included, and its correlation with article length is only +0.30. Of the articles' authors, 22 percent were women, with the incidence of female authors rising as the total number of authors increases.

The average article received 70 Web of Science citations in its first eight or nine years in print with, as is always the case in citations, substantial skewness in this measure (Hamermesh, 2018). The skewness

[14]These are calculated based on the average number of characters per page in each journal, with the number normalized to the journal with the most characters per page.

is equally pronounced in the distribution of the articles' cumulative Google Scholar citations. Even more skewness exists in the distribution of citations to each article's most cited author at the time of submission. The average most-cited (on each article) author received over 270 Web of Science citations in the year of submission, about average among tenured faculty members in economics departments that might be viewed as Top 30; but the median most-cited author of an article was cited only one-third as often. The post-Ph.D. experience of the most-cited authors averaged around 15 years—typical of relatively young full professors and consistent with evidence on the age distribution of authors in leading economics journals (Hamermesh, 2013).

With our focus on the process by which articles are handled, we examine the contributions of the three components of time from submission to publication. Their distributions are presented in Figure 2, containing decompositions of the average time from submission to publication, measured in months on the vertical axis and shown within each of five deciles. (Each journal is weighted as one-third of the total.) Several aspects of the Figure are striking:

1) The main proximate determinant of inter-decile differences in the speed of publication is the huge rise in the amount of time spent in author(s)' hands (the sum of times between receiving a response from a journal to re-submission on each round) as the total time to acceptance and publication rises. Among papers in the middle decile, this is 10 months; among those in the slowest decile, 26 months are spent in author(s)' hands.

2) While the amount of time spent at journals increases with the slowness of publication, moving from the middle to the slowest decile increases that duration only half as much, from 10 to 18 months.

3) Lengthier submit to-publication-times are essentially unrelated to differences in the time between acceptance and publication.

Figure 2 aggregates across the three journals and does not reflect the role of the heterogeneity of journals in the total publication lag. To examine how these contributing factors differ across the three journals, Table 3 shows the means and variances of the submit-to-acceptance lags among the 241 articles

in total and for each journal separately, and it decomposes the variance into its two sources and their covariance. The most interesting findings in this Table are:

1) The substantial heterogeneity in the length of time that articles are in process—the variance is quite large even within a journal.

2) The heterogeneity across the journals: Journal 1 handles the papers somewhat more quickly than the other two, but, most important, there is almost no variation in the amount of time a paper spends with editors/referees.

3) Despite the heterogeneity in the sources of the acceptance lags, and consistent with the evidence in Figure 2, over half of the variation in lags in acceptance at each journal arises from authors spending more time on revisions.

The covariance between the time in a journal's and author(s)' hands is positive in Table 3, but in no case does it account for even a third of the total variance in the submit-to-acceptance time. Even this low correlation is due mainly to the fact that articles that go through more rounds necessarily take more time of both authors and editors/referees. The correlations between editor/refereeing time and author(s)' response times are shown for each round separately in Table 4, both for all papers handled in the round, and for those completed in that round. The correlations at each article's final round average +0.30. Thus, those articles that take more editor/referee time to handle are associated with authors spending more time, but the relationship is weak.

Various characteristics of the articles might cause them to go through more rounds of re-submissions at a journal; and they might lead editors and referees to spend more time handling the paper. The same characteristics might lead authors to take longer re-submitting an article that has received an encouraging initial editorial response. To examine the first issue, in Column (1) of Table 5 we present least-squares regressions of the number of rounds through which a paper travels at a journal as a function of all the article/author characteristics on which we have information (except the number of references included, which may be partly affected by the number of rounds and time spent refereeing/revising). Column (2)

presents the same regressions with journal indicators added to account for the heterogeneity demonstrated in Table 3. The estimates treat each article equally—the observations are unweighted.[15]

Authors' characteristics are unrelated to the number of rounds an article goes through: How well-cited an author is, his/her seniority and gender are all unrelated to this outcome. Characteristics of the article are, however, related to the number of rounds: Theory papers are handled in significantly fewer rounds, with differences across the other sub-fields being small and statistically insignificant (not shown in the Table). Papers with fewer authors are handled more rapidly. Articles that are longer when published are handled in no more rounds than shorter articles.

Columns (3) and (4) of Table 5 present estimates of the correlates of the length of time that the journals take to handle a submission. The clearest result is that theory papers are dealt with significantly and substantially more quickly than other articles, 2-1/2 months on a mean of 10 months, at each journal (again with only small differences across the other sub-fields). Weaker evidence shows that having multiple authors is associated with more rapid treatment by the journals, perhaps because co-authors help iron out problems that might otherwise lead editors and referees to spend more time handling the article. There is weak evidence that better-cited authors receive somewhat faster treatment and that, conditional on an author's prior scholarly recognition, more senior authors' submissions are handled more slowly, other things equal. These last two results are consistent with the observation that one's prior impact on the profession matters much more than one's seniority in relation to how an author is treated. Other than these effects, none of an article's characteristics is correlated with the time that it spends at a journal.

The final two columns of Table 5 describe the determinants of the time that authors spend revising their papers in response to a requested re-submission. The only correlates whose relation to this outcome are even marginally significant are the presence of a female author (2-1/2 months extra on an average of 12

[15]Using weights that are inversely proportional to the number of articles in each journal in the sample produces only minute changes in the estimates. Similarly, while ordered-probit estimation is more appropriate than least-squares, its implications differ little from those of the results in the Table. Also, replacing the variable "any female author" with indicators of the number of female authors, and replacing "two or more authors" with indicators of their number, do not change the qualitative conclusions about the effects of these measures.

months) and the negative estimate for articles classified as theoretical.[16] There is no evidence that authors whose prior work has had a greater scholarly impact, or those who are more senior, are differentially slow in handling requests for revision. Here and throughout this table, variations in the length of articles have essentially no effect on the outcomes. The results demonstrate that most of the variation in authors' behavior is idiosyncratic.[17]

2.3 *Slowness and Citations*

The most important question in judging whether the uniquely lengthy publication process in economics is worthwhile is its relation to the scholarly attention to the research that survives this very lengthy treatment at these major outlets. We recognize that research published in these top journals often has important influences beyond those on economists or other scholars, for example, on debates about policy or on inchoate popular feelings about economic issues. Nonetheless, economic research, indeed, any scholarly research is judged at least in part by the extent to which subsequent work acknowledges its influence. We, therefore, answer this question by measuring the relationship of the outcomes examined in Tables 3 and 5 to annual patterns of (Web of Science) citations up through 2020 to the articles published in 2012 and 2013.[18]

Table 6 lists the results. Each observation is an article/year, necessitating clustering standard errors on the individual articles. In addition to the regressors in Table 5, we add the number of references included in each article, since additional references in an article might, for scholarly or invidious reasons, generate more subsequent citations to the article. Column (1) shows least-squares estimates of the relationship of

[16]Less time is spent revising theory articles at each round of the publication process. There are no significant differences across the other sub-fields. Thus, articles using administrative data take no longer than other non-theory articles to revise, and similarly for articles based on experiments.

[17]Here and in the next sub-section we also experiment with a measure of heterogeneity—the standard deviation of citations across co-authors. This measure is uncorrelated with the time co-authors spend revising, and its inclusion has minute effects on the estimated impacts of the other regressors.

[18]Checchi *et al.* (2021) show that there is a remarkably high correlation between this objective bibliometric measure and subjective peer-based evaluations of individual research products, suggesting that a subjective approach to measuring impact would yield results that would arguably be similar.

citations to the number of rounds the article has gone through and to various control variables. With average annual citations of about eight, the estimated relationship of subsequent citations to the presence of an additional co-author is low (within this set of studies in these leading journals), although not much different from that found in other studies (Hollis, 2001; Medoff, 2003; Bosquet and Combes, 2013; Hamermesh, 2018). Having a female author on a study has a substantial but not quite statistically significant positive relation to the scholarly impact of the article, larger than found in other studies (Laband, 1987; Ferber and Brün, 2011; Hamermesh, 2018), maybe because of within-subfield differences by gender in the topics on which economists work, or perhaps because these are better articles.[19] Lengthier articles have no greater association with subsequent citations than do shorter ones, perhaps due to the relatively narrow range of page lengths in the sample. A one standard-deviation increase in the number of references is related to a statistically significant 0.06 additional standard deviations in citations.

Theory papers on average receive roughly half as many citations per post-publication year as do otherwise identical articles in other sub-fields, a result consistent with evidence comparing leading specialized journals in different sub-fields.[20] Articles by authors whose prior work has been more heavily cited receive more attention; but conditional on that measure, more senior authors' work is cited less. As with the impact of these measures on the time that journals spend handling the paper, this juxtaposition suggests an autocorrelation of scholarly attention to one's work, and that those who have not "made it" earlier in their careers will not "make it" even with work published in a leading outlet.

The central variables of interest indicate the number of rounds at the journals. The results suggest, other things equal, that the 51 percent of articles that require a third round (two re-submissions) are related to greater subsequent citations than the 27 percent of papers that go through only two rounds (that are

[19]The articles cited on this issue, which is quite secondary to the crucial points of this study, are part of a burgeoning and now voluminous literature.

[20]The average five-year impact factor among the *Journal of Development Economics*, *Journal of Econometrics*, *Journal of International Economic*s, *Journal of Labor Economics*, *Journal of Monetary Economics*, and *Journal of Public Economics* was 3.67 in 2019. The average five-year impact factor of *Games and Economic Behavior* and *Journal of Economic Theory* was 1.49 (from Clarivate Analytics, 2020).

accepted after the first re-submission), the excluded category in Table 6. On the other hand, the marginal additional citations related to the fourth round (the 22 percent of articles that are re-submitted, re-submitted again, and then accepted after yet another re-submission) is smaller although positive.

One might think that greater editorial attention or more time that authors spend revising before re-submission(s) would improve the quality of the article in terms of its subsequent impact. The specification in Column (2) thus adds measures of time spent at the journal and with author(s). Given the number of rounds an article goes through, greater lags in the process are negatively related to its subsequent attention by other scholars.[21] These estimates are statistically significant, not huge, but not small either: A one standard-deviation increase in the time at a journal is associated with 0.11 standard-deviation fewer subsequent citations. Similarly, a one standard-deviation increase in the time that authors spend revising is associated with 0.13 standard deviations fewer citations.

These estimates ignore the tremendous heterogeneity across journals in the kinds of articles published and, as Table 3 showed, in how they are treated. This difficulty is accounted for by our preferred estimates, shown in Columns (3) and (4) of Table 6, which include journal indicators. The major comparisons to the results presented in the first two columns are:

1) Not surprisingly, given the heterogeneity shown in Table 3 and the relatively low within-journal variation in this measure, the negative relationship of subsequent citations to the time that an article spends with the journal disappears.

2) The estimated relationship of a fourth round at a journal to subsequent citations is reduced but becomes about equal to that of a third round, with both effects not quite reaching standard levels of statistical significance.

[21]To account for citations to articles pre-publication, we re-estimated the equations here and in Table 7 using cumulative Google Scholar citations (through March 2021) instead of annual Web of Science citations. This re-specification does not qualitatively alter any of the inferences. With cumulative Google Scholar citations equaling roughly 3.5 times annual Web of Science citations in this sample, the coefficient estimates differ in proportion. The measures that are significantly related to citations in Table 6 remain significant.

3) Most important, the negative relationship of citations to additional time spent in author(s)' hands is essentially unchanged and statistically significant.

4) None of the estimated coefficients on the control variables is altered in any important way.

As the statistics in Table 2 demonstrate, citations to the articles in this sample are highly skewed, as are prior citations received by their authors. The regressions in Columns (1)-(4) of Table 6 describe the average experience of these published articles; but given the skewness in these variables, they do not describe what the median author faces. To infer that, Columns (5) and (6) present least absolute deviation (LAD) estimates, with the same specifications as in Columns (3) and (4), including the journal indicators. While the parameter estimates of the control variables are smaller than in the OLS estimates, they are qualitatively quite similar. The estimated coefficients on of the number of rounds through which an article passes and the amount of time spent in editor/referees' or author(s)' hands are also smaller; but the basic inference remains the same. The marginal association of another round at a journal to subsequent citations is positive and statistically significant, and, conditional on the number of rounds, authors' slowness in revising their work has a significant negative relation to its later citations.

Table 6 shows that there are differences in the subsequent scholarly attention received by theoretical and other articles, while Table 5 showed that journals spend sharply different amounts of time dealing with them and that authors of theory articles spend less time revising in response to re-submission requests. Perhaps this is because upon submission a theory paper is clearly correct or incorrect, with fewer inherent possibilities for revision and the main issue being whether the result is sufficiently important. Regardless, to examine the theory-other sub-field distinction further, Table 7 presents estimates of equations specified like those in Columns (4) and (6) of Table 6, but with the articles separated into sub-samples of theory and other papers. For each type of article, the first column shows OLS estimates, the second LAD estimates.

Depending upon the type of article, estimates of the relations of the crucial variables—an extra round of re-submission and the times spent at the journal and with author(s)—to subsequent citations have

different implications. The conclusions from Table 6 apply mainly to articles in sub-fields other than theory: Among those sub-fields, the relationship of citations to a third re-submission (a fourth round) is positive at the margin; and, most importantly, as in the entire sample, additional time that authors spend revising remains associated with a statistically significant lesser scholarly impact. Among theory articles, the time spent either at the journal or by authors is unrelated to subsequent citations, although there is evidence that the marginal relationship of a second re-submission (a third round) to citations is positive, while that of a fourth round is not.

The analysis of this sample leads to the conclusion that multiple rounds of editing/handling at these journals may be useful (in terms of articles' relations to the attention in subsequent scholarly work), although statistical significance is low. Publishing longer papers (within the range of full-length articles included in the sample) is, however, unrelated to scholarly attention. The strongest conclusion is that authors' spending more time responding to requested re-submissions is associated with less scholarly attention.

3. *Solutions to Slowness*

The results in Sections 2.2. and 2.3. do not reflect *ex ante* random assignment of papers to quicker or longer processes; nor were articles randomly assigned to differing amounts of time spent by editors/referees or by authors. (We do not see how such randomness could be ethical, although randomly nudging some submitting authors to choose faster decision routes might work.) Without a true experiment, we cannot be sure that articles that went through more rounds were not inferior to others *ab initio* and required extra attention to bring them up to par. Similarly, articles on which authors spent more time, conditional on the number of rounds, might have needed that time to rise to the minimum acceptable quality level of the journal. The former caveat may be important, although we saw that additional rounds had a positive relation to subsequent citations. The latter does not seem credible, especially given the low correlation of the time a journal takes to generate a first revise-resubmit request and the author(s)' time spent responding to it.

We assume throughout that, given the returns to publishing in these top journals, the disincentives posed by the lengthy refereeing process deter almost no submissions (despite concerns expressed by Azar, 2007). Assuming therefore that shortening the process would be desirable, the findings in the previous section point to three margins along which the publishing process might be improved with no loss of quality. Additional back-and-forth between authors and editors—more rounds with a journal—has some scholarly value. Even if third revisions are positively related to later scholarly attention, however, that gain must be traded off against the cost to (younger) scholars' careers, in that additional back-and-forth with journals postpones their ability to demonstrate their scholarly prowess. Thus, considering alternative editorial arrangements and rules is important. A second margin is in the time authors "sit on" their papers after hearing back from journals, time that our results suggest is related to lesser scholarly attention. The final margin is the time that editors and referees spend handling papers, time that at the margin is unrelated to attention by later research.

3.1 *Fast-tracking—The* Economic Inquiry *Innovation*[22]

We first consider the oldest major effort to accelerate the refereeing/publication process, *Economic Inquiry*'s (*EI's*) introduction in 2007 of a two-track process. Submitting authors could choose between a fast track, in which the article receives a simple accept or reject; or a regular track, which might lead to an acceptance with minor revisions, or one or more revise/re-submit responses with subsequent additional refereeing, or to rejection (McAfee, 2010) (https://weai.org/view/EI-No-Revisions). Several journals have now instituted a similar quick turnaround policy, although none appears to offer authors a choice of tracks or a definite no-revision track. This policy change is obviously not a randomized experiment: Authors may nonrandomly self-select into the fast-track group and, as shown below, they did so along one interesting dimension.

To examine how this experiment worked out, we collected data on the 935 articles published in *EI* between 2009 and 2018 inclusive, yielding a usable sample of 835 articles that were not invited and were

[22]This sub-section is a very much shortened version of Hadavand *et al*. (2020).

at least ten pages long. In addition to all published articles, we have information on the track used for 5,178 rejected articles. We obtained information that allowed the construction of variables that are similar *mutatis mutandis* to those used in Section 2.

Fast-track papers were only slightly albeit statistically significantly more likely to be accepted for publication than those submitted through the regular track (an acceptance probability of 0.159, s.e. = 0.004, versus 0.149, s.e. = 0.002). There is little difference in the time between submission and first decision among accepted papers along the two tracks. Rejection times are also similarly distributed across tracks. The difference between them arises from the lag between initial response and final acceptance on regular-track papers. There is a very long tail among these papers, with a 90^{th} percentile of 17 months (compared to 7.5 months among fast-track papers). Aside from the obvious risk of rejection, submission along the regular track carries a small risk of involvement in a dragged-out process, less arduous than at "Top 5" journals but still quite long.

Certain characteristics of authors generated predictable differences in the track chosen. As the probit derivatives in Column (1) of Table 8 suggest, more successful (in terms of prior scholarly impact) and more senior authors were more likely to choose the fast track. Most interesting, we searched over various ranges of the seniority of authors to find where the likelihood function was maximized. This occurred using the closed interval [5, 10] years post-Ph.D. If any author was in this experience range, the probability of a fast-track submission was significantly higher. With only nineteen percent of published articles submitted along this track, the parameter estimate implies that this choice is over one-third more likely if an author is in this range of experience—presumably facing an impending job-security and/or promotion decision. The evidence suggests that this type of fast-tracking might aid junior scholars who face a rapidly approaching tenure decision.

Fifty-one percent of accepted submissions along the regular track went through more than two rounds of submissions, far below the 73 percent among "Top 5" journals. Paralleling the analysis in Section 2.3., we estimate the determinants of annual citations to each of the 835 usable articles. As was done there, each article is included as an observation in each post-publication year. Column (2) of Table 8 presents a

simple model, including only the track chosen; if regular-track, whether an article went through "only" two rounds of submission, and two variables that mechanically alter the number of citations. Column (3) adds the length of time (in years) from submission to acceptance, the post-Ph.D. experience and prior citations of the most cited author, and controls for: Number of pages; *JEL* category, aggregated into 10 groups; number of authors, and whether at least one author was female.

The least-squares estimates in Table 8 demonstrate that, whether we include covariates or not, fast-track papers are cited significantly more than articles submitted through the regular process.[23] Two-round regular-track papers receive more citations than those published papers that were refereed multiple times, demonstrating that the relationship of an extra revision to subsequent citations was zero.[24]

We stress that these estimates do not account for the possible endogeneity of the choice of track; this sample provides no evidence that fast-track handling reduced subsequent attention to an article.[25] The apparent absence of any relation of third or higher-order rounds of refereeing to citations contrasts with the results for the third and fourth rounds in Section 2. The difference may, of course, simply result from sampling differences or from underlying unmeasurable quality differences between these articles and those published in "Top 5" journals. A substantive explanation is that refereeing at the top journals may be of higher quality than at *EI*, with the difference in quality being more pronounced on later-round referee reports.

3.2 *Fast-tracking:* AER: Insights *and the* AEJ*'s*

While *Economics Letters* has promised and delivered rapid turnaround with little or no revision for many years, its policy was only adopted by top general economics journals with the creation of the

[23]Re-estimating the equations in Columns (2) and (3) using Poisson estimation to account for the count nature of the dependent variable, which contains many zeros, yields essentially the same conclusions as the Table. The same was true for Tables 6 and 7, although the near absence of zeros in those data make this technique less appropriate.

[24]In a survey reported in Hadavand *et al*. (2020), we find no evidence that fast-track submissions had previously been rejected at more journals than regular-track submissions.

[25]Instrumenting for fast-track using an indicator of whether any author of the article was in the five to ten-year range of experience reduced the impact of fast-track on citations somewhat; but, with the instrument quite weak, as implied by the estimates in Column (1) in Table 8, it is not clear what this search for exogeneity tells us.

American Economic Review: Insights (*AERI*), which published its first articles in 2020. The question is whether the *AERI* has lived up to its promise to short-circuit the publication lags that characterize the "Top 5" journals. To examine this, we obtained information on the submission and acceptance dates of all articles published in the *AERI* in 2020 and 2021.

The top panel of Table 9 presents information like that in Table 1, submit-to-accept and submit-to-publish times. The record so far is extremely encouraging. The mean submit-to-accept time is four months, and there is remarkably little variance around this average: The 90th percentile is only five months. Of course, submit-to-publish times are longer, about 14 months on average, but they too suggest that this innovation has been highly successful so far.[26] Whether it will be successful in generating the same scholarly attention as the top journals cannot yet be known; but at least scholars whose work is accepted by the *AERI* will know that their work can be circulated quickly with the *imprimatur* of a widely recognized outlet.

The second novelty is the creation of the opportunity for what we call "cascading referee reports"—allowing authors to submit referee reports on their work from journals that had previously rejected the paper. This policy was adopted at their inception by the *American Economic Journals*, and it has now spread to many other journals. It is not possible to tell whether it has speeded up the editorial process, since authors' choices about whether to include prior referee reports depend on the nature of those reports. But with many papers rejected not because of errors, but because editors view them as being of insufficient interest for their "Top 5" journal, creating a cascade of reports can be a good strategy for authors and can save editors' and referees' time.

To examine whether published articles that are submitted with a cascade move through the publication process more rapidly, we collected information on all publications in the *AEJ: Applied* in 2020 and 2021. Of the 80 articles, 26 were submitted with prior referee reports, with 25 enclosing reports from

[26]These "short" articles averaged 17 pages, far below those in the "Top 5;" but they are longer than the average article in the *AER* was before the late 1990s.

the *AER*, and one with reports from the *AERI*.[27] The bottom two panels of Table 9 show the submit-to-accept and submit-to-publication times for articles without and with a refereeing cascade. Papers including a cascade of reports are handled on average five months more quickly than other papers; they are handled with slightly less variability than others; and the upper end of the distribution of submit-to-accept times is substantially shorter. This comparison suggests the value, in terms of speeding up acceptance/publication, of allowing cascades. As noted above, we cannot construct the appropriate experimental counterfactual that would allow us to infer whether cascading causes more rapid treatment; nor can we tell whether it raises the citations that "cascaded" articles will eventually receive.

3.3 *Fast-tracking: Desk Rejections*

Desk rejections speed the review process and have become *de rigueur* among "Top 5" journals, with these journals now reporting desk-rejection rates of around 50 percent.[28] Until the 1990s desk-rejection was essentially unknown in these journals, with the *AER* explicitly refusing to desk-reject submissions, since its Board felt that the journal representing the profession should be open to all submissions.

The growth of desk-rejections is a rational response to the growth in the number of submissions and the burden that providing referee reports on all of them would entail. So long as the desk rejections are rapid, there is little time (but often substantial psychological) cost to authors.[29] But are there enough desk rejections? Even with half of submissions being summarily turned down, acceptance rates among those articles that do receive reports remain at ten percent at these journals. It is difficult to believe that editors feel that half of submissions have a serious chance of being worthy of appearing in their journals. If editors

[27]We exclude two *AERI* articles that were (co-)authored by prior Nobel-Prize recipients and two *AEJ: Applied* papers that had Nobelists as (co-)authors. Unsurprisingly the editorial lags that these papers encountered were shorter than the averages shown in Table 9.

[28]Web-based and directly communicated editors' statements report desk-rejection rates at the *AER, Econometrica, JPE, QJE,* and *REStud* of 46, 43, 55, 63, and 55 percent respectively.

[29]Our experience and that of colleagues is that desk-rejections occur within one week of submission. The quickest we know of was on a submission that was sent from Europe at Noon on a Sunday, with the rejection occurring in the U.S. at 9AM that same day.

exercised still more discretion and desk-rejected more submissions, publication would be accelerated, the burden on referees would lessen, and perhaps the quality of referee reports would increase.

3.4 *Limiting Revision Time*

In the data set describing "Top 5" articles published in 2012-13, the time between receipt of the first decision and the first re-submission exceeded six months on 56 percent of the 241 articles; and it exceeded one year among 25 percent. Of the 176 articles that went through three or four rounds, 15 percent spent more than six months in the author(s)' hands between the second response and the second re-submission. Most surprising is that nine of the 52 papers that went through four rounds were worked on for more than three months between the third editorial response and the final re-submission. While the times to re-submission decrease with the number of re-submissions, they remain very long.

With the demonstration that the additional time that authors spend re-submitting is at best useless, the question arises as to why so much time is spent. One reason may be that procrastinating authors produce lower-quality research, so that more revisions are necessary to produce an acceptable paper. Yet another reason may be that they are too busy to devote the real time necessary for producing high-quality revisions (although the estimates in Table 4 showed that these lags are unrelated to authors' characteristics that might indicate that their time is more valuable than others'). An alternative explanation is that some authors may use the submission process to obtain comments on a paper that was not well-polished and was submitted prematurely, with revision time needed to bring the paper up to a minimally acceptable level. Yet a fourth possibility consistent with slowness on the second and subsequent re-submissions is that the feedback received in response to the first re-submission is of reduced quality because the authors and, especially, the editors and referees failed to remember all the nuances of a subject that they handled many months, or even years before. Regardless, it is clear that allowing authors free rein to delay re-submission is unrelated to their articles' scholarly value.

Requiring rapid re-submission is standard in the natural sciences, common in other social sciences, but uncommon in economics. As an illustrative exception, the *American Journal of Agricultural Economics* (*AJAE*), the oldest and most distinguished in its sub-field, does not impose a deadline but does include in

its revise-resubmit letter, "please submit the revised manuscript and separate responses to the reviewers … within six months of receiving this letter."[30] It had a median submit-to-acceptance time of 10 months in 2020, with the 90th percentile being 22 months.[31] Both statistics are unsurprisingly far below the comparable statistics shown in Table 1; but they are also below those of the six leading specialized applied journals listed in Footnote 20, which had median submit-to-accept times of 12, 15, 19, 18, 12, and 12 months respectively. Of those six, in only one was the 90th percentile of the distribution as short as at the *AJAE*.

We cannot tell whether turnaround times in this journal are relatively rapid because of the moral suasion in its revise/re-submit letters, because for some reason the ethos that generates publishing lags in the "Top 5" has not infected it as much as other specialized journals, or because of something else unique to its sub-specialty. Regardless, this admonition might be included in all revise/re-submit letters. By providing at least a soft deadline, journals might take advantage of incentives that induce collaborators to move together more quickly (Bonatti and Hörner, 2011). Going further, the evidence in this study of the negative relation between subsequent citations and lags in authors' revisions suggests that imposing and enforcing a six-month limit on time spent revising, as appears to be done in psychology, would not be harmful to their eventual scholarly attention. If nothing else, it would help pull the right tail in the distribution of submit-to-acceptance times to the left.

An objection to this proposal is that authors are busy. Of course, they are. But for most authors publishing an article in these journals is a jackpot prize, one that merits putting an invited re-submission on the "front burner" of activities. Very few, if any, requested revisions take more than six months of actual work; it is more likely that the delays simply result from author(s)' procrastination. Given the rewards, procrastination is difficult to explain; and it can be costly.[32]

[30]Email communication, Amy Ando, Co-editor, *AJAE*, March 19, 2021.

[31]The *AJAE* has an impact factor of 3.44, almost identical to the average of the six specialized non-theory journals listed in Footnote 20.

[32]In at least one case, an author delayed 18 months in responding to a revise-resubmit request from a "Top 5" journal. The eventual re-submission was quickly rejected by the new editor who was uninterested in the topic.

While some top journals specify length limits on submissions, published versions of accepted articles suggest that those limits are often violated. Figure 4 shows the average pages in each "Top 5" journal and the average in all five journals over the past half century, based on data provided by Kosnik (2022).[33] It documents the tremendous "page-creep" that has occurred in the profession—a tripling over the half century. Aside from the flouting of these limits, incentivizing journals and authors to drag out the decision process, it also sacrifices journal space that might be devoted to other authors' work. Raising the remarkably low acceptance rates (compared to other economics journals and other social-science fields) at top economics journals could be a beneficial result of enforcing limits on page counts. The "page-creep" in economics journal publishing may be related to the increasing lags in editorial decisions, lags that might be reduced if page limits were enforced both *ab initio* and throughout the editorial process.

3.5 *Limiting Refereeing/Editing Time*

The evidence in Section 2 made it clear that editor/refereeing lags are not the more important contributor to the excessive times from submission to acceptance and publication at the "Top 5" economics journals. It also demonstrated, however, that conditional on the number of rounds of back-and-forth, additional time spent by referees and editors has no relationship to the eventual attention that an article receives. This suggests that there is room for marginal improvements along this dimension too.

While the data used here cannot distinguish between the contributions to publication lags of dilatory editors and the referees whom they assign, we do know (Hamermesh, 1994) that most referees who complete their assigned task do so quickly, with only 20 percent of them taking more than three months. The difficulty is that a small fraction are never heard from (5 percent) or quickly decline the refereeing request (17 percent). But almost 2/3 of referees solicited agree to do the job and complete it within three months.

The theory of procrastination (see, e.g., Akerlof, 1991) suggests that people backload completion of tasks until just before a deadline. While there are deadlines in requests to referees, they are not enforced:

[33]Adjusting Figure 4 for differences in character counts per page across journals and for the changes in page size that occurred in the *AER* barely changes this Figure.

and referees can backload indefinitely. Monetary incentives merely shift a few delayed reports across the margin to qualify for the payment (Hamermesh, 1994). Non-monetary incentives, for examples, the *American Economic Review*'s or *Journal of Political Economy*'s lists of referees, or free journal subscriptions to reward rapid refereeing, are unlikely to provide much motivation to overcome procrastination. Public shaming of delinquent referees is a possibility, but journals may be unwilling to engage in it; and, in any case, it is unclear whether such shaming would reduce delinquency.

Some referees are simply unreliable; since refereeing deadlines are not enforceable, journal editors may feel stuck with delinquents. There is a solution: "Fire" the delinquent after some short period of non-response. If an article is so narrowly focused that only two or three scholars can provide useful comments/recommendations to the editor, it probably does not belong in a top general-interest journal. A reasonable requirement is thus that no referee be allowed more than three months to handle an article (a policy that is currently implicit and tightly enforced by our Journal 1 and which explains the low variance in the time articles spend in that journal's hands). If a referee fails to respond within that time limit, the editor should immediately request a report from another referee, if reports are still needed. Given the evidence that a large majority of referees complete the task within this time limit, it is unlikely that this constraint would reduce the supply of *useful* refereeing talent (as opposed to those who agree to referee but fail to do so). The general equilibrium effects of such a limit seem minor.

As demonstrated in Section 2, 22 percent of articles at "Top 5" journals went through four submissions/re-submissions, back-and-forth with the journal. While these additional rounds were related to some additional subsequent citations, is that worth the delay in making research more visible and in authors' improving their CVs? Journal editors might solicit no more than two re-submissions, with the second requesting only "cleaning-up" and "polishing." If implemented, this innovation would also reduce the incidence of multiple rounds of re-submissions that end in rejection. The broader adoption of refereeing cascades would facilitate this reduction. Admittedly, this recommendation requires that editors exercise judgment when soliciting the first re-submission. They should be clear that, as one former "Top 5" editor

suggested, an initial re-submission will only be sought if the additional work is "doable" and can be handled by the author(s) in a reasonable length of time, as recommended in the previous sub-section.

The editors of most "Top 5" journals are paid for their work, with substantial time released from teaching and/or monetarily and often quite lucratively. (One "Top 5" journal pays its editors $51,500 per annum; another pays $32,000—with $64,000 to the Editor-in-Chief.) They should be well-paid—their work is important and time-consuming. Asking that they abide by the dictum that they only solicit re-submissions on papers on which there is a clear path to publication and therefore exercise more judgment early on is not unreasonable. Moreover, given their remuneration, "sitting on" a paper longer than a month upon submission/re-submission or upon receipt of a sufficient number of referee reports is inexcusable.

4. *Escaping the Low-level Equilibrium*

The economics profession is in a low-level equilibrium trap, with much longer decision times than any other discipline that validates ideas through their acceptance by peer-reviewed journals. Today the lags between an article's acceptance and publication are unimportant. Online publication often occurs within a few weeks of an article's acceptance. Even ignoring the now technologically irrelevant lag between acceptance and publication, however, economics publishing remains woefully slower than that in other disciplines.

The long lags hurt the profession and, as we have shown, are at least partly unrelated to the amount of attention that articles receive from other scholars. They have especially severe negative impacts on younger scholars facing tenure/job-security decisions, with cases where Ph.D. essays are hanging in the balance at a journal even when the person's tenure case is being considered. In many institutions junior economists are compared to peers in other disciplines, even in other social sciences, whose research *oeuvres* do not suffer the same lags in acceptance/publication. Economists making decisions about their colleagues' future understand this problem, but "higher-level" administrators often do not, creating needless stumbling blocks to tenure for active junior economists.

We have outlined several steps that might reduce the time between an article's submission and its acceptance and have indicated how some innovations instituted in the past 15 years have accelerated the

publication process. While the evidence supporting these recommendations comes from data describing "Top 5" journals, the new AEA journals, and one lower-level general journal, *Economic Inquiry*, they are equally valid at other lower-level journals (whose decision process is also distinctly slow). Some observers might be concerned that these recommendations would increase the advantages of "insiders," which are already substantial at some journals (see Bethmann *et al.*, 2020); but it is unclear why speeding things up would aid those whose value of time is highest more than those with fewer professional demands on them.

In all these journals, the burden of improving the situation—of putting the economics profession on the same footing as other disciplines—rests on editors. They need to change their behavior, to insist that referees behave as gatekeepers rather than co-authors, and to be sure that authors respond reasonably rapidly to editors' requests for re-submissions. The low-level equilibrium trap developed because editors let it develop. We will not escape it until editors change how they deal with referees and authors.

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TABLE 1 ACCEPTANCE AND PUBLICATION LAGS (IN MONTHS), ECONOMICS, OTHER SOCIAL SCIENCES, AND "HARD" SCIENCES, 2012-13 AND 2020*

	Weighted Mean	Std. Error	Percentile 10	25	50	75	90
			2012 -13				
Four "Top 5" + *REStat* (535)**							
Submission to acceptance	24.72	(0.63)	10	14	21	32	42
Submission to publication	33.15	(0.66)	17	25	35	43	52
APSR, JApplPsy, JPersSocPsy (371)							
Submission to acceptance	12.84	(0.36)	6	8	12	16	22
Submission to publication	18.05	(0.37)	11	13	17	22	38
*Nature, PNAS**** (195)							
Submission to acceptance	5.77	(0.22)	3	4	5	7	9
Submission to publication	7.80	(0.24)	5	5	7	9	11
			2020				
Four "Top 5" + *REStat* (308)**							
Submission to acceptance	26.38	(1.00)	10	15	22	35	50
Submission to publication	34.31	(0.93)	18	25	32	44	59
APSR, JApplPsy, JPersSocPsy (212)							
Submission to acceptance	14.37	(0.52)	6	8	13	17	24
Submission to publication	22.99	(0.56)	14	17	21	26	32
*Nature, PNAS**** (183)							
Submission to acceptance	7.16	(0.41)	3	4	6	8	13
Submission to publication	9.35	(0.41)	5	6	8	11	15

*Number of articles in parentheses. Means weighted by the inverses of the numbers of articles from the journal in the samples. Several articles (fewer than five in each case) accepted within a month of submission were deleted from the samples of psychology journals.

**In addition to the *REStat* and the three "Top 5" journals that provided confidential information, we also include published information from one of the two "Top 5" journals that did not provide such data.

***The sampled issues cover only the last several weeks of the respective calendar years.

TABLE 2 DESCRIPTIVE STATISTICS FROM THE THREE-JOURNAL SAMPLE, ARTICLES 2012-13 (N=241)

Variable means:

Number of rounds:		Field:		Number of authors		(fraction with any female):
2	0.27	Theory	0.35	1	0.21	(0.12)
3	0.51	Admin. data	0.11	2	0.43	(0.18)
4	0.22	Other data	0.42	3	0.27	(0.28)
		Experiment	0.09	4+	0.09	(0.39)
		Econometric theory	0.03			

			Percentile				
Variable:	Mean	Std. Error	10	25	50	75	90
Page equivalents*	29.18	0.41	21	25	29	33	37
References included	46.08	1.18	26	33	44	55	67
Cumulative Web of Science citations	69.52	5.15	10	20	44	86	168
Cumulative Google Scholar citations	299.24	21.67	42	78	168	402	739
Web of Science citations of most-cited author during year of submission	271.81	36.53	7	28	97	284	701
Post-PhD experience of most-cited Author	16.41	0.66	4	8	14	24	32

*Pages standardized to the journal with the densest format.

TABLE 3 DECOMPOSITION OF VARIANCE OF THE SUBMIT-TO-ACCEPTANCE LAG (IN MONTHS)

	Mean	Variance	Due to Author(s)	Due to Journal	2*Covariance
All journals	22.20	16.68	9.24	4.32	3.12
Journal 1	15.36	12.12	10.44	0.24	1.44
Journal 2	24.60	14.16	3.72	6.36	4.08
Journal 3	26.28	17.52	10.32	2.88	4.32

TABLE 4 CORRELATIONS OF TIME IN JOURNALS' AND AUTHOR(S)' HANDS

	All Papers		Completed in Round	
Round	Correlation	N =	Correlation	N =
2	0.023	241	0.255	65
3	0.260	176	0.256	124
4	0.364	52	0.364	52

TABLE 5 DETERMINANTS OF THE EDITORIAL PRODUCTION PROCESS, OLS ESTIMATES, N=241*

	No. of Rounds		Months at journal		Months with author(s)	
Ind. Var.:						
Citations to most- cited author/100	0.009	0.005	-0.256	-0.129	-0.161	-0.121
	(0.008)	(0.008)	(0.086)	(0.070)	(0.127)	(0.126)
Experience of most-cited author	-0.006	-0.006	0.072	0.071	0.074	0.079
	(0.005)	(0.005)	(0.049)	(0.039)	(0.073)	(0.071)
Any female author	0.044	0.028	-0.902	-0.413	2.467	2.570
	(0.112)	(0.109)	(1.145)	(0.920)	(1.696)	(1.659)
Two or more authors	-0.171	-0.162	-1.577	-1.700	-0.013	0.078
	(0.115)	(0.118)	(1.190)	(0.955)	(1.762)	(1.722)
Equivalent pages	-0.004	-0.005	0.121	0.039	0.043	-0.074
	(0.007)	(0.007)	(0.075)	(0.064)	(0.112)	(0.115)
Theory	-0.238	-0.205	-1.070	-2.235	-1.808	-2.142
	(0.098)	(0.096)	(1.000)	(0.810)	(1.481)	(1.461)
Adj. R^2	0.018	0.081	0.041	0.383	0.006	0.052

*Standard errors in parentheses. Columns (2), (4), and (6) contain journal indicators. The correlation of the residuals in Columns (3) and (5) is 0.24, between the residuals in Columns (4) and (6) it is 0.31.

TABLE 6 DETERMINANTS OF ANNUAL POST-PUBLICATION CITATIONS (N=241 ARTICLES, 2,049 CITATION-YEARS)*

	OLS				LAD	
Ind. Var:						
3 rounds	2.541	3.261	1.314	1.827	0.815	1.020
	(0.956)	(1.038)	(0.924)	(1.033)	(0.323)	(0.357)
4 rounds	3.066	5.909	2.349	3.987	0.977	1.295
	(1.671)	(2.145)	(1.645)	(2.209)	(0.382)	(0.552)
Journal hands	-------	-0.145	-------	0.010	-------	0.259
		(0.071)		(0.086)		(0.306)
Author(s) hands	-------	-0.147	-------	-0.140	-------	-0.662
		(0.057)		(0.062)		(0.170)
Citations to most-cited author/100	0.508	0.447	0.463	0.446	0.407	0.409
	(0.091)	(0.085)	(0.088)	(0.086)	(0.057)	(0.079)
Experience of most-cited author	-0.114	-0.091	-0.118	-0.106	-0.103	-0.095
	(0.041)	(0.042)	(0.040)	(0.041)	(0.013)	(0.016)
Any female author	2.953	3.064	2.696	3.011	0.755	0.918
	(1.695)	(1.638)	(1.610)	(1.600)	(0.372)	(0.376)
Two or more authors	1.206	1.301	1.139	1.360	0.494	0.429
	(1.108)	(1.111)	(1.097)	(1.104)	(0.322)	(0.344)
Equivalent pages	-0.099	-0.068	-0.027	-0.037	0.005	0.011
	(0.078)	(0.076)	(0.082)	(0.083)	(0.022)	(0.023)
Number of references	0.072	0.065	0.058	0.061	0.029	0.029
	(0.026)	(0.025)	(0.025)	(0.025)	(0.007)	(0.007)
Theory	-4.087	-4.224	-3.734	3.859	-1.969	-2.036
	(0.898)	(0.913)	(0.937)	(0.967)	(0.257	0.266

*Standard errors in parentheses, clustered on articles. Columns (3)-(6) contain journal indicators. Each equation also includes a vector of indicators of year post-publication.

TABLE 7 DETERMINANTS OF POST-PUBLICATION CITATIONS, THEORY ARTICLES VS. OTHERS*

Ind. Var.:	Non-theory		Theory	
	OLS	LAD	OLS	LAD
3 rounds	0.916	-0.206	1.578	0.727
	(1.670)	(1.048)	(1.283)	(0.637)
4 rounds	3.628	0.559	1.082	0.314
	(3.255)	(1.368)	(1.406)	(0.922)
Journal hands	0.099	0.069	0.025	0.033
	(0.124)	(0.063)	(0.075)	(0.042)
Author(s) hands	-0.193	-0.083	-0.004	-0.004
	(0.076)	(0.038)	(0.068)	(0.030)
R^2	0.288	0.273	0.315	0.270
N (articles, observations)	(158, 1,345)		(83, 704)	

*Standard errors in parentheses, clustered on articles. Each equation also includes a vector of indicators of year post-publication. Also included in each equation are journal indicators and all the other independent variables included in the estimates of Table 6.

TABLE 8 SELECTION EQUATION, AND RELATION TO CITATIONS, *ECONOMIC INQUIRY*

Ind. Var.: Dep. Var.:	Fast-track selection*	Citations**	
Any author [5-10] years post-Ph.D.	0.085		
	(0.029)		
Years post-Ph.D. of most-cited author	0.0023		0.0087
	(0.0014)		(0.0057)
Five prior years citations of most-cited author (/1000)	0.0345		0.380
	(0.0159)		(0.125)
Fast track		0.510	0.419
		(0.188)	(0.203)
Two-round regular		0.147	0.103
		(0.138)	(0.155)
Years from submission to acceptance			0.051
			(0.116)
Year post-publication (9)		X	X
Issue number (4)		X	X
N pages			X
JEL category (10)			X
N authors (3)			X
Any female author			X
Pseudo-R^2 or R^2	0.020	0.087	0.117
N =	835	3889	3889

*Also includes year of initial submission.

**Standard errors in parentheses, clustered on articles.

TABLE 9 ACCEPTANCE AND PUBLICATION LAGS (IN MONTHS), ECONOMICS, "NOVEL" ECONOMICS JOURNALS, 2020-21

	Mean	Std. Error	Percentile				
			10	25	50	75	90
AER: Insights (N = 64)							
Submission to acceptance	4.05	(0.15)	3	3	4	5	5
Submission to publication	14.72	(0.37)	11	13	14	16	18
AEJ: Applied, No cascade (N = 54)							
Submission to acceptance	15.13	(1.21)	8	10	14	19	24
Submission to publication	29.13	(1.26)	20	23	28	34	38
AEJ: Applied, Cascade (N = 26)							
Submission to acceptance	10.03	(0.95)	5	6	9	14	17
Submission to publication	23.77	(1.12)	16	20	22	29	32

Figure 1. Depiction of Publishing Lags in Economics

Note: With permission of Rafael Pereira @UrbanDemog .

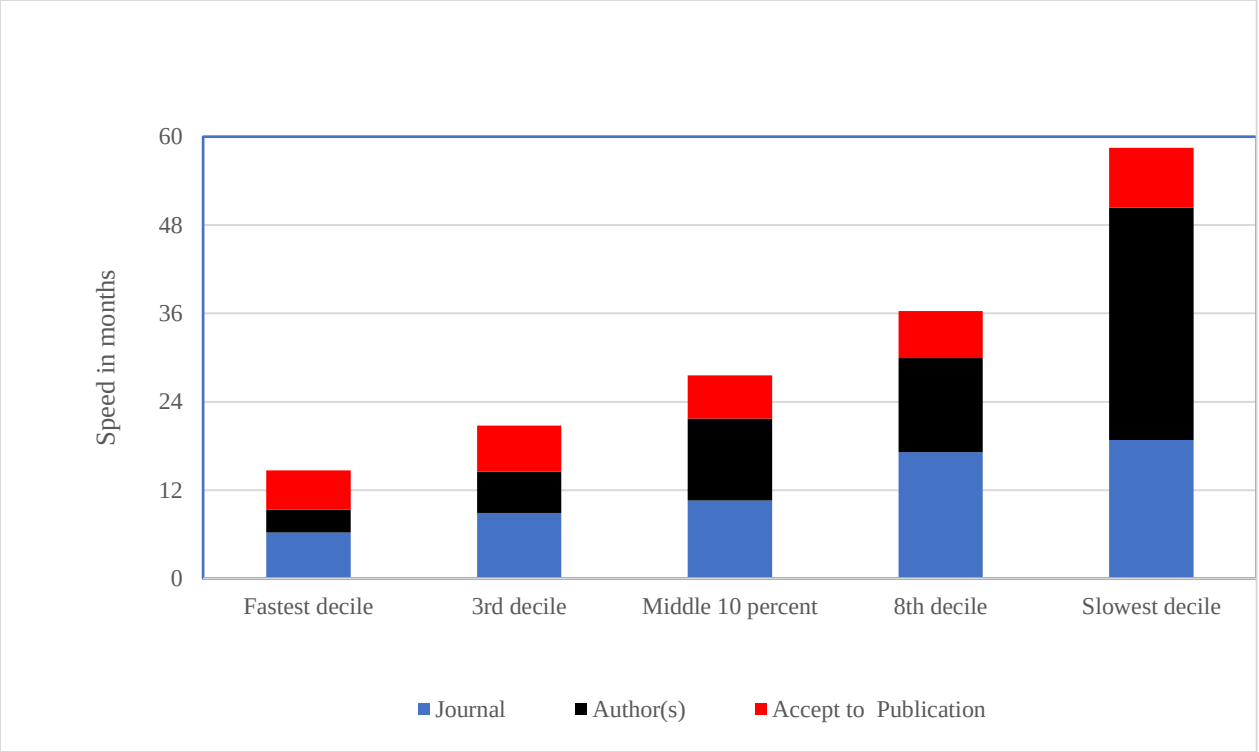

Figure 2. Contributions to Slowness, by Decile of Speed

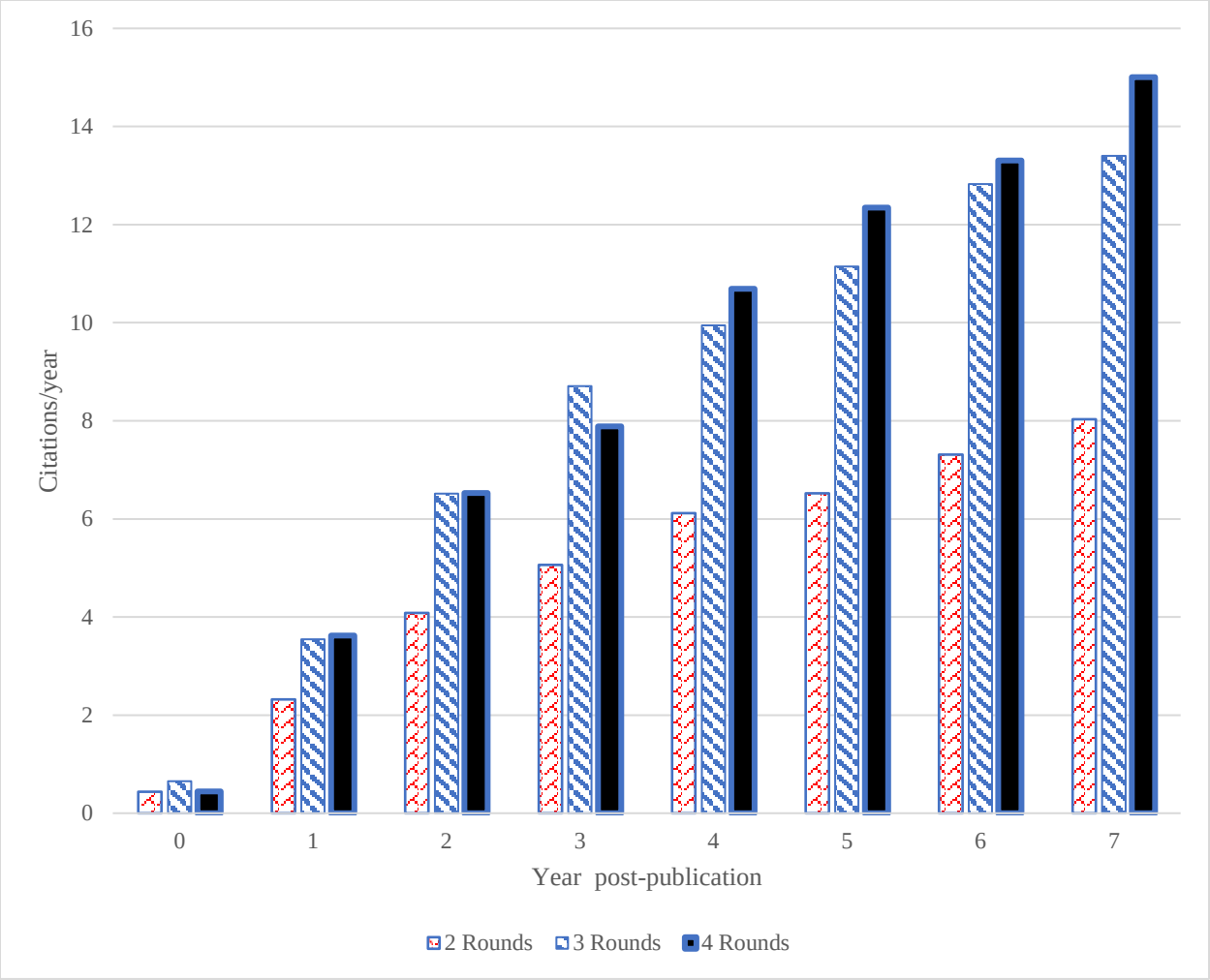

Figure 3. Average Citations/year by Rounds of Submission

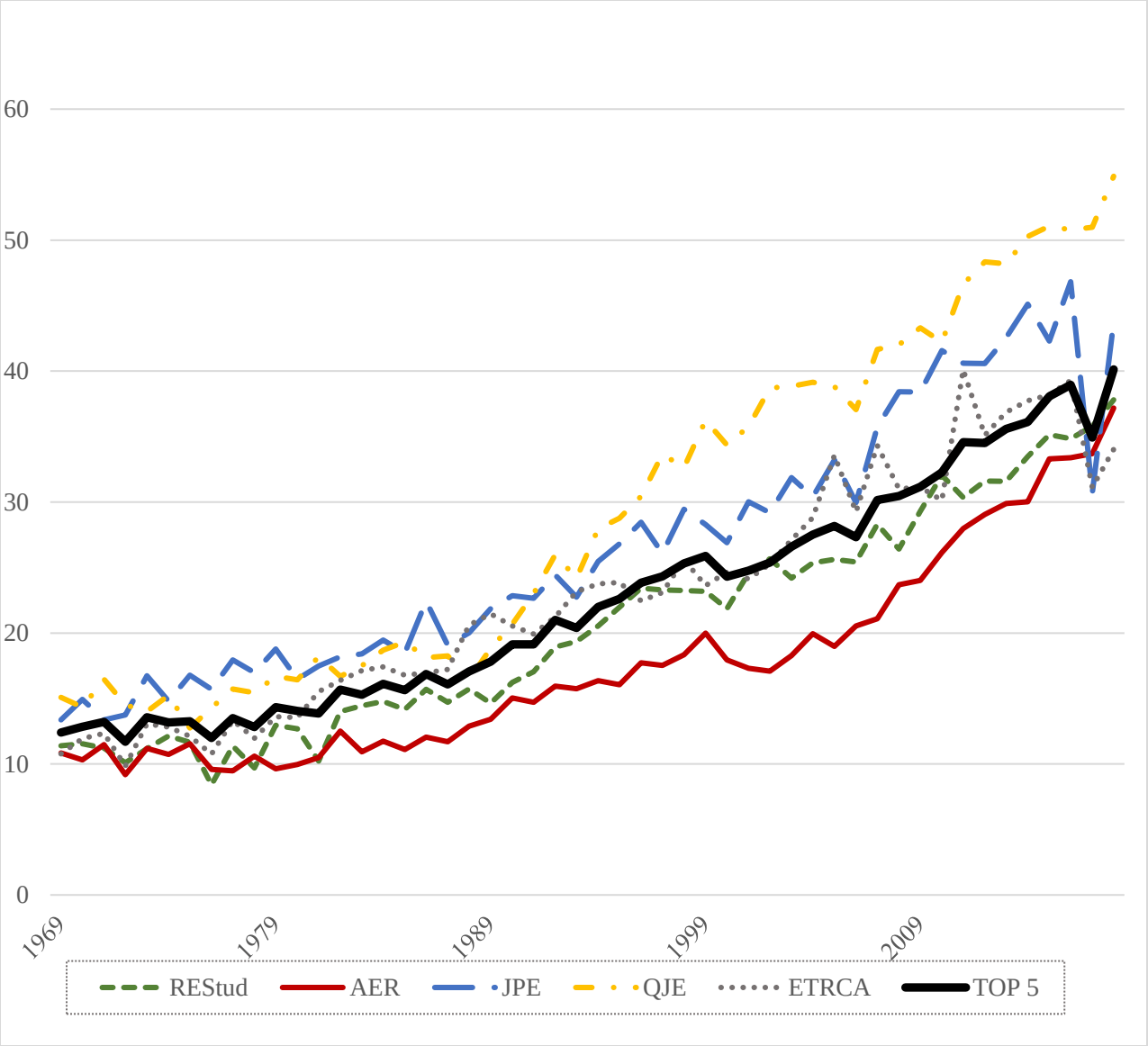

Figure 4. Average Page Length in "Top 5" Journals, 1969-2018

Note: Excludes Comments/Replies/Rejoinders and Nobel/Presidential Addresses. Based on data from Kosnik (2022).