Clubs and Networks in Economics Reviewing

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We study how author connections influence paper outcomes at the *Journal of Human Resources*. Authors who attended the same PhD program, worked with, affiliate with the same National Bureau of Economic Research program(s), or are closely linked via coauthorship networks as the handling editor are more likely to avoid a desk rejection. Reviewer recommendations are similarly influenced by PhD and employment matches. Matching on signals of ability—such as top five publishing, attending a high-ranked PhD program, or working in a high-ranked department—also impact peer review decisions. We find some evidence that published papers with greater connectivity subsequently receive fewer citations.

I. Introduction

We investigate the role of potential biases in the evaluation of economics research by examining whether network connectivity and author matches

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© 2024 The University of Chicago. All rights reserved. Published by The University of Chicago Press. https://doi.org/10.1086/730208 influence publication outcomes. To do so, we examine nearly 8,000 paper submissions during a 12-year period at the *Journal of Human Resources* (JHR), a highly ranked applied microeconomics field journal. Specifically, we focus on how various connections between authors, editors, and referees—such as shared coauthorships, same National Bureau of Economic Research (NBER) program affiliation, same PhD program, and current/former colleagues—influence reviewer recommendations and editor decisions.

To date, the existing evidence on match effects in economics publishing has largely focused on gender match. Using data from the *American Economic Review*, Blank (1991) finds no gender differential impacts to masked versus unmasked review processes. Using data on National Science Foundation reviews, Broder (1993) finds that female reviewers give lower ratings to female-authored papers. Using matched author-reviewer data from economics journals, Abrevaya and Hamermesh (2012) and Card et al. (2020) find no significant gender match effect.¹

A few papers have documented correlations on characteristics other than gender. Using data on papers published in six economics journals, Medoff (2003) finds that authors who served on the journal's editorial board experienced increased citations. Also utilizing published articles, Brogaard, Engelberg, and Parsons (2014) and Colussi (2018) document connections based on academic history between published authors and journal editorial boards. For instance, PhD students and faculty colleagues of a head editor are more likely to publish in the editor's journal.²

But these types of matches do not get to the question of whether economics publishing is affected by club membership. To do so, we explore several new margins of matching between reviewers and manuscript authors. First, after constructing a network of coauthors based on published and working papers, we analyze how degrees of separation between the author and editor/reviewer impacts editor decisions and reviewer

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¹ Though not directly investigating gender match, Donald and Hamermesh (2006) find that the predominately male *American Economic Association* exhibit a positive bias toward electing female candidates for the association's executive board. A similar finding from a working paper from Bransch et al. (2017) finds that the gender composition of the editorial board from the top five economics journals is negatively associated with the gender composition of published papers.

² Because Medoff (2003), Brogaard, Engelberg, and Parsons (2014), and Colussi (2018) observe only journal publications, one cannot be certain whether these results are driven by matching effects between authors and reviewers/editors or by increased selection (i.e., submissions) to the journal. In other words, it may be that there is no editor/reviewer bias toward authors who are connected but that authors connected to the editor decide to submit more manuscripts to the editor's journal.

recommendations. For example, all else equal, do authors receive beneficial evaluations from editors/reviewers who were previously a coauthor's coauthor (two degrees of separation) relative to editors/reviewers who were a coauthor's coauthor's coauthor (three degrees of separation)? Then, by visiting every author's/editor's/reviewer's personal website and/or curriculum vitae, we construct a comprehensive panel dataset tracking all individuals starting from their PhD to investigate other potential matches of interest. These include whether the author-editor or author-reviewer pair attended the same PhD institution (or a similarly ranked PhD program), whether a pair were ever colleagues together (or currently employed by similar ranked institution), whether a pair are both affiliates of the same NBER program(s), and whether a pair had both published in one of the top five economics journals.

Our empirical strategy employs several dimensions of fixed effects to overcome concerns of endogenous assignment of papers to editors and reviewers to identify the causal impact of network connectivity and match. First, when we evaluate desk rejection decisions, editor fixed effects account for differential sorting of paper types across editors. With editor fixed effects, we estimate differences in editor decisions across papers written by authors with varying network connectivity and match to the same editor. In other words, editor fixed effects allow us to examine how the same editor evaluates papers written by authors with different academic histories (and thus across different club matches) and by authors of differing network connectivity. Similarly, when we evaluate reviewer recommendations, since reviewers often review more than one manuscript, our data allow us to control for potential sorting of papers across reviewers by estimating reviewer fixed effects. Finally, in reviewer recommendation models, paper fixed effects can be estimated by using variation in network connectivity and club match across author-reviewer pairs. These are estimated for any paper that has multiple reviewers, who have varying network connectivity or match with the paper's author(s). Paper fixed effects control for anything related to the paper-specific probability of getting reviewed positively or negatively, such as the paper's quality, subfields, or team of authors.3

Our results suggest that clubs and networks play a considerable role in influencing editor and reviewer decisions. Authors who attended the same PhD program, were ever colleagues with, or are both affiliates of the same NBER program(s) as the handling editor are significantly more likely to

³ Though some survey evidence suggests that editors note observable characteristics, such as author gender (Card et al. 2020), our data allow us to control for all unobservable characteristics that relate to editor/reviewer and paper quality. Investigating whether editor assignment is based on author-reviewer match, Hamermesh (1994) provides evidence that with the exception of a few superstar authors, editor assignment of papers to reviewers is orthogonal to the author and reviewer quality, as proxied by citations from prior papers.

avoid a desk rejection (5.2, 4.6, and 12.2 percentage points, respectively). Authors more closely linked to the editor via coauthorship networks are also more likely to pass the desk. When estimating all of these effects simultaneously in one model, we find that NBER program affiliation and coauthor networks play the strongest role in constituting the club effect. These club effects stack as well: authors with multiple matches do better than those with fewer. We find evidence that top five matching also matters for desk rejection decisions, while match based on the PhD rank or institution of employment rank does not influence editor desk rejection decisions.

Turning to reviewers, we similarly find that reviewers are persuaded by authors with whom they share a match. Authors are significantly more likely to receive a positive evaluation from reviewers from the same PhD program and who were previous colleagues (6.2 and 3.7 percentage points, respectively). NBER program affiliation match is also positively associated with reviewer recommendations but is imprecisely estimated. Degrees of separation seem to matter less for reviewer decisions, with the lone exception coming from the rare instances of one degree of separation: reviewers reviewing a direct coauthor are nearly 10 percentage points more likely to give a positive recommendation on a paper relative to an author of four or more degrees of separation. Similar to editors, the match effects stack: having more connections further bolsters the average positive evaluation rate. We also find that sharing signals of ability significantly influences reviewer recommendations: reviewers who published in a top five are 2.9 percentage points more likely to give a positive evaluation to an author who also published in a top five. Reviewers also give positive reviews to authors who attended a similarly ranked PhD program or were employed by a similarly ranked economics department. This rank-match effect is driven almost exclusively by higher-ranked schools-that is, reviewers from higher-ranked PhD programs and economics departments favorably review authors from higher-ranked PhD programs and economics departments, while reviewers from lower-ranked PhD programs and economics departments appear to be more ambivalent toward their lower-ranked author counterparts.⁴

Importantly, we illustrate how these match effects ultimately capitalize into publication decisions. Unsurprisingly, editorial decisions are very strongly correlated with reviewer recommendations: papers where all reviewer recommendations are positive are over 54 percentage points more likely to be published than papers with all negative reviews. But network

⁴ A series of additional explorations and robustness checks further suggest strong club and network effects. While our primary analysis weights each author equally, we also consider models with a hierarchy of each paper's coauthors: these include models where we identify the closest connection across authors for each editor/reviewer and models where we strictly consider the most prominent author. Results are also robust when estimating with logit models.

effects do not end with differential reviewer recommendations: conditional on passing the desk, and when we control for reviewer recommendations, separate author-editor matching effects arise, particularly for NBER program affiliation. Networks apparently matter at all stages of the editorial process.⁵

Finally, using citations data of published manuscripts, we find somewhat mixed evidence regarding how these club and network effects influence the efficiency of the publication process. We first find that papers accepted for publication where the editor and author are highly connected in the coauthorship network (one or two degrees of separation) receive significantly fewer citations compared with those accepted by the same editor with less connection, suggesting an inefficiency in the process (closely connected editors accept lower-quality papers). However, we find (weaker) evidence that the opposite is true for author-reviewer connections: papers accepted with more author-reviewer connections receive more citations, though these effects are smaller and only marginally significant.

A notable limitation of our study is that we examine decisions made at only a single journal, JHR. As such, a natural question is whether our results can be generalized to the broader profession. Data collected from publicly available curricula vitae (CVs) of both JHR editors and reviewers confirm that the individuals involved in the editorial process at JHR also have vast influence in the editorial process at numerous other journals. Over half (20 of 37) of JHR editors/coeditors have also edited/coedited for another journal, and this group of 37 editors/coeditors has collectively served as editorial board members or associate editors at 53 distinct journals. Likewise, on average, JHR reviewers report serving as a reviewer for 23 other journals (median, 20), with 73% having refereed for at least one top five journal. And 56% report having served in at least one editorial position (editor/coeditor, associate editor, or editorial board) at another journal. As such, while we cannot extrapolate our findings to other journals, the JHR editors and reviewers are very well connected to economics publishing, broadly defined.

⁵ Colussi (2018), who focuses on the top four—JPE, *American Economic Review* (AER), *Quarterly Journal of Economics* (Q JE), and *Econometrica*—finds that 10.2% of published articles have at least one author who went to the same PhD program as the handling editor, 28.8% have an author who was formerly or currently colleagues with the editor, and 7.7% have an author who was a direct coauthor of the editor. The corresponding statistics from publications in JHR are 8.6%, 15.7%, and 1.5%. Thus, it appears that connections could matter more at the top journals, but of course, the previous literature cannot disentangle whether the difference in published effects are driven by increased selection (authors submit more to top journals when there is a match) or by different match effects conditional on submission (editors/reviewers at top journals display a stronger bias for matched papers). Across all our considered direct connections (PhD, employment, NBER program affiliation, coauthorship), 33.6% of published papers at JHR have an author with at least one direct connection to the editor.

Our paper contributes to the literature in at least three important ways. First, our rich data and identification strategy allow us to rule out many potential concerns for endogeneity (e.g., paper quality and assignment to editors and reviewers).⁶ Second, to our knowledge, this is the first paper to directly examine how the network of coauthorships affects editor and reviewer decisions. Finally, our study is the first to take a comprehensive examination of author and editor/reviewer matches by direct club participation (such as attending the same PhD, working together as colleagues, and sharing NBER program affiliations) and outward signals of quality (such as rank of PhD, rank of institution of employment, and prior publication in a top five).

Relying on external signals of quality is a potentially rational response taken by editors and reviewers who may be looking for shortcuts to lessen the evaluation burden, and it is not one limited to the economics profession; for instance, English (2008) posits this as an explanation for the concentration of winners of cultural prizes. Doing so, however, comes at a potentially major cost: our results indicate that these biases may contribute to the lack of diversity within the economics profession, since publication success is the primary factor in promotion and tenure decisions. Our findings suggest that the "tyranny of the top five" documented by Heckman and Moktan (2020)-in which top five publications play an outsized role in determining promotion and tenure at major economics departments-has an even longer reach still, as the signal of a top five publication apparently substantively influences publication potential in journals ranked just below. Within economics, a field arguably obsessed by rankings and stature, external evaluation is often required for hiring, promotion, and tenure decisions as well as for prestigious awards for teaching, research, and service. Though we can only speculate, it is likely that similar biases may also exist in these evaluations.

II. Data Sources and Background

Our data consist of three parts. First, we collected data on nearly 8,000 paper submissions to JHR from 2007 to 2018. For each submission, we know the paper's author(s), the handling editor, and the assigned reviewers (if sent for review). The review process at this journal is single-blind: reviewers can observe the identity of the authors, but the authors do not know the identity of the reviewers. Our analyses use these data to consider four outcomes of interest: whether the paper passed the editor's desk, whether the

⁶ To our knowledge, the only studies to employ similarly rich data include Abrevaya and Hamermesh (2012), who estimate reviewer fixed effects, and Card et al. (2020), who estimate paper fixed effects. Outside of economics, Teplitskiy et al. (2018) estimate similar relationships from neuroscience manuscripts submitted to *PLOS ONE*.

assigned reviewer(s) evaluated the paper positively, whether the editor ultimately accepted the article for publication, and citations among published articles.

The second part of our data consists of manually collected information on authors, editors, and reviewers. Our primary dataset was collected by visiting each individual's website(s), including the full history of an individual's academic employment, starting with their PhD. NBER program affiliation was also collected by visiting the NBER web page. Rankings for the prestige of each individual's PhD program were collected from the 2019 US News and World Report rankings and department of employment productivity rankings on IDEAS (https://ideas.repec.org).⁷

Our third set of data comes from RePEc (Research Papers in Economics). We use RePEc for two purposes. First, we collected time series information on each individual's yearly publication history, including total number of publications, publications in top five journals, number of unique coauthors, and number of unique coauthor's coauthors. Second, we use RePEc to generate networks between authors and editors/reviewers across years. To start, using the EconPapers (https://econpapers.repec .org) service, we compiled a list of all publications from nearly 100 related economics journals and four popular working paper series (NBER, Institute of Labor Economics, arXiv, and Center for Economic and Policy Research).⁸ Then, for each author who appeared on this list of papers, we created an author account that consisted of all the author's papers.⁹ Finally, for each year of our sample, an author network was generated on the basis of coauthorships from the author accounts.

A. The Journal of Human Resources

JHR is widely considered a top field journal in economics, with an overall acceptance rate of 6.2% and just over two-thirds of manuscripts desk rejected.¹⁰ Journal rankings confirm this perception. For instance, when examining the 2020 Scimago Journal Rankings (SJR) by impact factor,¹¹ JHR ranks twenty-third among journals listed in the "Economics and Econometrics" category, ahead of the *Journal of Public Economics* (JPubE) and behind the *Journal of Labor Economics* (JoLE), both which are also widely

⁷ See https://www.usnews.com/best-graduate-schools/top-humanities-schools/economics-rankings. IDEAS rankings retrieved in May 2019 from https://ideas.repec.org/top/top.econdept.html.

³ The full list of journals can be found in table A1 (tables A1–C5 are available online).

⁹ We coded two individuals as being the same if they shared a first name and a last name. Manual checks were included in case authors used different first names across papers (e.g., Ben vs. Benjamin) and in case an author's last name changed. We also used registered RePEc author profiles to verify and adjust matches across papers.

¹⁰ Based on authors' calculations.

¹¹ See https://www.scimagojr.com/journalrank.php.

considered top field journals.¹² Recent research by Heckman and Moktan (2020) shows that tenured faculty accumulate significantly more tier A field journals, such as JHR, by year 8 compared with their untenured counterparts, with this relationship growing stronger as one moves from the top 10 departments to those ranked 16–35.¹³

To examine author journal submission behavior at JHR, as detailed in Brodeur et al. (2023), in early 2021 we conducted a survey across a broad sample of applied microeconomists.¹⁴ The survey first asked the authors to list all the journals they had submitted to in the previous 5 years. For a random subset of journal submissions, authors were then asked which journals they had submitted to prior to the specified journal submission. In figure 1 of Brodeur et al. (2023), we plot the distributions of these prior submissions, sorted by journal rank, for several journals of interest. When examining JHR, the most common journal authors submit to prior to a JHR submission is the *American Economic Journal: Applied Economics* (AEJ: AE), with a significant share also submitting to JHR after receiving rejections from a top five journal. Notably, JHR submission patterns closely resemble that for JPubE.

Finally, to assess the external validity of our sample of editors and reviewers, we collected data on editorial experience from publicly available CVs of 37 JHR editors/coeditors and a random sample of 150 JHR reviewers. Results show that both JHR editors/coeditors and reviewers report refereeing and/or editing at over 500 different journals across multiple fields and disciplines.¹⁵ Over half (20 of 37) of JHR editors/coeditors have also

¹⁴ Specifically, we collected contact information for all authors who had published at least one article with an empirical identification strategy (instrumental variable, difference in differences, regression discontinuity, or randomized controlled trial) in 2018 within a top 25 ranked economics journal. This produced 561 email invitations, with 143 authors fully completing the survey.

¹⁵ In addition to the most common journals discussed below, we found that numerous JHR referees reported reviewing for field journals outside the scope of JHR, including *American Economic Journal: Macroeconomics* (AEJ:Macro), *Journal of International Economics*

¹² Oddly, SJR has two economics categories—"Economics and Econometrics" and "Economics, Econometrics, and Finance (miscellaneous)"—that do not overlap in their list of journals. In later analysis, we match impact factors to all (400+) published-in journals from tenured applied microeconomists currently employed at the top 100 ranked economics departments. Among these matched journals, JHR ranks twenty-sixth, according to the SJR impact factor.

¹³ To further examine the relative importance of publishing in JHR, we collected data on journal publications at the time of tenure for all tenured applied microeconomists at the top 100 economics departments in the United States. We then matched journal publications to the 2020 SJR journal rankings to examine where JHR fits within the distribution of publications among faculty who received tenure at a top 100 department. Results show that JHR is the fifth most commonly published-in journal behind AER, *Review of Economics and Statistics* (REStat), JPubE, and QJE. Additionally, for each tenured author, we calculated their median ranked journal article at the time of tenure. Only 23% (115 of 499) of tenured authors' median ranked publications were ranked better than JHR. Across the entire sample of top 100 departments, the average author's median ranked publication is 90.7, with the 25th, 50th, and 75th percentiles of 26, 57, and 131.5, respectively.

edited/coedited at another journal, including top five journals (AER and *Review of Economic Studies* [REStud]), other general interest journals (AEJ: AE [two], *American Economic Journal: Economic Policy* [AEJ:EP], REStat [three], *European Economic Review*), top field journals (*Journal Business and Economic Statistics*, JPubE [two], JoLE), and lower-ranked journals (*Economics Letters, Journal of Policy, Analysis, and Management* [JPAM], *Canadian Economic Review*).¹⁶ We similarly find that JHR reviewers are heavily involved in the editorial process at numerous other journals across all fields. On average, JHR reviewers report serving as a reviewer for 23 other journals (median, 20). The most common journals refereed in were REStat, AER, QJE, JPubE, AEJ:AE, *Economic Journal*, JoLE, and REStud.¹⁷ Seventy-three percent of JHR reviewers report having refereed for at least one top five journal, and 56% report having served in at least one editorial position (editor/coeditor, associate editor, or editorial board).¹⁸

These results illustrate that the sample of JHR reviewers and editors includes individuals who have served as reviewers and editors across a broad spectrum of economics journals. Hence, though our study relies on data from a single journal, there is no particular reason, ex ante, we would expect these editors and reviewers to behave differently when serving for journals outside of JHR.

B. Summary Statistics

Table 1 presents summary statistics for our sample at the author and reviewer level (panel A) and at the author-paper and reviewer-paper level (panel B). In columns 1–4, we consider the subsample of authors and author-papers that passed the desk (i.e., the sample of authors and author-papers that constitute our sample when analyzing reviewer recommendations). Our full sample includes 8,369 authors and 2,006 reviewers. Unsurprisingly, authors of papers that pass the desk tend to have received their PhDs from higher-ranked institutions, have more top five publications, are twice as likely to be a NBER affiliate, and are employed at higher-ranked economics departments. Reviewers also tend to be more qualified than

⁽JIE), Review of Economic Dynamics, World Bank Economic Review, Journal of Finance, Science, Proceedings of the National Academy of Sciences of the USA, and Management Science.

¹⁶ JHR editors and coeditors have also served as editorial board members or associate editors at 53 other journals.

¹⁷ The next most commonly refereed journals were *Journal of European Economic Association, Labour Economics, Journal of Political Economy* (JPE), *Economic Inquiry*, JHE, AEJ:EP, EER, *Journal of Development Economics*, and JPAM.

¹⁸ From a random sample of 150 JHR reviewers, we examined those with publicly available CVs (131 out of 150). Of these, 101 of 131 CVs reported which journals they had served as a referee. Note that the most senior scholars were those who were less likely to report refereeing experience, with 20 out of 30 solely reporting editorial positions on their CV.

	(1)	(2)	(3)	(4)	(5)	(6)		
	A. Author and Reviewer Level							
	All Aut	hors	Passed Des	sk Authors	All Rev	iewers		
	Mean	SD	Mean	SD	Mean	SD		
Female	.36	.48	.37	.48	.35	.48		
Gender missing Institution of PhD (US News and World Report):	.02	.15	.01	.08	.00	.04		
Ranked top 10	.16	.36	.24	.43	.41	.49		
Ranked 11–30	.18	.39	.23	.42	.26	.44		
Ranked 31–50	.06	.23	.07	.25	.05	.21		
Ranked 51+/missing	.60	.49	.47	.50	.28	.45		
Institution of PhD (IDEAS):								
Ranked top 10	.14	.35	.21	.41	.36	.48		
Ranked 11–30	.15	.36	.21	.40	.25	.44		
Ranked 31–50	.08	.27	.10	.30	.09	.29		
Ranked 51+/missing	.62	.48	.48	.50	.30	.46		
Year received PhD	2005.45	10.67	2005.38	10.50	2004.22	9.57		
Unknown PhD	.10	.30	.04	.20	.02	.13		
Unknown PhD year	.16	.37	.09	.28	.04	.20		
Observations	8,369		3,344		2,006			
	B. Author-Paper and Reviewer-Paper Level							
	Author-I	Papers	Passed Author	l Desk -Papers	Reviewer-Papers			
	Mean	SD	Mean	SD	Mean	SD		
Prior publications	3 39	7 19	4 50	8 58	4 79	6.93		
Prior top fives	.28	1.39	.50	1.90	.79	1.58		
NBER affiliated	.05	.21	.10	.30	.27	.45		
Unique coauthors	8.19	27.41	9.77	27.63	8.14	16.23		
Coauthors' coauthors	115.51	476.32	143.80	519.86	113.82	271.47		
Department rank (IDEAS):								
Ranked top 10	.05	.22	.08	.27	.13	.34		
Ranked 11–30	.06	.24	.10	.30	.17	.38		
Ranked 31–100	.16	.36	.20	.40	.25	.43		
Ranked 101–250	.15	.36	.17	.38	.18	.38		
251+/missing/nonacademic	.58	.49	.45	.50	.26	.44		
Unknown employment	.12	.32	.04	.19	.02	.14		
Observations	11,275		4,134		4,523			

TABLE 1							
SUMMARY STATISTICS:	AUTHOR AND	REVIEWER	CHARACTERISTICS				

Note.—The sample is collected from the population of submissions made to JHR from 2007 to 2018. Columns 3 and 4 focus on the sample of submissions that were not desk rejected by the handling editor. Missing ranks are due to either unknown PhD or employment location or due to location being unranked (by US News and World Report or IDEAS).

authors: reviewers come from higher-ranked PhD programs, have published more articles, published more in the top five, are more likely to be an NBER affiliate, and are employed by higher-ranked economics departments.¹⁹

¹⁹ Later analyses involving paper and reviewer fixed effects will involve dropping certain papers and reviewers. In table A3, we characterize differences across author(-papers) and

Table A2 presents summary statistics at the units of observation for our analyses. Columns 1 and 2 present our data at the author-editor-paper level, where we find that 37% of observations constitute passing the desk. Columns 3 and 4 describe the data at the author-reviewer-paper level, where we will analyze whether the reviewer gave a positive recommendation (positive evaluation). At JHR, reviewers are given five different options for recommendations ranging from outright rejection to publish as is. Approximately 45% of these observations came with a positive recommendation (i.e., recommend against outright rejection).

From the RePEc data, we see that over 10% of author-editors and authorreviewers are connected within three degrees of separation. We also observe a nonzero probability that a direct coauthor served as an editor or a reviewer.20 Approximately 13% of author-editor-papers and 11% of authorreviewer-papers do not appear in our constructed RePEc network. Unreported in table A2, unmatched authors and reviewers tend to have graduated more recently, which is unsurprising: younger authors are less likely to have released a working paper or to have published. Between 2% and 3% of observations include author-editor and author-reviewer pairs that attended the exact same PhD program. Using bins of top 10 versus 11-30 versus 31–50 versus >51 or missing, we find that roughly 20% of authoreditor pairs and 36% of author-reviewer pairs attended similarly ranked PhD programs. Between 4% and 5% of observations include author-editor and author-reviewer pairs that were formerly or currently colleagues. Similarly, the match rate for publishing in the top five is 7%–9%. Finally, between 2% and 3% of author-editor and author-reviewer pairs are affiliates in the same NBER program(s).

III. Econometric Specifications

We start with our primary specification for analyzing editor desk rejection decisions:

$$PassedTheDesk_{aep} = \alpha + \beta[Match]_{aep} + \lambda_e + X_{ap} + \epsilon_{aep}, \qquad (1)$$

where each observation is an author-editor pair *ae* for a specific paper p submitted to JHR. For instance, a manuscript that has three authors will have three observations in this dataset. PassedTheDesk_{*aep*} is an indicator for whether the editor did not desk reject the manuscript. [Match]_{*aep*} includes

reviewer(-papers) between those kept in our estimation sample and those who are dropped when investigating reviewer decisions.

²⁰ The shares of observations with one and two degrees of separation are relatively uncommon across the full sample. Unreported, these shares increase to 1.5% and 9.7%, respectively, when we focus on papers that were accepted. So, though the probability of a single author-paper being one or two degrees of separation from the editor is low, a nontrivial amount of matches (cumulatively, 11.2%) manifest among publications.

various measurements of interest that reflect the connectivity between an author-editor pair. For example, we consider whether both the author and editor attended the same PhD institution, in which case [Match]_{*aep*} is an indicator for the author-editor pair coming from the same PhD. Other indicators considered include whether the author-editor pair were ever colleagues, were in the same NBER program(s), both published in a top five journal, attended similarly ranked PhD, and were employed by a similarly ranked university.²¹ We also consider degrees of separation between the author-editor pair as constituted by our constructed network of coauthorships, where one degree of separation reflects a direct coauthorship between an author-editor pair, two degrees reflects an author and editor sharing a common coauthor (but not directly coauthors), and so on. Overall, a positive estimate for β reflects a positive relationship between author-editor matching and the probability the paper passes the desk.

Importantly, editor fixed effects λ_e control for potential issues of endogenous assignment to editors. That is, these models compare how the same editor handles different papers written by authors with varying levels of match to the editor. Naturally, [Match]_{*aep*} may still be correlated with paper quality, particularly since editors tend to come from "stronger" backgrounds, and so papers written by "stronger" authors who write (unobserved) "better" papers may also simultaneously be more likely to match to an editor. Thus, we also include a rich set of author controls in X_{ap} to proxy for paper quality. These include the author's number of publications up to year of submission, publications in the top five economics journals, number of unique coauthors from published manuscripts, number of unique coauthors' coauthors from published manuscripts, NBER program affiliations, gender, binned rankings of institution of PhD (according to US News and World Report), and binned rankings for their institution of employment (according to IDEAS).

Turning to reviewer recommendations, we estimate a similar model:

PositiveEvaluation_{*arp*} =
$$\alpha + \beta [Match]_{arp} + \lambda_r + \lambda_p + \epsilon_{arp}$$
, (2)

where observations are unique at the author-reviewer-paper level. The outcome variable is an indicator for the reviewer giving a positive evaluation on the paper, while our various considerations for [Match]_{arp} remain the same.

The key addition to this model comes from our inclusion of paper fixed effects λ_p , which rely on variation in [Match]_{*ap*} across author-reviewer pairs. Thus, our β coefficients are identified using papers that had two or more reviewers with varying match to the paper's author(s). Hence, paper fixed effects control for anything related to paper-specific probability of getting

²¹ Note that top five, NBER affiliation, and employment statuses are time varying and thus vary at the author-paper and reviewer-paper level.

reviewed differentially, such as paper quality, subfields, or team of authors. Moreover, paper fixed effects absorb editor fixed effects, which control for the possibility that different editors handle different types of papers or may make different types of reviewer assignment decisions. Similar to the editor fixed effects from (1), reviewer fixed effects λ_r look at how the same reviewer rates different papers written by authors with varying levels of match. Since both paper and reviewer fixed effects can be estimated simultaneously, we can account for endogenous sorting of papers to reviewers. For instance, if reviewer A is systemically assigned low-quality papers, while reviewer B is assigned high-quality papers, our inclusion of paper fixed effects will account for the quality difference in papers assigned across reviewers. Likewise, if paper C is given harsh reviewers, while paper D is given easy reviewers, our inclusion of reviewer fixed effects will account for the differences in reviewer propensity to suggest rejections. Altogether, our fully specified models can be estimated so long as there exists variation in match within papers and within referees (i.e., papers that have multiple referees who have reviewed multiple manuscripts).

Since editor/reviewer decisions are made at the paper level, we weight observations at the editor-paper or reviewer-paper level. Hence, we assume an equal weighting across the paper's authors. Therefore, our specifications implicitly assume that match effects are additive across authors (e.g., a solo-authored paper with a matched editor-author will carry as much weight as a two-authored paper having two matched editor-authors). Additional robustness checks will loosen this assumption by checking whether multiple matches matter or whether a singular match across any of the paper's authors suffices to influence editor/reviewer decisions. We also consider specifications where authors are weighted deferentially by their connectivity to the editor/reviewer and by author prominence.

IV. Main Results

A. Editor Desk Rejection Decisions

We begin by examining editor desk rejection decisions by estimating (1) via ordinary least squares. Our first set of results is presented in table 2. Each column comes from a separate regression. Standard errors are clustered at the paper level, and observations are weighted at the paper-editor level (i.e., each observation is weighted by the inverse of the number of coauthors on the paper).

In column 1, we see that an author is 5.2 percentage points more likely to pass the desk when they attended the same PhD institution as the handling editor (significant at the 90% level). Similarly, in column 2, authors who were ever colleagues with the editor by the time the paper was submitted experience a 4.6 percentage point increase in likelihood of passing the desk

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome: passed desk:						
Exact same PhD institution	.052*				.034	
	(.031)				(.035)	
Former/current colleagues		.046**			.026	
		(.022)			(.025)	
Same NBER program(s)			.122***		.093**	
			(.046)		(.046)	
Degrees of separation:					~	
1				.265***	.241***	
				(.064)	(.067)	
2				.137***	.129***	
9				(.034)	(.034)	
3				.074***	.072***	
Direct metches				(.017)	(.017)	
1						056**
1						(0.000)
2+						089***
2 '						(.033)
Author-editor-papers	11.062	11.062	11.062	11.062	11.062	11.062
Editor fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Author controls	Yes	Yes	Yes	Yes	Yes	Yes
R^2	.303	.303	.303	.306	.306	.304

TABLE 2 Author-Editor Matching by PhD, Employment History, NBER Affiliation, and Coauthor Networks

NOTE.—Observations are unique at the author-editor-paper level. Each column presents results from a single regression, with observations weighted by the inverse of the number of coauthors on the paper. "Passed desk" is an indicator for the editor not desk rejecting the paper. Degrees of separation in cols. 4 and 5 are calculated from a constructed network of coauthorships based on a set of journal publications and working papers series housed on RePEc. A direct match in col. 6 between an author and editor occurs when they are direct coauthors, went to the same PhD, were ever colleagues, or affiliated with the same NBER program(s) (maximum of four per author-editor pair). Author controls include number of publications up to year of submission, publications in the top five economics journals, number of unique coauthors from published manuscripts, number of unique coauthors' coauthors from published manuscripts, NBER program affiliations, gender, binned rankings for their institution of PhD (according to US News and World Report), and binned rankings for their institution of employment (according to IDEAS). Standard errors are clustered at the paper level.

* Significant at the 10% level.

** Significant at the 5% level.

*** Significant at the 1% level.

(significant at the 95% level). Next, in column 3, we estimate a large and robust effect for NBER program affiliation: editors are 12.2 percentage points more likely to send a paper out for review if the author is affiliated with the same NBER program(s) as the editor at the time of the paper submission (significant at the 99% level). In column 4, we estimate degrees of separation as a series of dummies, omitting any author-editor connections of four (an author who is the editor's coauthor's coauthor's coauthor's coauthor) or greater. We first see that direct coauthorship leads to a huge

boost in avoiding desk rejection relative to all connections of four or greater, though these connections are relatively rare, constituting less than 1% of observations. The connectivity effects decrease as the degree of separation increases, from 26.5 to 13.7 to 7.4 percentage points when moving from one to three degrees of separation, respectively. In column 5, we estimate each of these match effects simultaneously in one regression: we find that NBER affiliation and coauthor networks are the strongest drivers of matching effects for editor decisions.

Finally, in column 6, we consider a specification where we count the number of matches for each author-editor pair, where a match occurs if the author-editor pair attended the same PhD institution, were ever colleagues, affiliated with the same NBER program(s), or were direct coauthors (for a maximum of four). We estimate dummies for just a single match versus multiple (two or more), omitting cases with no matches. This specification suggests that the matching effects stack: having one connection boosts the probability of passing the desk by 5.6 percentage points, while having multiple connections boosts the probability by 8.9 percentage points.

Our next set of author-editor match results are presented in table 3. In this table, we consider matches based on observable characteristics of the author that do not necessarily constitute a direct connection between the author and editor. For instance, in column 1, we consider match based on whether the author-editor pair had both published in a top five. Here, we estimate a positive and statistically significant effect of 4.5 percentage points. Thus, it appears that top five publication may also constitute a club.

In columns 2–5, we consider matches based on the ranking of the author and editor PhD programs and institutions of employment.²² We would expect to see effects here if, for example, editors who graduated from lowerranked PhD programs or are employed at comparatively lower-rank institutions show preference for authors who are also from relatively weaker backgrounds (compared with editors/authors from relatively stronger backgrounds). As shown in columns 2 and 4, we find little evidence that editors are biased toward authors who come from similarly ranked education or employment institutions.²³

B. Reviewer Evaluations

In this section, we move to reviewer evaluations by estimating equation (2) via ordinary least squares. We present results in tables 4 and 5 in a similar

²² Graduate student authors (and later reviewers) are included in this analysis and were coded using their current institution of graduate enrollment.

²³ See tables A20 and A21 for the coefficients on author controls from tables 2 and 3. Those with more prior publications, who went to higher-ranked PhDs, were NBER affiliates, and were employed at higher-ranked institutions were all significantly more likely to get past the desk during the editor stage.

(1)	(2)	(3)	(4)	(5)
.045**				
(.021)				
	004			
	(.015)			
		018		
		(.023)		
		.029		
		(.027)		
			027	
			(.018)	
				.052**
				(.022)
				014
				(.027)
11,062	11,062	11,062	11,062	11,062
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes
.303	.303	.303	.303	.303
	(1) .045** (.021) 11,062 Yes Yes .303	$\begin{array}{ccc} (1) & (2) \\ .045^{**} \\ (.021) & & \\ & $	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

 TABLE 3

 Author-Editor Matching by Publication in Top Five and Department Rankings

NOTE.—Observations are unique at the author-editor-paper level. Each column presents results from a single regression, with observations weighted by the inverse of the number of coauthors on the paper. "Passed desk" is an indicator for the editor not desk rejecting the paper. Each reported covariate is an indicator for whether both the author and the editor share a particular characteristic. Author controls include number of publications up to year of submission, publications in the top five economics journals, number of unique coauthors from published manuscripts, number of unique coauthors' coauthors from published manuscripts, NBER program affiliations, gender, binned rankings of institution of PhD (according to US News and World Report), and binned rankings for their institution of employment (according to IDEAS). Standard errors are clustered at the paper level.

** Significant at the 5% level.

fashion to tables 2 and 3. Standard errors are clustered at the paper level, and observations are weighted at the paper-reviewer level. Recall that in these models, we simultaneously estimate both paper fixed effects and reviewer fixed effects, which rely on papers with multiple reviewers, each of whom has reviewed multiple papers for JHR during our sample period.

In table 4, we first consider an indicator for whether the author and reviewer attended the exact same PhD institution. We find that reviewers are 6.2 percentage points more likely to positively review an author from the same graduate program (significant at the 90% level). Reviewers who were ever colleagues with the author are 3.7 percentage points more likely to give a positive review (significant at the 90% level). We also observe a positive relationship for NBER program matching (2.3 percentage points), though the coefficient is imprecisely estimated. Turning to degrees of separation in column 4, we find evidence of match effects for only direct coauthors (when the reviewer is one degree from the author). When we

	(1)	(2)	(3)	(4)	(5)	(6)			
Outcome: positive evaluation:									
Exact same PhD institution	.062*				.050				
	(.033)				(.033)				
Former/current colleagues		.037*			.013				
		(.022)			(.022)				
Same NBER program(s)			.023		.022				
			(.032)		(.033)				
Degrees of separation:									
1				.096*	.079				
				(.052)	(.052)				
2				020	027				
				(.026)	(.027)				
3				.005	.003				
				(.012)	(.013)				
Direct matches:									
1						.021			
						(.020)			
2						.067**			
						(.032)			
Author-reviewer-papers	8,164	8,164	8,164	8,164	8,164	8,164			
Reviewer fixed effects	Yes	Yes	Yes	Yes	Yes	Yes			
Paper fixed effects	Yes	Yes	Yes	Yes	Yes	Yes			
R^2	.880	.880	.879	.880	.880	.880			

TABLE 4							
AUTHOR-REVIEWER MATCHING BY PHD, EMPLOYMENT HISTORY,							
NBER PROGRAM AFFILIATION, AND COAUTHOR NETWORKS							

NOTE.—Observations are unique at the author-reviewer-paper level. Each column presents results from a single regression, with observations weighted by the inverse of the number of coauthors on the paper. "Positive evaluation" is an indicator for the reviewer recommending the possibility of a revision (i.e., not suggesting outright rejection). Degrees of separation in cols. 4 and 5 are calculated from a constructed network of coauthorships based on a set of journal publications and working papers series housed on RePEc. A direct match in col. 6 between an author and reviewer occurs when they are direct coauthors, went to the same PhD, were ever colleagues, or affiliated to the same NBER program(s) (maximum of four per author-reviewer pair). Standard errors are clustered at the paper level.

* Significant at the 10% level.

** Significant at the 5% level.

estimate all match effects simultaneously in column 5, PhD matching and one degree of separation display the strongest effects, though they are imprecisely estimated. Finally, in column 6, we again find that the matching effects stack: authors with multiple matches to the reviewer experience a 6.7 percentage point increase in the probability of receiving a positive evaluation relative to authors with no matches to the reviewer (95% significant).

Turning to table 5, we find strong evidence of match effects based on signaling characteristics of quality. Reviewers who published in a top five are 2.9 percentage points more likely to positively review an author who also published in a top five (significant at the 95% level). Reviewers also

	(1)	(2)	(3)	(4)	(5)
Outcome: positive evaluation: Author-reviewer both top five	.029** (.014)				
Both from similar rank PhD	(
(US News and World Report)		.022**			
Not similar rank (reviewer higher)		(.010)	009		
Not similar rank (reviewer lower)			(.000) 040*** (.014)		
Both employed at similar rank department (IDEAS)			(1011)	.019*	
Not similar rank (reviewer higher)				(.011)	034^{**}
Not similar rank (reviewer lower)					(.013) 005 (.011)
Author-reviewer-papers	8,164	8,164	8,164	8,164	8,164
Reviewer fixed effects	Yes	Yes	Yes	Yes	Yes
Paper fixed effects R^2	Yes .879	Yes .880	Yes .880	Yes .880	Yes .880

 TABLE 5

 Author-Reviewer Matching by Publication in Top Five and Department Rankings

NOTE.—Observations are unique at the author-reviewer-paper level. Each column presents results from a single regression, with observations weighted by the inverse of the number of coauthors on the paper. "Positive evaluation" is an indicator for the reviewer recommending the possibility of a revision (i.e., not suggesting outright rejection). Each reported covariate is an indicator for whether both the author and the reviewer share a particular characteristic. Standard errors are clustered at the paper level.

* Significant at the 10% level.

** Significant at the 5% level.

*** Significant at the 1% level.

favor authors who attended a similar ranked PhD program (significant at the 95% level). This positive PhD rank match effect could also be interpreted as a negative rank mismatch effect; therefore, in column 3, we investigate whether the negative rank mismatch effect is driven by lower-ranked (higher-ranked) reviewers punishing higher-ranked (lowerranked) authors. To do so, we generate indicators for whether the author and reviewer did not attend a similarly ranked PhD program and whether the author rank is higher versus lower than the reviewer. These results suggest that the negative rank mismatch effect is driven by lowerranked reviewers being less likely to give a positive evaluation to higherranked authors. We repeat this same exercise in columns 4 and 5 for the author's and reviewer's institution of employment rank (at the time of the paper submission). Again we find that reviewers positively favor authors of a similar rank. Interestingly, when decomposing by rank mismatch in column 5, we find that this effect is largely driven by reviewers from higher-ranked institutions punishing authors from lower-ranked institutions.²⁴

C. Publication Decisions and Quality

Next, we consider models to investigate how reviewer recommendations influence publication decisions, and whether author-editor matching effects still manifest conditional on the reviewer recommendations. We estimate specification (1) with the outcome being whether the paper was published (for papers that received reviews) while controlling for the fraction of the reviewers' recommendations that were positive. These results are presented in table A5. We first find that editors typically closely follow the recommendations of the reviewers: going from all rejection recommendations to all positive evaluations increases the probability the paper publishes by over 54 percentage points. Thus, the positive author-reviewer match effects capitalize into subsequent publication. We further find that some author-editor matching effects still manifest conditional on reviewer recommendations, particularly for column 3, where NBER program affiliation match leads to an additional 15.1 percentage point increase in the probability of publication acceptance.²⁵

Given the relatively strong club and network effects we find, an underlying question is whether these biases affect the overall efficiency/quality of eventually published manuscripts. To examine this question, we collected citation data from Google Scholar on all accepted manuscripts in

²⁴ In figures A2 and A3 (figs. A1–A3 are available online), we test for the sensitivity of these rank match results by considering an indicator for whether the author and reviewer both attended a top *x* PhD program or were employed by a top *x* economics department, respectively. For instance, the first point above 5 in fig. A2 estimates the impact of both the author and reviewer having attended a top five PhD program. We find that as we include more lower-ranked schools to define PhD rank match (moving right in the figure), the effects slowly decrease and become statistically insignificant around rank 23. A similar pattern, albeit more noisily, can be observed for employment rank match. These results show that the author-reviewer rank match effects are strongest for higher-ranked schools and imply that more prominent reviewers favor authors from similarly high-ranked backgrounds, whereas lower-ranked reviewers appear to be more apathetic toward lower-ranked authors.

²⁵ We also examine whether editors are differentially influenced by reviewer recommendations when there is an author-reviewer match to test for whether editors filter out potentially biased reviews from matched author-reviewers. To do so, we regress the editor decision to accept or reject on the reviewer's recommendation and the interaction with our various author-reviewer match effect variables (e.g., attended same PhD program) at the reviewer-paper level while collapsing our author level controls into averages across authors for each paper. These results are presented in table A6 and show no evidence of editors filtering out potentially biased reviews. If anything, the positive coefficients suggest that editors are more likely to follow reviewer recommendations when there is a positive authorreviewer match.

In results not presented, we also exam which types of reviewers, all else equal, editors are more likely to take advice from. Not surprisingly, editors are more likely to follow the recommendations of more prominent reviewers (e.g., NBER affiliates and reviewers with top five publications).

our sample. Assuming that weaker papers get published as a result of matching, we may expect to find fewer citations for accepted papers with more connectivity to the handling editor and reviewers. To test for this possibility, we reproduce our main author-editor and author-reviewer models for match by PhD, employment history, NBER affiliation, and coauthor networks, with citations as the outcome. Note that these models cannot include paper fixed effects, so we additionally control for our full set of author characteristics, editor fixed effects, and the paper's submission month-year to JHR.

These results are presented in tables 6 and 7 and show somewhat mixed evidence regarding how these club and network effects influence the efficiency of the publication process.²⁶ We first find that papers accepted for publication where the editor and author are highly connected in the coauthorship network (one or two degrees of separation) receive significantly fewer citations (-171.6 and -86.8, respectively), which suggests an inefficiency in the peer review process. We additionally find weak evidence that papers published from former or current colleagues of the handling editors receive fewer citations. On the other hand, we find weaker evidence of the opposite to be true for author-reviewer connections. Papers accepted with multiple author-reviewer connections receive, on average, 47.7 more citations compared with those accepted with no connections, though this effect is only marginally significant and noticeably smaller than the magnitude of the negative effect from author-editor matching.²⁷

V. Alternative Specifications and Robustness Checks

In this section, we consider a series of alternative specifications and robustness checks. In our primary analysis, all authors on a paper are given equal weight. However, it is plausible that instead of all authors mattering equally, an editor or reviewer may be swayed by matching to at least one of the paper's authors. To investigate this possibility, we collapse our data to the editor-paper and reviewer-paper levels and redefine our PhD institution, formerly/currently colleagues, and NBER program(s) match variables as equal to 1 if the editor/reviewer matched to any of the paper's authors.

²⁷ Related work from Laband and Piette (1994) finds that when authors of published articles are matched to the editorial board of the publishing journal (with match defined as PhD match and employment match), the article tends to have more citations. In contrast, our specifications explicitly disentangle match effects (i.e., interaction effects) from the main effects (i.e., author quality). As can be seen in table A22, the sums from adding the coefficients from the main effects with the match effects are generally positive. For example, papers with NBER match have overall positive citation outcomes: a positive NBER author main effect outweighs the negative NBER match effect. For completeness, we report the author level controls from our two main editor tables in tables A20 and A21.

²⁶ See table A17 for our reviewer model while additionally including reviewer fixed effects.

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome: citations:						
Exact same PhD						
institution	-1.253				37.110	
	(39.369)				(35.482)	
Former/current						
colleagues		-64.005*			-70.433*	
_		(38.719)			(38.201)	
Same NBER						
program(s)			-42.584		-12.115	
			(47.073)		(49.386)	
Degrees of						
separation:						
1				-171.620 **	-146.069 **	
				(80.267)	(72.489)	
2				-86.794 **	-78.642 **	
				(37.281)	(36.802)	
3				-26.194	-27.111	
				(26.183)	(26.955)	
Direct matches:						
1						.307
						(26.743)
2+						-102.753
						(64.147)
Author-editor-						
papers	907	907	907	907	907	907
Editor fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Author controls	Yes	Yes	Yes	Yes	Yes	Yes
R^2	.531	.535	.531	.536	.540	.537

 TABLE 6

 Author-Editor Matching by PhD, Employment History, NBER Affiliation, and Coauthor Networks: Citations on Accepted Papers

NOTE.—Observations are unique at the author-editor-paper level. Each column presents results from a single regression, with observations weighted by the inverse of the number of coauthors on the paper. Degrees of separation in cols. 4 and 5 are calculated from a constructed network of coauthorships based on a set of journal publications and working papers series housed on RePEc. A direct match in col. 6 between an author and reviewer occurs when they are direct coauthors, went to the same PhD, were ever colleagues, or affiliated to the same NBER program(s) (maximum of four per author-reviewer pair). Additional controls include year of submission fixed effects. Standard errors are clustered at the paper level.

* Significant at the 10% level.

** Significant at the 5% level.

Furthermore, we redefine degrees of separation as the shortest path across all author-editor and author-reviewer pairs for the paper. In our final specification, we total the number of matches across all authors. For editorpaper models, our author controls are collapsed into averages (note that author controls are irrelevant in reviewer models because of paper fixed effects). The results from this exercise are presented in table A7 (for editors passing the desk) and table A8 (for positive reviewer recommendations). Overall, the pattern of our results do not change, with some notable coefficients increasing in magnitude (NBER program[s] match and

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome: citations:						
Exact same PhD						
institution	39.602*				25.798	
	(20.429)				(25.718)	
Former/current						
colleagues		29.167*			16.534	
0		(16.761)			(20.513)	
Same NBER program(s)			4.610		4.745	
1 0			(28.190)		(28.149)	
Degrees of separation:						
ĩ				23.146	11.060	
				(35.843)	(36.486)	
2				-14.432	-17.322	
				(21.993)	(22.174)	
3				-23.881	-23.615	
				(18.538)	(18.540)	
Direct matches:						
1						371
						(17.865)
2+						47.652*
						(24.641)
Author-reviewer-papers	1,906	1,906	1,906	1,906	1,906	1,906
Editor fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Reviewer controls	Yes	Yes	Yes	Yes	Yes	Yes
Author controls	Yes	Yes	Yes	Yes	Yes	Yes
R^2	.611	.611	.610	.611	.611	.611

 TABLE 7

 Author-Reviewer Matching by PhD, Employment History, NBER Affiliation, and Coauthor Networks: Citations on Accepted Papers

NOTE.—Observations are unique at the author-reviewer-paper level. Each column presents results from a single regression, with observations weighted by the inverse of the number of coauthors on the paper. Degrees of separation in cols. 4 and 5 are calculated from a constructed network of coauthorships based on a set of journal publications and working papers series housed on RePEc. A direct match in col. 6 between an author and reviewer occurs when they are direct coauthors, went to the same PhD, were ever colleagues, or affiliated to the same NBER program(s) (maximum of four per author-reviewer pair). Additional controls include year of submission fixed effects. Standard errors are clustered at the paper level.

* Significant at the 10% level.

degrees of separation). This suggests that (perhaps unsurprisingly) match to the closest author is what appears to matter most in influencing editor and reviewer behavior.

As another alternative specification, we seek to identify the most prominent author of the paper. Many times, there exists a clear hierarchy among the authors, and it may be that match to the most prominent author matters more than the average match across authors. To consider this, we flag an author as the most prominent if they have published the most top fives.²⁸ This analysis is presented in tables A9 and A10. Once again,

²⁸ To break ties, we then consider the rank of the department of the author's employment, followed by which author has the most publications, then PhD rank, then whoever

we observe a similar pattern overall as our primary results. Some estimates lose statistical significance for both editor and reviewer decisions (exact same PhD institution and former/current colleagues), while coefficients for NBER program(s) match attain greater precision and statistical significance. These results suggest that the most prominent author on a paper carries a substantial proportion of the weight in influencing editor and reviewer decisions.

Next, in tables A11 and A12, we test the sensitivity of our reviewer model results to replacing paper fixed effects with editor fixed effects and author controls. We do this as a proxy to test for how well our author controls explain unobserved paper characteristics, particularly since we are unable to include paper fixed effects in our editor models. Reassuringly, our results are largely consistent with our previously reported results when including paper fixed effects. With the exception of top five match, the magnitude the effects (e.g., PhD institution, current/former colleagues, degrees of separation) are of equal or larger magnitude, while standard errors tend to increase as well.²⁹

Finally, in tables A13–A16, we estimate our primary specifications using logit models.³⁰ Again, we find results consistent with our primary specifications. Both editors and reviewers are positively influenced by match to the author.

VI. Discussion and Conclusion

In this study, we examine how author-editor and author-reviewer network connectivity and "match" influence editor decisions and reviewer recommendations in economics publishing. Though our analyses are limited to investigating decisions made from a single journal, we provide evidence that editors and reviewers at JHR have served as editors and reviewers across a broad spectrum of journals in the profession and that JHR itself is an important determinant in tenure outcomes. For editors, we find significant positive match effects for PhD institution of attendance, employment, NBER program affiliation, coauthor network degrees of separation, and publishing in a top five economics journal. Importantly, we find that these effects are additive, with an increased number of matches further influencing editor decisions. For reviewers, we similarly find that reviewers are swayed by authors with whom they have shared attributes. Specifically,

is oldest (years since PhD). Remaining ties (typically two graduate student coauthors from the same cohort) are then broken randomly.

²⁹ We also consider models that simultaneously include author-paper level controls with paper fixed effects in tables A18 and A19.

³⁰ Because of the high dimensionality of the paper fixed effects in our reviewer models, we were unable to estimate paper fixed effect logit models. Instead, we estimate our logit models while including editor fixed effect and author controls, as in tables A11 and A12.

we find significant positive match effects for authors and reviewers who attended the same (and similarly ranked) PhD institution, were previous colleagues (and are employed at similarly ranked departments), and have published in a top five.

The observed match effects could be driven by both a conscious and an unconscious bias. A conscious bias is straightforward: the editor/reviewer may simply prefer or trust papers written by authors for whom they share the same observable attributes. An unconscious bias would arise if the editor/reviewer has an underlying bias or preference for papers of certain characteristics for which matched authors are more likely to write.³¹ In the publishing context, it may be that authors of certain educational backgrounds write papers in a certain style, adopt certain methodologies, or utilize certain datasets that are preferred by editors/reviewers of the same or similar educational background. Since the identity of the authors are not hidden from the editors/reviewers, differentiating between conscious and unconscious biases is difficult.³² However, given that our results tend to be strongest for indicators signaling club or elite status, this suggests at least partially a conscious bias.

Regardless, our results suggest that there are important determinants in both the editor's and reviewer's evaluation process that extend beyond the paper's suitability for publication. We find that part of what drives decisions across papers is simply whether the author(s) of the paper share a characteristic with the editor/reviewer. However, if the objective is to publish the best research, there is no reason shared characteristics should be indicative of the paper's publication prospects, conditional on paper quality. Indeed, we find some evidence that published papers with greater author-editor connectivity subsequently receive fewer citations. Thus, our results imply at least one inefficiency in the current system of paper evaluation.

Still, the potential policy implications are complicated. Editors are largely selected on expertise and stature in the profession, which are highly correlated with our measures of club membership. Likewise, the primary factor for selecting a reviewer is expertise on the paper's topic. Therefore, if certain topics attract researchers from, for example, the same PhD program, it may be efficient to have increased PhD match for the sake of having more highly qualified reviewers. That is, the editor may face a reviewer capability-impartiality trade-off: picking reviewers who are capable of evaluating the paper's topic while recognizing that the

³¹ For example, Lusher, Campbell, and Carrell (2018) find positive racial matching effects between Asian students and teaching assistants (TAs) in settings where TAs graded essay-style exams, suggesting that (non-)Asian TAs preferred writing styles of (non-)Asian students.

³² A recent example of biases arising in a double blind review setting comes from Kolev, Fuentes-Medel, and Murray (2019), who find gender biases in the reviews of grant proposals submitted to the Gates Foundation.

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reviewer may be positively biased toward authors of similar background characteristics.

A potential remedy would be for editors to discount recommendations to account for matching biases.³³ However, an obvious shortcoming is that what we observe is the average bias across matches, with (unobserved) variation in how these biases manifest. Hence, in some instances, the review should not be discounted because of author-reviewer match, while others should perhaps be heavily discounted. In practice, we find no evidence that editors currently discount recommendations made from reviewers connected to the author.

Last, it is important to note the match effects we estimate are relative to the editor's/reviewer's own background characteristic. That is, our study does not causally identify whether, for example, authors from top PhD programs directly face easier publication prospects compared with authors from lower PhD programs. Still, our study does suggest that authors who better match the editor/reviewer pool on background characteristics are indirectly gaining an advantage. In our setting, the population of editors/ reviewers tend to be of a higher status compared with the author population, implying that the rich do, in fact, get richer.

Hence, in an environment where the prospect of publishing is increasingly difficult and journals face capacity constraints, our results imply that authors who attain club or elite status will see continued publication success, conditional on paper quality, at the expense of those who do not possess such signals. That is, being part of the club boosts an author's publication prospects when being evaluated by editors/reviewers of the same club in a system where editors/reviewers are relatively more likely to be part of said club.

Data Availability

Code replicating the tables and figures and information regarding the proprietary data used in this article can be found in Carrell, Figlio, and Lusher (2024) in the Harvard Dataverse, https://doi.org/10.7910/DVN/KCY7YR.

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³³ This could be done by either (1) downgrading recommendations with positive match (e.g., strong revise and resubmit [R&R] is treated more like a weak R&R) and/or (2) the editor giving less weight to reviews with positive match in making their final decision.

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